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GREEN PAPER

on expanding the use of e-Procurement in the EU

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1. WHY A GREEN PAPER ON E-PROCUREMENT?

E-Procurement refers to the use of electronic communications and transaction processing by government institutions and other public sector organisations when buying supplies and services or tendering public works. However, there is much more at stake than the mere changeover from paper based systems to ones using electronic communications for public procurement procedures. E-Procurement has the potential to yield important improvements in the efficiency of individual purchases, the overall administration of public procurement and the functioning of the markets for government contracts.

The phasing-in of e-Procurement forms part of the ambitious e-government agenda which can fundamentally transform the delivery and performance of public administration. The Commission's European Digital Agenda foresees the adoption of a Commission White Paper outlining steps that the Commission will take to establish an inter-connected e-Procurement infrastructure¹.

The present Green Paper constitutes a first step towards completion of this action and the definition/implementation of an ambitious but realistic programme to harness the potential of ICT for better public procurement across the single market.

The present Green Paper also constitutes a first step towards a co-ordinated, ambitious and comprehensive review of the existing EU Public Procurement framework that will inform proposals for the reform of EU legislation. It will be followed by a second Green Paper addressing other issues related to the modernisation of the existing EU public procurement framework.

In 2005, EU Ministers voiced the hope that *"by 2010 at least 50% of public procurement above the EU public procurement threshold will be carried out electronically"*². To achieve this, the Commission has modified legislation and implemented the (2004) e-Procurement Action Plan³. Despite this, actual take-up lags far behind initial aspirations, reflecting the technical, logistical and administrative complexity of the changeover. The Commission's evaluation⁴ suggests that less than 5% of total procurement budgets in the first-mover Member States⁵ is awarded through electronic systems.

The Commission considers that the time is right to refocus Community action to support the deployment of e-Procurement by national, regional and local public administrations. The technology is now mature. Successful e-Procurement platforms are well-established in many regions and Member States. Traffic through these systems has reached a critical mass and is growing strongly. There is an opportunity to disseminate best practice and correct

¹ A Digital Agenda for Europe COM(2010) 245 (page 32)

² The Manchester ministerial declaration of 2005

³ Communication on the Action plan for the implementation of the legal framework for electronic public procurement published December 2004.

⁴ See Commission's Evaluation of the 2004 Action Plan for electronic public Procurement and supporting study published on DG Market and Internal Services website.

⁵ This excludes Portugal, which has made the use of e-Procurement mandatory for phases from notification to tender award since 1 November 2009.

shortcomings in the EU legal and policy environment which might otherwise stifle these developments.

In addition, there is a window of opportunity to align developments and processes to ensure that key components of the emerging e-Procurement infrastructure support cross-border participation in procurement procedures. Unchecked proliferation of technical solutions and applications could lead to unnecessary barriers to participation by economic operators in procedures that are organised on partner country systems. While cross-border participation in e-Procurement remains anecdotal, the Commission believes that it is wise to act now in order to avoid technical or operational barriers becoming endemic in the emerging e-Procurement landscape.

What is e-Procurement?

E-Procurement is a catch all term for the replacement of paper based procedures with ICT based communications and processing throughout the procurement chain. E-Procurement involves the introduction of electronic processes to support the different phases of a procurement process – publication of tender notices, provision of tender documents, submission of tenders, evaluation, award, ordering, invoicing and payment.

Processes linked to invoicing and payment (post-award) are not procurement-specific and solutions developed for the wider (B2B) market can be put to work in e-Procurement⁶. However, some phases (notification, submission, evaluation and ordering) require customised solutions. The phases of submission, evaluation and ordering are the most challenging as they require an agreed set of protocols and standards for organising the exchange of complex documents and interaction between the public purchaser and suppliers.

Some aspects of procurement activity will continue to require non-automated handling. For example, certain phases of complex procurements (designs, works) may be difficult to reduce to standardised formats and may require human intervention. Nevertheless, there is potential for large parts of procurement activity to be shifted to an electronic basis. The experience of Korea is instructive: over 90% of all government procurement in that country is mediated through the centrally administered KONEPS platform.

Often, parts of the procurement procedure can be conducted electronically with others being operated on a non-automated basis. Many public administrations have built portals for the publication of procurement notices and provision of access to tender documents. Progress in the use of automated systems for the submission, processing and evaluation of tenders and ordering is less widespread. The ultimate prize is 'straight through e-Procurement' with all phases of the procedure from notification to payment being conducted on an automated basis, through the medium of electronic procedures. Such possibilities are available – usually provided by specialised e-Procurement platforms which provide all relevant support to individual contracting authorities in running electronic procurement procedures.

2. WHY IS E-PROCUREMENT IMPORTANT?

The Commission sees the following advantages in the wider use of e-Procurement:

⁶ Deutsche Bank Research published the paper "e-Invoicing Final steps of an efficient invoicing process" in May 2010, which contained figures suggesting that "under certain assumptions the automated processing of an electronic invoice can cost a total of over EUR 18 less than the unstructured processing of a traditional paper invoice."

