
A strategy for e-procurement
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1. INTRODUCTION

This Communication presents the strategic importance of electronic procurement (e-procurement) and sets out the main actions through which the Commission intends to support the transition towards full e-procurement in the EU.

E-procurement can significantly simplify the way procurement is conducted, reduce waste and deliver better procurement outcomes (lower price, better quality) by stimulating greater competition across the Single Market. It can also contribute to addressing two of the main challenges the European economy is facing today: the need to maximise the efficiency of public expenditure in a context of fiscal constraints and the need to find new sources of economic growth.

Contracting authorities and entities that have already made the transition to e-procurement commonly report savings between 5 and 20%; experience also shows that investment costs can be rapidly recouped. Given the size of the total procurement market in the EU, each 5% saved could return around €100 billion to the public purse. E-procurement also delivers significant environmental benefits by reducing paper consumption and transport, as well as the need for costly archiving space with its attendant energy consumption. The economic and environmental benefits of e-procurement thus go hand-in-hand – contributing to the sustainable growth objective of the EU 2020 Strategy. Moreover, the Digital Agenda for Europe\(^2\) and the eGovernment Action Plan 2011 – 2015\(^3\) highlight the importance of connecting e-procurement capacities across the Single Market.

Despite these undisputable benefits, the EU is lagging behind both its own targets and internationally. E-procurement is still used in only 5-10% of procurement procedures carried out across the EU despite ambitious political targets.\(^4\) By comparison, a full online procurement market place has already been achieved in Korea, which generated savings of US$ 4.5 billion\(^5\) (about 8% of total annual procurement expenditure) annually by 2007; in Brazil 80% of public procurement is carried out electronically. The EU should act now to reap the benefits offered by e-procurement and to avoid losing competitiveness.

\(^1\) The use of electronic communications and transaction processing by public sector organisations when buying supplies and services or tendering public works

\(^2\) COM(2010)245

\(^3\) COM(2010) 743 of 15 December 2010

\(^4\) According to the Manchester Ministerial Declaration of 24 November 2005 “all public administrations across Europe will have the capability of carrying out 100% of their procurement electronically” and “at least 50% of public procurement above the EU public procurement threshold will be carried out electronically” by 2010:


\(^5\) See: http://www.pps.go.kr/english/ for further information
The Commission has put forward an ambitious but realistic proposal to modernise the EU's public procurement legal framework as foreseen in the 2011 Single Market Act. One objective of these proposals is to achieve a full transition to e-procurement in the EU by mid-2016. The ultimate goal is “straight through e-procurement” with all phases of the procedure from notification (e-notification) to payment (e-payment) being conducted electronically. This will maximise the efficiency gains of e-procurement for the public sector and allow European companies – especially SMEs – to exploit the full benefits of the Digital Single Market.

2. A CHANGE FOR THE BETTER – THE ECONOMIC CASE FOR E-PROCUREMENT

The EU’s public procurement market is large: the current directives cover contracts worth around €447 billion, while the overall market for purchases of goods, services and works by the EU public sector is estimated to be worth in excess of €2.4 trillion. E-procurement has the potential to bring significant efficiency gains in this large market:

• e-procurement can help improve the transparency of and access to procurement opportunities, especially for SMEs, thus stimulating cross-border competition, innovation and growth in the Single Market. It can also reduce error rates, for example, by avoiding the need to repeatedly encode paper-based information in IT systems at different phases of the procurement procedure;

• e-procurement can also achieve significant cost reductions, both by lowering the price that the public sector pays to purchase goods, services and works; and by reducing transaction costs for the public sector and for economic operators (including by reducing the duration of procurement procedures). The resulting savings can either help to promote fiscal consolidation or be redirected towards growth enhancing initiatives.

Economic modelling work carried out by the European Commission services suggest that price reductions in public procurement can have a significant macro-economic impact. The price reductions assumed in this modelling work are well within the range that existing e-procurement systems have achieved and could raise GDP by up to 0.1 to 0.2% after 5 years.