- a) **Increased accessibility and transparency:** by automating and centralising the flow of information about individual tender opportunities, e-Procurement can improve the access of businesses to public procurement. Searching for opportunities on-line is much quicker and cheaper than screening individual publications. E-Procurement systems can also be configured to alert suppliers to particular opportunities and provide immediate access to tender documentation. Transparency is also improved as the procurement process is more open, well-documented and communicated. As a result the monitoring and overall efficiency of public procurement improves, opening up markets to more competition and deepening the pool of competing suppliers.
- b) **Benefits for individual procedures:** compared to paper based systems, electronic public procurement can help contracting authorities and economic operators to reduce administrative costs and speed up individual procurement procedures. In the current financial climate, such efficiencies could be very welcome, maximising the potential which can be obtained from constrained resources. E-Procurement systems have also proved very useful in speeding up the expenditure of public procurement budgets.
- c) **Benefits in terms of more efficient procurement administration:** where Central Purchasing Bodies (CPBs) exist, the use of electronic procedures can contribute to centralise costly procurement back-office functions and reap scale economies in procurement administration. The switch to e-Procurement also provides a wider opportunity to rationalise and review the procurement process – moving to e-Procurement does not have to mean copying in electronic form the paper based procedures which may have existed for many years. E-Procurement can be integrated within the other (electronic) activities of an organisation (e.g. inventory control, contract management and audit) ensuring consistency and wider efficiency.
- d) **Potential for integration of EU procurement markets:** in a paper based environment, lack of knowledge and concerns about bidding for contracts some distance from a business' place of establishment may have limited or discouraged suppliers from competing in certain tenders. E-Procurement has the potential to reduce these distance barriers and information gaps and encourage greater participation, widening the pool of possible suppliers and potentially enlarging markets. Although it cannot change the relevance of distance or physical proximity in terms of actually performing the underlying business transaction, it does offer a way to overcome distance-related costs to participation in the procurement procedure itself. The resulting transparency is not just a cross-border benefit; the advantages of this greater transparency can be felt even within the borders of a country, as suppliers in one region take advantage of opportunities in another. Easier access to information about tender opportunities and streamlined tender processing will make it easier for foreign suppliers to participate in on-line procurement opportunities.⁷

All of the above benefits help the desired procurement outcomes to be achieved more effectively. In particular, e-procurement can help to source inputs for public services on terms that are better value for tax-payers. These savings are particularly valuable now in the context of pressure to manage public expenditure.

⁷ They may still be deterred from participating by structural costs or other factors linked to the underlying market which make it unattractive for them to participate. Nevertheless, an increasing range of procurements can be sourced remotely including services such as software, design competitions and help-desks. E-Procurement should be well suited to publicise, exploit and ultimately realise such opportunities.

These benefits do not come for free. The ability to perform procurement electronically requires investment throughout the procurement chain to build the necessary capacity and manage the change-over. Investment costs in national and regional e-Procurement facilities – spanning e-portals to more comprehensive solutions – range from 0.5m€ to 5m€⁸. Maintenance costs vary from several thousand euros to several million, presumably depending on the size and sophistication of the system. Experience suggests these investments can be recouped in administrative savings within short time-frames. However, the bigger barrier to the use of these systems lies in encouraging contracting authorities and supplier communities to work with these new systems. Successful e-Procurement initiatives often include extensive support for training user communities and continued efforts by sponsors of e-Procurement to promote and develop their systems.

Examples of savings and improvements

- Italian Emilia Romagna's agency Intercent ER offers e-Procurement services including e-Marketplace, e-Catalogues and e-Auctions and is now the reference point for 539 administrations (90% of local agencies). In 2008 it processed transactions amounting to some €419 million, delivering efficiency benefits of €67.5 million and time savings of 45 man-years.
- The Austrian Federal Procurement Agency centralises purchases for federal authorities through e-Procurement functionalities. In 2008 it reported savings of €178 million against a procurement volume of €30 million. Benefits seem to significantly outweigh the annual maintenance costs of €5 million, which are less than 3% of the savings.
- As of 1 February 2005, all contracting authorities in Denmark may only accept electronic invoices. This reform affects approximately 15 million invoices a year, and applies to the entire public sector, from ministries to nursery schools. The use of e-Invoicing is expected to save the public €100 million every year, on top of savings in internal administrative processes.
- In Norway, the Ehandel platform is helping authorities to achieve 20-40% reductions in the time taken to handle orders, receipt of goods and invoicing and delivering price savings in the region of 2-10%.
- In the UK, the Buying Solutions site reported in its 2008/09 annual report that it had facilitated sales of over £5 billion, delivering £732 million in savings. The UK also reported savings frequently exceeding 10% (and even up to 45%) through the use of e-Auctions and recently announced plans to use e-Auctions to save the taxpayer up to £270 million by the end of 2011.
- A Portuguese study compared the best bids for public works contracted by 50 Portuguese public hospitals in 2009 (using paper based systems) and 2010 (using e-Procurement). It concluded that a cost reduction of 18% had been achieved in 2010, due to the increase in competition generated by e-Procurement.

3. WHAT ROLE CAN THE EU PLAY IN PROMOTING E-PROCUREMENT?

Most of the required investment in e-Procurement must be undertaken at national or regional level, as this is where the needs and resources lie. Moreover, EU procurement legislation leaves contracting authorities the choice as to whether to use electronic or other

⁸ Based on information available from the website www.epractice.eu.

communication methods for above threshold procurement. Therefore, EU policy towards e-Procurement needs to recognise the bottom-up and decentralised nature of the change-over.

However there is still an important role for EU initiatives to unlock the potential of e-Procurement and to avoid the pitfalls of an uncoordinated and decentralised switch-over to e-Procurement. In particular, EU legal and policy efforts have in the past and should continue to:

- (1) Enable contracting authorities to undertake procurement electronically. EU legislation needs to be configured to allow e-Procurement systems and processes to be used (for above threshold procurement);
- (2) Ensure that e-Procurement is undertaken in a way that complies with the core principles and provisions of EU public procurement legislation (for above threshold procurement) and relevant Treaty principles (for below threshold procurement);
- (3) Encourage the development and use of convergent, secure but commercially viable solutions and disseminate examples of best-practice. This should speed up the switch to e-Procurement, avoid wasteful duplication and avoid repetition of mistakes.
- (4) Permit economic operators to participate in electronic procurement procedures across the single market. E-Procurement provides the possibility to reduce distance barriers and information gaps. E-Procurement capacity in the different Member States should – to the greatest extent possible – build on common models and approaches. Solutions which improve and enhance interoperability between local, regional and national e-Procurement systems should be encouraged. This will avoid unnecessary technical barriers to cross-border participation in e-Procurement systems.