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7 The Single Market Act identifies a series of measures to boost the European economy and create jobs
8 The proposals foresee mandatory use of e-procurement at the latest two years after the transposition deadline, which under the current timetable for adoption should allow implementation by mid-2016
9 The procurement processes covers two main phases: the pre-award phase and the post award phase. Pre-award comprises all the sub-phases of procurement until the award of the contract (publication of notices, access to tender documents, submission of bids, evaluation of the proposals and the award of the contract). Post-award comprises all the sub-phases of procurement after the award of the contract (ordering, invoicing and payment)
11 Contracting authorities and entities that made the transition to e-procurement commonly report savings between 5 to 20% mainly driven by price reductions
A conservative back-of-the-envelope calculation from another study suggests that a full transition to e-procurement could generate €50 to €75 billion/year.\(^\text{13}\)

There are numerous examples of successful e-procurement solutions already in operation across Europe:\(^\text{14}\)

- following the introduction of e-procurement, Portuguese hospitals were able to achieve price reductions of 18% on their procurement contracts. In aggregate, the switch-over to e-procurement in Portugal is estimated to have generated savings of about €650 million in the first year and could have reached €1.2 billion if all contracting authorities had fully implemented e-procurement. The potential savings therefore amount to between 6% and 12% of total procurement expenditure. Most of the savings were due to lower prices resulting from higher competition (more bids per procedure), although administrative savings were also achieved;

- XchangeWales – the Welsh e-procurement programme - delivered benefits of £58 million (December 2011), three years after it was launched. The investment costs of setting up the programme were recouped in only one year. To date, the programme has saved about 15 million sheets of paper, equivalent to 101 tonnes of CO2. So far, 56 000 suppliers registered in the system and £18 billion of contracts were advertised electronically;

- UGAP (Union des groupements d'achats publics) – the French central purchasing body – estimates that the progressive switch to e-procurement reduced the administrative burden for buyers by 10% (e.g. through faster analysis of bids and easy access to documents) and by another 10% for the legal services involved (as less legal control was required when e-procurement is used). The cost of implementing the system was minimal compared to the benefits that have already been realised, although effort was required to train staff and change internal working methods;

- a study of 400 local authorities in the Netherlands shows that switching to e-procurement generates process cost savings of over €8 500 per tender. This is based on using electronic means from the publication of notices through to submission, but does not include automatic evaluation (which was unavailable on the platforms at the time of the survey, but which is now creating further significant savings). Two of the key factors contributing to these cost savings are: time reduction – per procedure, contracting authorities save on average up to 3 days and bidders up to 1 day; and reduced printing and postage costs (estimated at €2 350 per tender);

- a recent survey of Norwegian public procurement managers found out that none of the managers surveyed would consider returning to manual, paper-based tendering. The survey indicates that the use of e-procurement: increased participation by foreign firms (22% of respondents) and by SMEs (30% of respondents), resulted in a larger number of bids per tender (74% of respondents), reduced purchase costs (70% of respondents) and reduced the time spent on each tender by more than 10% (73% of respondents).

\(^{13}\) See E-procurement - Public procurement worth two trillion euros needs smarter spending, Deutsche Bank Research (February 2011). See: [http://www.dbresearch.de/PROD/DBR INTERNET DE-PROD/PROD00000000000269867.PDF](http://www.dbresearch.de/PROD/DBR INTERNET DE-PROD/PROD00000000000269867.PDF).

\(^{14}\) These examples were obtained by the European Commission through direct contact with various public authorities and stakeholders.
participants). While these results may not be fully representative due to the limited sample size used, they illustrate the benefits that e-procurement can deliver.

Implementation of e-procurement solutions inevitably incurs some up-front costs, but experience shows that these can be recouped in a relatively short period of time. In addition, existing systems show that they can be a powerful means to promote SME participation, including across borders, as SMEs find it easier to identify and respond to tender opportunities using electronic means than in a traditional paper-based environment.

3. OVERCOMING THE BARRIERS – THE WAY FORWARD

The economic case for e-procurement is compelling and the enabling technologies for e-procurement are now widely available. Nevertheless, a number of barriers continue to hamper the transition towards full e-procurement in the EU. Responses to the 2010 Green Paper on e-procurement\(^\text{15}\) identified two main drivers of the slow up-take:

1. The "inertia" exhibited by certain stakeholders. The challenge is to persuade hesitant purchasers and suppliers to change their ingrained habits; convince them that the predicted benefits are attainable and that investments can be recouped in a reasonable period.

2. Market fragmentation that can emerge from the existence of a wide variety of systems, sometimes technically complex, deployed across the EU (and sometimes within a single Member States) that can lead to increased costs for economic operators/suppliers.

The challenge is therefore to persuade stakeholders to embrace new electronic solutions and ensure that the systems put in place facilitate wider access across the EU to these valuable markets. The results of the 2010 evaluation of the Action Plan\(^\text{16}\) for e-procurement show that additional measures are needed to support e-procurement take-up, as the technology to conduct e-procurement is now ready to be used. To overcome these barriers, the European Commission is undertaking a number of actions, including both legislative and non-legislative measures. This chapter describes these actions.

3.1. Creating an effective legal framework

The strategy set-out in this Communication builds on the e-procurement provisions contained in the legislative proposals adopted by the European Commission in December 2011, which would replace the existing legislative framework. It is premised on the assumption that these proposals will be adopted without substantial change. This is however without prejudice to the outcome of the legislative procedure, which will need to be taken into account by organisations implementing e-procurement systems.

\(^{15}\) Summary of the responses to the Green Paper on expanding the use of e-procurement in the EU:

\(^{16}\) See the Action Plan and related documents, including its 2010 evaluation at:
The proposal on the classical sector\textsuperscript{17} foresees a gradual transition towards full electronic means of communication. These will become mandatory for some phases of the procurement process and for some actors by the transposition deadline: e.g. e-notification to TED\textsuperscript{18} and electronic availability of procurement notices. Central Purchasing Bodies should also move to full electronic means of communication, including electronic submission of bids (e-submission) by that date. All other contracting authorities will be required to perform all procurement procedures using electronic means of communication no later than two years after the transposition deadline, except in duly justified circumstances.

The proposal also includes streamlined provisions regulating certain electronic procedures and tools, such as Dynamic Purchasing Systems (DPS), electronic auctions (e-auctions) and electronic catalogues (e-catalogues). In addition, e-CERTIS will become a mandatory clearing house two years after the transposition deadline. It will list the certificates and statements that may be requested for qualification of a bidder in procurement and will set the equivalence criteria across Member States. This will provide greater clarity and legal certainty, especially in terms of cross-border submission, with regards to certificates and statements that may be required by Member States\textsuperscript{19}.

The provisions on e-procurement in the proposal on the utilities sector\textsuperscript{20} are substantially similar to those in the classical sector. The proposal on concessions\textsuperscript{21} also includes requirements on electronic means of communication and foresees a transition period of five years instead of two. If the Commission’s proposals are adopted by the end of 2012 (the deadline endorsed by the informal European Council of 30 January 2012), the vast majority of procurement procedures covered by the proposals would in principle be carried using electronic means of communication by mid-2016.

Last but not least, the proposals support the sharing of information and best practices and greater co-operation through the use of the Internal Market Information System (IMI), a secure online application that allows competent authorities in the EEA to communicate quickly and easily with their counterparts abroad. In the future, synergies could be explored between the IMI application and e-CERTIS.

The phased approach to e-procurement implementation is designed to give all stakeholders time to meet the operational challenges, whilst ensuring that the pace of change accelerates and that all Member States follow the same overall timetable. The objective is to avoid the lengthy co-existence of parallel electronic and paper-based procedures that significantly increase costs for both contracting authorities and economic operators. The Commission urges Member States to launch the necessary preparatory work as soon as possible to ensure timely compliance with these provisions. The Commission will monitor and publicly report about progress in the Member States as set out in chapter 3.5.