EU policy may therefore play an important and complementary role in support of national or regional efforts to put procurement on an electronic footing. It also has a wider co-ordinating role, ensuring consistency with developments in other related areas – for example legislation relating to electronic signatures or electronic invoicing and which may eventually lead to some harmonisation of approaches within the EU. If the EU level dimension is not taken into account, the switch-over may be hampered, there may be wasted resources as the wheel is constantly reinvented, and the potential of e-Procurement to widen supplier bases may go unrealised. This Green Paper and subsequent work aim to define a realistic and effective basis for the EU to accompany and facilitate this important process.

4. WHAT HAS THE EU DONE TO DATE?

The Commission is not a newcomer to this policy area. It has already taken a number of steps in recent years to achieve the objectives introduced above. In particular, it has:

- (1) Proposed modifications to the EU Public Procurement Directives permitting the use of electronic procedures for procurement and introducing techniques and tools which were thought to be relevant for e-Procurement. Previously, EU legislation did not recognise the possibility for the use of these methods. The Commission also introduced new techniques and tools (e-auctions, DPS) to allow contracting authorities to make fuller use of electronic communications to improve procurement outcomes. These proposals were adopted and implemented in the modified Public Procurement Directives of 2004;
- (2) Conceived and implemented a programme of over 30 non-legislative initiatives to clarify and encourage the use of e-Procurement (the Action Plan). The policy vision underpinning the Action Plan was ambitious – that “...any business in Europe with a

*PC and an internet connection can participate in a public purchase conducted electronically."*⁹;

- (3) Co-financed research and developed other practical tools to overcome administrative and technical barriers to cross-border e-Procurement. These include initiatives such as PEPPOL¹⁰, the newly launched e-CERTIS tool and open e-PRIOR. These projects are still in development or only recently introduced.

In parallel with this Green Paper, the Commission services have undertaken an evaluation of EU measures to support e-Procurement. The main conclusions of this evaluation are that on the whole, the Action Plan correctly identified the relevant challenges and priorities to be tackled. It also recognised that the primary impetus for progress had to come from Member States and regions. It identified a number of actions to steer national and regional investments in ways that were consistent with EU legislation and a single market.

The Action Plan achieved some notable success in the creation and use of a common infrastructure for electronic publication of tender notices. There is now a single, accepted and well used system for the publication of above threshold notices across the EU, supported by compatible infrastructure at national level. In 2009 just over 90% of forms sent to TED (Tenders Electronic Daily) were received electronically and in a structured format. The electronic publication of notices for below threshold procurement has also advanced at national or regional level.

Many Action Plan measures consisted of guidance or pilot studies which sought to test or promote certain solutions. They have raised awareness of problems, pointed towards solutions and provided common points of reference for the wider market. However, they did not seek to impose particular solutions or outcomes at a time when technology and business models were still evolving. More concrete projects in the area of standardisation have not yet crystallised. In summary, although priorities were generally identified correctly and much of the Action Plan has been implemented as foreseen, it has not yet created a situation where every EU business can participate in every procurement procedure via its own computer.

The bottom-line is that many of the priorities identified by the Action Plan, correctly identified in 2004, remain priorities today. The "soft law" approach was appropriate to the evolving e-Procurement environment and encouraged the development of creative solutions. With the benefit of hindsight, there are some areas which might have benefited from a more pro-active and/or directive approach. The evaluation of the Action Plan has identified a number of challenges and weaknesses which, if not addressed, will prevent the realisation of a wider take-up of e-Procurement and cross-border participation in on-line procurement.

⁹ Page 10 of the Extended Impact Assessment COM 2004(841), annexed to the Action Plan Communication.

¹⁰ Pan-European Public Procurement Online (PEPPOL) - for more information see website www.peppol.eu

Commission financed and steered actions to support e-Procurement

PEPPOL: run by public-sector organisations from various EU countries and co-funded by the European Commission, PEPPOL is a major cross-border e-Procurement project intended to provide large-scale, standards-based IT infrastructure and services to set up and run on-line pan-european public procurement operations. At the heart of the PEPPOL architecture is a transport network, enabling e-Procurement business partners to connect their own IT resources to perform secure and reliable exchanges of business documents. The project will also deliver solutions to e-ordering and e-invoicing and provide building blocks towards the creation of systems for e-catalogues, signature validation and the Virtual Company Dossier (VCD).

Open e-PRIOR: the European Commission has developed and deployed e-PRIOR to allow the exchange of structured e-Catalogue, e-Ordering and e-Invoicing documents between the Commission and its suppliers. Open e-PRIOR publicly provides this solution in a re-usable open-source format. Furthermore, Open e-PRIOR includes an integrated PEPPOL Access Point that enables document exchange via the PEPPOL Network.

e-CERTIS: launched at the same time as this Green Paper, e-CERTIS is a free, on-line information tool which provides details of the different certificates and attestations frequently requested in procurement procedures across the 27 Member States, two Candidate Countries (Turkey and Croatia) and the three EEA countries (Iceland, Liechtenstein and Norway). E-CERTIS has been designed to help both economic operators and contracting authorities, first to understand what information is being requested or provided and secondly to identify mutually acceptable equivalents.

5. THE STATE OF E-PROCUREMENT

a) Availability of technical solutions

E-Procurement is now possible in practice – not just in theory. The technology exists and is being used in several countries to permit all the phases of the procurement transaction to be completed on-line.