\textsuperscript{17} Proposal for a Directive of the European Parliament and of the Council on public procurement (COM(2011) 896 final)
\textsuperscript{18} TED (Tenders Electronic Daily) is the online version of the 'Supplement to the Official Journal of the European Union', dedicated to European public procurement.
\textsuperscript{19} More information about e-CERTIS is available on the Europa website at: http://ec.europa.eu/internal_market/publicprocurement/e-procurement/e-certis/index_en.htm.
\textsuperscript{20} Proposal for a Directive of the European Parliament and of the Council on procurement by entities operating in the water, energy, transport and postal services sector (COM(2011) 895 final)
The Commission’s proposals encourage inter-operability between e-procurement systems and contain provisions designed to ensure that suppliers encounter no technical barriers when bidding on different systems. To this end, it empowers the Commission to adopt delegated acts in a number of specific areas to render mandatory the use of specific technical standards. These could draw on work carried out in the relevant standardisation bodies and on recommendations issued by the e-Tendering Expert Group (see section 3.2). In addition, in the context of the Digital Agenda for Europe, guidelines are being developed on how to use standards when procuring ICT systems.\footnote{Digital Agenda Europe Action "Guidance on link between ICT standardisation and public procurement".}

Although they do not mandate the use of electronic signatures (e-signatures), the legislative proposals aim to achieve a better balance between providing flexibility to public authorities that wish to use this tool, and ensuring greater cross-border inter-operability of e-signature solutions. If public authorities require the use of an advanced e-signature as defined in Directive 1999/93/EC on e-signatures, they must accept e-signatures supported by a qualified electronic certificate referred to in the Trusted List provided for in Commission Decision 2009/767/EC. The proposal thus leverages the approach developed under the Services Directive.

The Commission is currently assessing the framework for electronic identification, authentication and signatures to enhance trust and security and to ensure the ease of use and the interoperability of such systems across the EU. A legislative proposal is expected by the end of the 2nd quarter of 2012.

**KEY ACTIONS:**


### 3.2. Promoting practical solutions based on best-practices

The recent legislative proposals are a necessary but not sufficient condition for the successful implementation of e-procurement in the EU. In addition, a number of non-legislative flanking actions are needed to support Member States during their transition to full e-procurement and to address certain practical challenges currently limiting take-up.

IT technology is now mature to enable a new generation of e-procurement systems. New paradigms, already used in the private sector, are becoming available to public buyers, allowing them to simplify and streamline the purchase process without compromising the public interests that such procurement must fulfil, e.g. transparency, competition, inclusion of SMEs and cross-border bidders, etc.

Recognising this potential, the Commission’s legislative proposals are based on the principle of simplification, and this priority should be retained when considering the practical implementation of e-procurement solutions. Such solutions should seek to provide an optimal balance between performance, cost-effectiveness and accessibility, while of course respecting
the requirements of EU law. These systems should be designed to ensure full SME participation to the procurement market in accordance with the Small Business Act and the "Think Small First" principle. A particular objective should be to make the e-submission phase as accessible as possible, removing barriers that currently often discourage newcomers from undertaking onerous registration or authentication procedures required by some platforms – in some cases requiring the use of tools and assets only available in the country concerned.

In order to address these challenges, the Commission has established an e-Tendering Expert Group (e-TEG) tasked with defining a blueprint for pre-award e-procurement that provides a basis for the development of “best of breed” solutions. The objective is to promote solutions that achieve the optimal balance between usability and other attributes such as security. An essential task for the e-TEG is to define an effective model for e-submission, as this is currently the main bottleneck for the wider implementation of e-procurement. On-going standards work, such as that carried out by the CEN BII workshop, will be leveraged by the e-TEG.

Using this blueprint as its reference model, the e-TEG will also present recommendations on actions to be taken by the EU institutions and Member States to ensure the roll-out of e-procurement platforms that guarantee cross-border access and facilitate use by all economic operators in particular SMEs, whilst nonetheless preserving Member State autonomy to design solutions that best fit national requirements and can be integrated with existing platforms.

In parallel, the Commission has launched a study to benchmark current e-procurement practices in Europe. This will lead to the publication of a case-book (“the Golden Book”) of best implementation practices based on the review of existing e-procurement platforms against criteria such as accessibility, ease of use and cost-effectiveness. The outcome of this work will be used to promote convergence towards and take-up of such good practices by Member States and public authorities investing in e-procurement infrastructure.

**KEY ACTIONS:**

(4) **e-TEG (Expert Group) to issue recommendations to promote “best of breed” e-procurement systems facilitating cross-border access and ease of use for all companies.** Deadline: by early 2013.