Technology has not provided the expected (high tech) solutions to all procedural steps. In some cases, progress has resulted from a more pragmatic approach – in the form of practical 'work-arounds' involving less technically demanding solutions or combining on/off-line communication e.g. the approaches adopted to the provision of evidentiary documents for exclusion and selection criteria; the use of user name and password solutions to authenticate a bidder. Nonetheless, these solutions are valid – they simply provide alternative ways to reach the end result. Certain limits to "straight through" e-Procurement have been identified e.g. difficulties in using automated evaluation approaches for complex purchases; absence of a time-stamping system which is accepted EU wide.

b) Investment in and availability of e-Procurement capacity

E-Procurement is beginning to make its presence felt in Europe. The success of a number of platforms demonstrates the business case. Significant efforts and progress have been made by some contracting authorities, economic operators, Central Purchasing Bodies and Member States. Great progress has been made in developing electronic applications capable of supporting most/all phases of procurement procedures. Some Member States or regions have put in place e-Procurement systems which can support 'straight through electronic procurement' processes – at least for purchases of standard supplies and services. Other systems concentrate on providing the first elements of procurement – in 25 Member States it is possible to publish notices and make tender documents available on-line.

A number of successful systems have adopted an e-Procurement model provided by 3rd parties over a network. Such platforms often offer their e-Procurement services to several organisations. Individual procurers are given a private web space where they can remotely define their own users, processes and deliverables. Some are run by public agencies, while others are provided by private sector companies; contracting authorities then pay on a flat-rate or per-use basis.

c) Actual use of e-Procurement

Overall take-up, both within most countries and across the EU as a whole, remains low and is estimated to be less than 5% of total procurement by value.

The exception to this low use is Portugal, where the use of electronic means to conduct the procurement phases up until contract award has been mandatory since 1 November 2009 for most public purchases (some small value contracts are not conducted electronically and the evaluation of certain purchases may be conducted by a mix of electronic and more standard means). As a result, contracting authorities are now procuring more quickly and administrative savings of €28 million per annum are expected. Other Member States have also made the use of certain e-Procurement phases or tools mandatory at a national level e.g. Cyprus, Belgium and the Netherlands have made or plan to make the notification of contract possibilities mandatory via certain platforms. Other countries have introduced mandatory requirements for certain levels of government e.g. Austria has made the use of framework agreements mandatory for federal authorities for specific goods and services.

Wider anecdotal evidence suggests that many contracting authorities and economic operators have made the switch-over to e-Procurement and would not contemplate a return to paper based procedures.

d) Cross-border accessibility of e-Procurement systems

Little commonality is currently visible in the different systems which exist – individual island solutions have been developed and if action is not taken quickly to create bridges between these systems, there is a strong risk of market fragmentation. The existing business processes, document standards and formats and ways to communicate are not sufficiently standardised. The more pre-defined and re-useable components for e-Procurement become available, the easier it will be to ensure an interoperable e-Procurement environment which encourages wider take-up and eventually, cross-border use. Whilst convergence on one monolithic system is neither desirable nor intended, it will facilitate participation if there is some common core functionality across systems.

As a result of some of these problems, in today's market, economic operators wishing to participate in on-line procurement procedures in other Member States will be faced with practical, technical and administrative obstacles. National/regional e-Procurement procedures are designed by reference to local administrative or technical practices which may differ significantly. Although the availability of infrastructure has increased significantly since 2004, little concrete progress has been made towards unhindered, cross-border electronic procurement. Up until now, these issues have not come strongly to the fore because of limited demand by partner country suppliers to take part in on-line procurement. However, attention should be focussed now on these issues, if we are not to face a new generation of technical barriers to cross-border (on-line) procurement.

6. CHALLENGES

The following section identifies the main challenges that prevent the successful transition to e-Procurement and which may be creating unnecessary obstacles to cross-border participation

in on-line procurement procedures. Many of these issues are inter-linked and can not be addressed in isolation if they are to be successfully overcome and the policy objectives achieved.

- (1) **Overcoming inertia and fears on the part of contracting authorities and suppliers:** the technology and capacity to conduct procurement electronically is increasingly available. However, it is not a case of "build it and they will come". Contracting authorities are slow in making use of these possibilities. This can be attributed to the costs of reorganising internal systems, and low awareness of the advantages. Equally suppliers do not always see the benefits for them in making the transition. Many contracting authorities and suppliers are willingly taking a "wait and see" approach because of the perceived risks in investing in e-Procurement. In addition to technology-related risks, they are concerned with risks associated with the integration of these technologies with existing information systems, with the business model that these technologies impose on supplier-contracting authorities relations, and with the security and control mechanisms required to insure their appropriate use. Some, particularly SMEs, are also concerned that they will be edged out of the market by trends towards aggregation and centralisation. If speedier transition to e-Procurement is desirable, it will be necessary to strengthen incentives to switch to e-Procurement where available – and possibly to impose the use of e-Procurement in certain circumstances (e.g. for certain purchases).
- (2) **Lack of standards in e-Procurement processes:** for the foreseeable future, suppliers will be confronted with an e-Procurement landscape consisting of different e-Procurement platforms and arrangements. Each system may contain different technical features and functions, complicating the task of suppliers who seek to participate in multiple systems. This could increase learning costs for procurement suppliers and reduce participation in e-Procurement systems. Many of the most challenging issues manifest themselves in the submission and processing of tenders phases. The market needs to identify mature applications with appropriate levels of functionality. More concerted EU level efforts to encourage alignment or standardisation in these crucial parts of the process are needed. Common reference points and standards are needed to permit the development of replicable and interoperable systems. Efforts should be concentrated in the areas of document exchange, authentication, e-invoicing, e-catalogues and product classifications.
- (3) **No means to facilitate mutual recognition of national electronic solutions** to critical procurement phases and tools (e.g. authentication of suppliers by the use of electronic signatures, national proof of eligibility documents). Solutions need to be found which reduce the burden on contracting authorities and suppliers wishing to operate in a wider European market.
- (4) **Onerous technical requirements, particularly for bidder authentication:** a wide range of requirements and solutions have been adopted across the EU to deal with issues relating to authentication and identification. Some of these solutions are technologically very simple e.g. the use of username/password combinations; others are more sophisticated, requiring specific types of electronic signatures, including qualified signatures (requiring a digital certificate issued by supervised/accredited Certification Service Providers). The decision to promote qualified e-signatures within the Action Plan may have set the point of reference for e-Procurement applications too high and increased the cost and burden of submitting tenders electronically. The choice of the security level of an electronic signature should be based on a risk assessment of failed identification/signature solutions in the context of procurement.

Finally, the lack of cross-border interoperability of electronic signatures poses another difficulty. There are hopes for progress based on the establishment of national trusted lists of the providers of qualified signature certificates¹¹; the forthcoming rationalisation of the electronic signature standards; and PEPPOL pilot solutions). Similar high tech expectations for other elements of the e-Procurement process have been addressed by more pragmatic solutions – for example the use of declarations of compliance/eligibility, accepted in the initial tendering stages rather than the development of complex e-Documents. E-Procurement solutions need to be proportionate, mutually recognisable and widely available at reasonable cost.

- (5) **Managing multi-speed transition to e-Procurement:** different Member States or regions are moving at different speeds to embrace the possibilities offered by e-Procurement. Some Member States have imposed the use of electronic procurement procedures for some or all purchases. Procurement procedures for these purchases have to be organised through the available e-Procurement infrastructure. The challenge for the single market is to ensure that partner country suppliers are not unnecessarily disadvantaged in competing on these systems and that they have the tools to participate in procedures organised on different systems.

Questions

1. *Do the above challenges represent the most significant obstacles to the take-up of e-Procurement and cross-border participation in on-line procurement procedures? Please rank these challenges in (decreasing) order of importance.*
2. *Are there other priority challenges not identified here? Please comment.*

7. PRIORITIES FOR EU LEVEL ACTION

The Commission believes that the following avenues could be explored with a view to smoothing the way for wider use of e-Procurement and supporting cross-border participation in e-Procurement procedures.

7.1. Carrots and sticks to accelerate take-up of e-Procurement

Now that the technology is there, the challenge lies in convincing contracting authorities and suppliers to make use of it. There may be a need for policy intervention to kick-start this process and ensure that it gathers critical mass.

With this in mind, a number of Member States have introduced obligations to conduct procurement procedures electronically – either generally (Portugal) or for designated purchases (France). For public purchases below the thresholds laid down in EU Directives, Member States retain large discretion as regards the organisation of procedures.

For above threshold procedures, the current EU public procurement Directives do not explicitly address the scenario where a Member States wishes to impose the use of e-Procurement as the relevant communication medium. Clarification on this point could provide national authorities with greater security when imposing the use of e-Procurement.

There may also be scope for using legislation to incentivise contracting authorities to convert to e-Procurement. The current EU Directives already foresee a reduction in publication deadlines (by seven days), in the event of electronic notification of tenders and the reduction in delays for tender submission (by five days) when unrestricted and full direct access to the

¹¹ Commission decision 2009/767/EC amended by Commission decision 2010/245/EU.

relevant documents is provided by electronic means. Further reductions in deadlines could compromise the ability of economic operators to prepare sound tenders. However, there may be potential for introducing other incentives or preferential regulatory conditions to encourage contracting authorities to migrate to e-Procurement.

For example, there may be scope for transferring the responsibility for compliance with certain regulatory or procedural requirements from the contracting authority to an e-Procurement system which handles or manages all or part of the procurement procedure. Where the transparency and procedural requirements of the Directive, and objectivity and traceability of individual procedures are guaranteed by the e-Procurement platform, the onus for ensuring compliance with the requirements of procurement legislation could be shifted from the individual contracting authority to the e-Procurement system. Such an approach would provide a 'safe harbour' for individual contracting authorities which use these specialised facilities to run individual procurement procedures. This shift in responsibility, from the contracting authority to the e-Procurement system, could make the use of on-line means more attractive and thus increase take-up. This approach might require the definition of common requirements or principles for recognised e-Procurement systems to ensure that they offer the necessary guarantees.

Questions

3. *Is there further scope for the introduction of regulatory incentives in EU legislation to encourage the use e-Procurement? Please describe the incentives that could be effective.*
4. *Should EU legislation alleviate the obligations and responsibilities of contracting authorities when procurements are performed by e-Procurement systems? Would this make the use of e-Procurement systems more attractive?*
5. *Should EU legislation permit the imposition of electronic procedures for some procurement covered by the EU Directives? What would be the advantages/disadvantages of such provisions? For which types of procurement covered by EU Directives could the mandatory use of e-procurement be successfully envisaged?*
6. *Alternatively, should EU procurement legislation clarify the possibility for individual Member States to require the use of e-Procurement under certain circumstances? Under which conditions would this be useful or justified?*

7.2. Facilitate cross-border participation in e-Procurement

Individual Member States and regions are moving at different speeds to promote the use of e-Procurement. Care will be needed to ensure that this does not give rise to unnecessary or disproportionate barriers to cross-border participation in procurement. A balance needs to be struck between encouraging authorities to invest in e-Procurement capacity and avoiding fragmentation of procurement markets into pools of operators connected to systems having their own unique functional specifications. To the greatest extent possible, e-Procurement systems need to be widely accessible. This means that the technical, legal and administrative conditions for participating in procedures should be non-discriminatory, proportionate and not create unjustified or arbitrary obstacles to participation/registration by economic operators from other Member States.

To achieve this, EU level attention – and particularly any steps to clarify the legal environment - should focus principally on procurement procedures above the EU thresholds or those conducted on an e-Procurement system where the total value of procurement exceeds

a certain threshold. A prioritisation of EU level intervention would allow national and regional efforts to develop their e-Procurement capacity organically and focus EU level attention on those segments or systems where the potential for cross-border on-line procurement is greatest.