(5) **European Commission to publish report on best e-procurement practice.** European Commission to use these results to promote best practice across the EU. **Deadline: by mid-2013.**

3.3. **Supporting the deployment of e-procurement infrastructure**

The Commission has promoted the implementation of cross-border e-procurement solutions through PEPPOL (Pan-European Public Procurement On-Line), a pilot project partly funded through the Competitiveness and Innovation Programme (CIP). PEPPOL does not provide an e-procurement platform but rather the interoperability bridges needed to connect the already existing platforms in Member States. The project comes to end in mid-2012 and the Commission intends to support the sustainability of a range of interoperable PEPPOL solutions. Furthermore, a new CIP call is currently open, seeking proposals to develop a comprehensive, coherent and reusable set of public services building blocks by bringing

[23](http://www.peppol.eu/)
together and completing work performed by five current CIP pilot projects (including PEPPOL).\(^{24}\)

As part of the multi annual financial framework, the Commission has proposed the launch of the 'Connecting Europe Facility' (CEF)\(^ {25}\) programme. Its goal would be to support investment in the deployment of infrastructure required to enable the delivery of cross border public services (i.e. essential digital service infrastructures in the public interest). The proposed budget for these infrastructures is around 2 billion EUR and e-procurement would be one of the key services under consideration. It is currently estimated that projects funded under the CEF will come on-stream in 2014-2015.

Moreover, the Commission will use structural funds under the proposed Common Strategic Framework (CSF) to complement investments made by the CEF and to support the use of e-procurement across public administrations in Europe.

### Key Actions:

1. **European Commission to support the sustainability of PEPPOL components as of mid-2012.**
3. **European Commission to promote use of Structural Funds to foster e-procurement take-up across Europe, as set-out in the Common Strategic Framework for 2014-2020.**

### 3.4. Dissemination strategy

To overcome the inertia exhibited by certain stakeholders (see chapter 3 above), the Commission will put in place a wide-ranging dissemination strategy, aimed at informing contracting authorities and suppliers about the benefits of e-procurement and about how they can be fully exploited. This will draw on a range of tools including:

- the Europe Enterprise Network, to provide targeted advice to European SMEs about the opportunities that e-procurement opens for them to bid across the EU;
- in order to ensure that local and regional authorities are made aware of the benefits that e-procurement can deliver for them, as well as good practices in e-procurement, the Commission will exploit the networking opportunities offered by the annual Open Days/European Weeks of Regions and Cities as well as the networking programmes (Urbact/INTERREG) and other good practice tools.

The Commission also intends to organise an annual high-level conference on e-procurement, bringing together a wide-range of stakeholders to debate the latest developments in e-procurement. The first annual conference will take place by mid-2012.

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3.5. Monitoring e-procurement take-up and benefits

One of the necessary conditions for EU and national policy-makers to be able to accompany and steer the take-up of e-procurement is the capacity to track developments and measure the impact of change. There is a shared interest among EU, national and local-level policy makers in having reliable and comparable information to optimise the change-over from traditional to electronic processes. There is thus a need to develop a set of indicators to provide a comprehensive picture of both the take-up of e-procurement and the efficiency gains that it will deliver.

To address this important requirement, the Commission has launched a study aimed at developing EU wide indicators for e-procurement. The project will provide an update on progress and lay the conceptual foundation for a future reporting regime about the use and economic impact of e-procurement across the EU. This reporting regime would be based on the ability of e-procurement platforms to generate homogeneous indicator data when the migration to e-procurement is completed. This data can then be collected and processed at various levels to obtain the required level of information on all procurement across the EU in near real-time.

In order to promote steady progress towards the objective of full e-procurement in the EU, the Commission intends to closely monitor both the take-up of e-procurement and its economic impact and will publish a report on e-procurement by mid-2013. This report will identify both the progress that has been achieved and any outstanding issues which remain, together with recommendations on the next steps to be taken. It will also draw on the indicators developed by the above mentioned study.

4. Leading by example

As a significant procurer, the European Commission recognises its own responsibility to obtain the best value for money possible and ensure that its own procurement processes are as efficient and effective as possible. This includes leveraging the potential of e-procurement.