Under this heading, EU level action could contribute in the following ways:

- a) **Clarifying access conditions that e-Procurement systems and procedures must satisfy.** A common view of the requirements necessary for the wide accessibility of e-Procurement across borders should be established, building on the functional requirements already produced under the 2004 Action Plan. This does not mean the creation of a single e-Procurement system, now or in the future. It means defining an agreed minimum set of characteristics which should be present in any e-Procurement system to ensure that it is widely accessible. It would involve providing operational guidance to expand on the principles laid down in Article 42 of Directive 2004/18/EC. Such guidance could take the form of Recommendations, interpretative communications or other non-legislative actions. Alternatively it could take the form of changes to the Directives (for above-threshold procurement) or stand-alone legislative measures addressed to e-Procurement systems.
- b) **Facilitate mutual recognition of electronic identifiers, evidentiary documents and other conditions for economic operators to participate in on-line procurement procedures.** Most concerns encountered so far relate to problems linked to authentication, such as the application of electronic signatures and recognition of electronic identification. These problems are not specific to the e-Procurement context but arise in any situation where authentication/signatures are required. The Commission has adopted measures to allow authorities to identify the origin/certification of partner country signatures. The PEPPOL project is developing solutions which seek to provide on-line tools permitting automatic recognition of electronic signatures from other Member States which can be used in a procurement context.

Other concerns arise from the requirement for contracting authorities to assess evidentiary documents submitted by tenderers to prove eligibility for selection. These documents are issued at national/local level in accordance with the relevant conventions, formats and languages. E-Procurement was expected to find ways to increase the efficiency of this part of the process and more specifically, to reduce the burden the repeated provision of such evidence places on an economic operator. Many of the solutions developed to date go some way to fulfilling these objectives, but do not rely on complicated high tech solutions. For example, in some countries the economic operator provides a statement (often a simple electronic document which may or may not be electronically signed) that they are not in breach of any of the set criteria. Only the winning bidders are asked to provide the actual documents and this may be done electronically or on paper.

The Commission has developed the e-CERTIS tool to assist contracting authorities in recognising valid documents from other Member States. It will continue to build on this tool, to develop practical solutions to help contracting authorities to recognise partner country attestations/certificates

- c) **Simplification of entry/participation requirements for economic operators.** The Commission's evaluation of the e-Procurement Action Plan reveals concerns that the preference for qualified electronic signatures may constitute an unnecessary entry barrier to e-Procurement – particularly for partner country suppliers in the absence to

date of operational tools for the recognition of different electronic signatures. Given this assessment, it may be useful to revisit the presumption in favour of qualified electronic signatures that is contained in EU procurement legislation. The Digital Agenda for Europe foresees a review of e-signatures legislation and a stepping up of work in the area of e-identification.

Questions

7. *Is EU intervention needed to avoid the emergence of unnecessary or disproportionate barriers to cross-border participation in on-line procurement procedures or systems? If clarification is needed should it take legislative or non-legislative form?*
8. *Do you consider that efforts to develop the EU legal and policy environment should focus on:*
 - *Systems which support procurement procedures above the thresholds laid down in EU Directives (including systems with a mix of above and below threshold);*
 - *Larger systems dealing with a certain de minimis level of procurement (by monetary value or percentage of total national procurement).*
9. *Is there a need to modify or update the current EU legislative framework on e-Procurement? If so, which provisions and for what reason? (Please refer to Annex I for a list of provisions related to e-Procurement.)*
10. *What authentication and identification solutions (including e-Signatures) are proportionate to the risks encountered in e-Procurement?*
11. *What are the main technical, administrative or practical obstacles encountered by economic operators when seeking to register or participate in partner country e-Procurement procedures or systems (authentication, proof of eligibility, financial solvency etc: please specify)? Do these barriers constitute an insurmountable obstacle or can they be overcome at reasonable cost?*

7.3. Building blocks for interoperable e-Procurement infrastructure

Future work should again emphasise the creation of re-usable tools and where appropriate, invest in developing infrastructure solutions and standards.

A clear success of the 2004 Action Plan was the creation of TED and the introduction of electronic standard forms for above-threshold procurement procedures which have provided a single Europe-wide point of reference for all above-threshold procedures using information provided in a common format. However the EU can do more to facilitate interconnectivity and interoperability within Europe's emerging e-Procurement landscape.

- a) **Encourage standardisation of key processes and systems:** a collaborative process like e-Procurement, where independent systems belonging to independent parties interact by exchanging business information, can only be supported if the systems share a common view of the business process and the information that needs to be exchanged. Standardised approaches and formats for the most frequent e-Procurement processes would considerably improve the up-take and re-usability of data. Operators would be able to take part in procurement processes across an unlimited number of different systems at little effort and cost, not needing to significantly re-work their submissions each time, other than to tailor them to the specific bid. Important progress is being made in some post-award phases (e.g. e-Catalogues, e-Ordering and e-Invoicing), although this has not yet led to the adoption

of European standards. Efforts in these areas should be stepped up and the standardisation process should also be extended to other key phases of e-Procurement. .

- b) **Pre-Award:** great strides have been made in the electronic publication and dissemination of information about procurement opportunities. However, much less progress has been seen in developing common approaches, standards or templates for the on-line submission and processing of tenders. This is where the real gains (and challenges) in e-Procurement lie. While solutions have been engineered for individual e-Procurement platforms, no attention has been devoted to aligning methods or approaches for submitting tenders electronically.
- c) **Providing common building-blocks for e-Procurement systems:** the Commission is developing a suite of applications that will encompass all key phases in the procurement cycle, building on the existing open e-PRIOR solution. These systems were primarily intended for internal use, allowing the Commission to develop an efficient e-Procurement capability but are now being made available as free, open source components which could be integrated into any e-Procurement system as desired.
- d) **Give economic operators the tools to overcome technical interoperability issues:** ICT is increasingly capable of delivering solutions to support communication between systems and applications based on different technical specifications. The PEPPOL pilot project is developing off-the-shelf software solutions to overcome the most important technical incompatibilities that can prevent economic operators from participating in partner country e-Procurement procedures. PEPPOL solutions will be trialled in real-life situations over the coming months. The Commission will promote and support the market take-up of successful PEPPOL solutions.

Questions

- 12. *What EU level standards are needed as a priority to support e-Procurement?*
- 13. *Should the Commission encourage / increase the provision of open-source solutions which can be integrated into existing or developing e-Procurement systems on a piecemeal basis?*
- 14. *Should the Commission continue to make its own e-Procurement solutions (e.g. building on open source e-Prior) available to the wider public?*

7.4. Making procurement more accessible (to SMEs), sustainable and innovative

E-Procurement may, by its nature, be more compatible with or facilitate the use of procurement budgets in support of EU 2020 objectives.

E-Procurement's potential to increase access must be fully realised. This does not just relate to possible cross-border participation, but also to attracting all interested and eligible suppliers, big and small. Some countries have followed the recommendations of the Action Plan and introduced strategies to encourage SMEs to adopt e-Procurement practices. These strategies appear to have been successful, with a significant proportion of SMEs registering on the various platforms and providing bids. Other countries report concerns that moves to use e-Procurement to increase the centralisation of purchasing or aggregation using framework

agreements are excluding SMEs. As further developments and refinements are made, it may be necessary to ensure that all e-Procurement systems are SME friendly¹².

E-Procurement can also decrease the consumption of environmental resources. Finally, the traceability and transparency of e-Procurement can make it easier to design, implement and monitor policies to direct expenditure towards innovative, sustainable and inclusive policy objectives.

Question

15. *The Commission has already taken steps to encourage the creation of strategies to improve access to e-Procurement markets by SMEs. What further steps might be taken to improve the access of all interested parties, particularly SMEs, to e-Procurement systems?*

7.5. Benchmarking and monitoring ...learning from best practice

As we move forward, it is vital that we find a mechanism which allows all parties to profit more directly from existing experiences, actively promoting the wider benefits of e-Procurement. This will be particularly important given the current financial environment, where resources are limited and proposals for IT projects (which have often had a history of failure or overruns) may be judged more sceptically than before.

Better monitoring systems at both EU and national level could enable progress to be tracked more closely and, provided the appropriate indicators are introduced, facilitate timely action to address issues as they develop rather than once they have become endemic.

7.6. International developments and co-operation

As part of the 2004 Action Plan, the Commission has been involved in various initiatives intended to contribute to the development of an international framework for e-Procurement. Although negotiations are still on-going, the revised GPA text includes provisions on e-Procurement and the Commission has worked with the United Nations Commission on International Trade Law (UNCITRAL) to introduce revisions relating to e-Procurement. Whilst progress to date has been limited, the Commission is committed to furthering the adoption of e-Procurement and promoting European solutions.

8. CONCLUSIONS

E-Procurement is no longer a pipe-dream – it is increasingly a working reality in many regions and Member States. Where it is used, it is delivering the hoped-for benefits. These systems have shown their capacity to expedite public purchasing and to ease the flow of public expenditure in the context of the current crisis.

However, use of e-Procurement lags far behind the expectations set out in the Manchester Declaration. Rather than 50% use of e-Procurement in 2010, with the exception of Portugal, the Commission estimates that e-Procurement transactions do not account for more than 5% of total procurement expenditure even in first-mover Member States. Leadership at all levels of government – including EU - is needed to maintain and accelerate the transition to e-Procurement. If contracting authorities are given the option, they will stick to tried and trusted (paper based) practices rather than invest in and make use of these promising new options.

¹² The Commission intends to make Open e-PRIOR more accessible for SMEs through the development of a supplier portal.

This Green Paper has presented some new ideas for overcoming inertia on the part of contracting authorities and economic operators which is currently holding back the migration to e-Procurement.

This Green Paper also presents a number of suggested avenues to ensure that the introduction of e-Procurement does not lead to another generation of technical and administrative barriers to cross-border participation in procurement procedures. Member States, regions and sectors are moving at different speeds to take advantage of the opportunities offered by e-Procurement. We must ensure that this 'variable geometry' does not give rise to unnecessary or disproportionate obstacles to cross-border procurement. This involves clarifying the obligations on the organisers of e-Procurement procedures to avoid imposing conditions which would unnecessarily or disproportionately prevent cross-border participation. It also envisages a number of steps to equip contracting authorities and economic operators to interact effectively in the context of on-line procurement.

The Commission has set out a series of questions linked to its evaluation of the state of e-Procurement in Europe and to its suggestions for possible avenues for overcoming key challenges to the take-up and use of e-Procurement in the single market. The Commission invites responses to these questions from all interested parties. The deadline for receipt of responses is 31.01.2011 (e-mail address: markt-consult-eproc@ec.europa.eu).

The Commission services will analyse all responses and publish a synthesis of views in 2011.

ANNEX I: Provisions relating to e-Procurement introduced by the 2004 Public Procurement Directives (2004/17/EC¹³ and 2004/18/EC¹⁴)