The Digital Agenda for Europe\(^26\) and the 2010 e-Government Action Plan\(^27\) both committed the European Commission to implement “an ambitious e-Commission Action Plan for 2011-


2015, including full electronic procurement, a public sector information strategy and a transparency policy.” The Commission expects to adopt the e-Commission Action Plan by the end of the 2nd semester of 2012.

The Commission is already carrying out pilot projects in both the pre- and post-award phases, such as the e-Tendering and e-Prior projects. These projects will be integrated into a comprehensive solution covering all phases of the procurement chain. Thanks to the e-Prior project (implemented under the ISA program), e-invoicing has been live at the Commission's Directorate General for Informatics (DIGIT) since 2009, offering significant advantages over traditional paper-based invoicing, such as: better data quality; faster processing time; absence of data encoding or attachment scanning, leading to a substantial reduction of human errors. Moreover, since the beginning of 2012, e-Invoicing (and gradually other e-Procurement processes) is becoming mandatory for other Directorate-Generals of the Commission and European Agencies using DIGIT’s Framework Contracts.

Furthermore, the next phase of development will concentrate on providing a system for electronic submission – probably the most challenging aspect of the pre-award phase. A feasibility study and an ensuing pilot implementation of this e-submission phase are planned before the end of 2012. The system is intended to be fully interoperable with the infrastructure developed under the PEPPOL project. Moreover, the software has been and will continue to be made available to external users and developers on an open source basis. Currently open e-Prior is being tested or considered for implementation by contracting authorities in several countries such as Greece, Norway and Portugal.

The European Commission intends to complete the transition towards a full e-procurement system, including both pre-award and post-award phases, by the end of June 2015 – delivering on its commitments in the Digital Agenda for Europe and e-Government Action Plan. The Commission’s High Level Committee on IT (HLCIT) decided in December 2011 to launch the necessary preparatory work. The European Commission will also work in close cooperation with other EU institutions, bodies and agencies to assist them with the possible integration of e-procurement solutions into their existing procurement procedures.

**KEY ACTIONS:**

(13) **European Commission to implement full e-procurement** by mid-2015 (one year before the deadline for Member States)

(14) **European Commission to make its e-procurement solutions available** to Member States that are building their infrastructure, to reduce investment costs.

5. **INTERNATIONAL DIMENSION OF E-PROCUREMENT**

The current text of the WTO (World Trade Organisation) GPA (Government Procurement Agreement) contains very limited provisions concerning e-procurement and merely foresees that parties shall consult regularly on developments in this area. The recently agreed GPA text represents a step-change as it recognises the importance of using and encouraging the use of electronic means for procurement, while contracts awarded by electronic means are now

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28 [https://etendering.ted.europa.eu/](https://etendering.ted.europa.eu/)
29 e-PRIOR is a solution developed within the European Commission. It was made available to external users as an open source solution (“Open e-PRIOR”). See [https://joinup.ec.europa.eu/software/openeprior](https://joinup.ec.europa.eu/software/openeprior).
explicitly within the scope of the Agreement. General principles are established governing the use of electronic means while specific rules apply *inter alia* to the electronic publication of notices and the use of electronic auctions. Beyond these legal provisions, informal consultations among jurisdictions on the use of e-procurement systems will become essential to avoid new obstacles to cross-border contracts. Common reliance on high-quality international standards should pave the way to achieve the necessary degree of openness and inter-operability.

In light of the increasingly important international dimension of e-procurement, openness of e-procurement systems to bidders from all jurisdictions, especially among WTO GPA members, must be ensured. The European Commission will therefore seek to step-up its participation in relevant international standardisation fora and to more systematically include e-procurement in bilateral regulatory dialogues with its main trading partners.

**KEY ACTIONS:**

(15) European Commission to **promote international regulatory dialogues** about open e-procurement systems and to actively **monitor relevant international standardisation work**.

6. **CONCLUSION**

The transition towards full e-procurement is not primarily a technical nor technological challenge. It is above all an economic and political challenge, which cannot be overcome without strong commitment at the highest political level. The Commission therefore invites Member States and the European Parliament to give a clear political signal of their determination to face-up to this challenge, in particular by adopting the revised Public Procurement legislative package before the end of this year so that the transition to full e-procurement is achieved successfully in the EU by mid-2016.