Subject	Reference	Description
Electronic means of communication	Articles 1.12 and 1.13 of 2004/18/EC and articles 1.11 and 1.12 of 2004/17/EC	It is clarified that written communication includes electronic means, i.e. 'using electronic equipment for the processing (including digital compression) and storage of data which is transmitted, conveyed and received by wire, by radio, by optical means or by other electromagnetic means'
e-Signatures	Article 42.5(b) of 2004/18/EC, and article 48.5(b) of 2004/17/EC	Member States are allowed to require that electronic tenders are accompanied by an advanced electronic signature in conformity with article 5 paragraph 1 of Directive 1999/93/EC (advanced electronic signature based on a qualified certificate)
Dynamic Purchasing System (DPS)	Article 1.6 of 2004/18/EC and 1.5 of 2004/17/EC	DPS is defined as a completely electronic process for making commonly used purchases, limited in duration and open throughout its validity to any economic operator meeting the selection criteria, after submitting an indicative tender.
e-Auctions	Article 1.7 of 2004/18/EC and 1.6 of 2004/17/EC	Defined as 'a repetitive process involving an electronic device for the presentation of new prices, revised downwards, and/or new values concerning certain elements of tenders', run after the evaluation of tenders and impacting the ranking of offers
e-Catalogues	Recital 12 of 2004/18/EC and recital 20 of 2004/17/EC	Defined as a tool to facilitate public procurement, specifically as a modality for participating in procurements under framework agreements or within a DPS
e-Notification	Article 36.2, 36.3 and 36.6 of 2004/18/EC and article 44.2 and 44.3 of 2004/17/EC	Notification should be made using standard forms but not necessarily using electronic means, but in accelerated procedures, notices must be sent by telefax or using electronic means. E-Notification allows shortened publication and increase the maximum permitted length of the notices.
Buyer profiles	Point 2(b) of Annex VIII of 2004/18/EC, and point 2(b) of Annex XX of 2004/17/EC	Defined as a collection of data regarding the procurement activities of a contracting authority which may include prior information notices, and useful general information such as a contact point

¹³ 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, see <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32004L0017:EN:NOT>

¹⁴ 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, see <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32004L0018:EN:NOT>

Subject	Reference	Description
Electronic access to documents	Article 38.6 in 2004/18, (corresponding provision Article 45.6 in 2004/17)	The time-limits for receipt of tenders may be reduced by five days provided the contracting authority/entity offers unrestricted and full direct access by electronic means to the contract documents and any supplementary documents. The notice text should specify the internet address at which this documentation is accessible.

ANNEX II: Status of Action Plan measures

Objective I: Ensure a well functioning Internal Market in electronic public procurement	
<i>Implement the legal framework correctly and on time</i>	
COM to issue interpretative document on the new rules on electronic public procurement	Completed
COM to make online training demonstrators available, allowing CAs and EOs to familiarise with new e-Procurement provisions and tools	Completed
COM to provide appropriate assistance to MS in transposing the new legal provisions	Completed
<i>Complete the legal framework by the appropriate basic tools</i>	
COM to adopt new Standard Forms for procurement notices taking account of new procedures and the use of electronic means of communication	Completed
COM to present proposals for revision of the Common Procurement Vocabulary (CPV)	Completed
COM to present Blueprint for a fully electronic system for the collection and publication of procurement notices on Tenders Electronic Daily (TED)	Completed
MS to implement fully electronic systems at national level including appropriate tools for automated collection and publishing in TED	On-going
<i>Remove/prevent barriers to carrying out public procurement procedures electronically</i>	
MS and COM test, refine and validate results of IDA (Interchange of Data between Administrations programme) common functional requirements for e-Procurement systems	Completed
MS to review whether all operational e-Procurement schemes have been adjusted to the requirements of the Directives	On-going
MS introduce national accreditation schemes to verify compliance of e-Tendering systems with legal framework	On-going
MS and COM consider through a feasibility study whether to introduce a European compliance verification scheme	Completed
COM proposes an action under IDABC (Interoperable Delivery of European eGovernment Services to public Administrations, Businesses and Citizens) programme to help MS co-ordinate implementing the use of advanced qualified signature to resolve interoperability problems, year 2005-2009	Completed
MS apply, if required by national law, interoperable qualified e-signatures	On-going
<i>Detect and address interoperability problems over time</i>	
CEN / ISSS (Centre Europeen de Normalisation/Workshop on Information Society Standardisation Systems) completes gap analysis on interoperability needs for effective e-Procurement	Completed

COM proposes to continue activities on e-Procurement under the IDABC programme for exchange and discussion on interoperability issues and monitoring of MS' developments	Completed (Work taken forward by IDABC/ISA)
COM and MS promote standardisation activities at European level and liaise with international standardisation bodies	On-going
Objective II: Achieve greater efficiency in procurement, improve governance and competitiveness	
<i>Increase efficiency of public procurement and improve governance</i>	
MS to prepare national plans for introducing eProcurement setting measurable performance targets, taking account of specific national needs	Partially completed
MS to encourage preparation of similar plans by individual national buyers and coordinate and monitor their implementation	Partially completed
COM to continue monitoring work on e-invoices by CEN/ISSS and propose continuation of XML activities undertaken in 2003-2004 on e-invoices and e-ordering under IDABC	On-going
MS to set up efficient electronic systems for the collection and processing of statistical procurement data	Partially completed
<i>Increase competitiveness of public procurement markets across the EU</i>	
COM to consider proposing services for the electronic supply of business information and certificates in public procurement for implementation under the IDABC programme	Completed
MS and COM agree on a common set of frequently required electronic certificates for use in e-Procurement	On-going
COM proposes launching study on e-catalogues (in DPS and electronic framework agreements) using work by CEN/ISSS under the IDABC programme	Completed
Public Procurement Network to organise benchmarking on transparency, auditing and traceability of e-Procurement systems	Delayed
Public Procurement Network to organise workshops to promote exchanges on tender document standardisation	Delayed
MS to launch and support specific awareness campaigns and training for SMEs at national and regional level	On-going
Objective III: Work towards an international framework for electronic public procurement	
COM to pursue negotiations on the review of the Government Procurement Agreement (GPA)	On-going
COM to take initiatives in the GPA to progress towards utilisation of a single common nomenclature for the classification of procurement goods and services	On-going

COM to promote the activities of and liaise with international standardisation bodies & fora to avoid emergence of interoperability barriers at international level	On-going
COM to cooperate with Multilateral Development Banks (MDBs) network in view of co-ordinating technical assistance to 3 rd countries, supporting re-organising and computerising their Public Procurement regimes	On-going
COM to consider any adjustments necessary and feasibility of e-Procurement in context of EU external aid instruments	On-going