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GOOD GOVERNANCE FOR DEVELOPMENT IN ARAB COUNTRIES INITIATIVE

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PRESENTATION OF THE VOLUME

E-Government – of which e-procurement is an integral part – is one of the most valuable ICT-based administrative innovation reforms; it can render public policy more effective, efficient and responsive to social and political needs. The two World Summits on Information Society organised by the United Nations demonstrated how public e-procurement, as part of an e-government strategy, can play a fundamental role in achieving good governance. Through its Initiative on e-Government and ICT for Development, Italy played a crucial role in these events.

Additionally, e-procurement reinforces one of the fundamental rules of information and communication technologies: technological and organisational aspects must be linked within the overall innovation process. The Seminar discussions showed that changes in public procurement management – facilitated and promoted by the use of ICT – embrace both technological innovations and organisational and cultural transformations, especially with regard to know-how and practical skills. Italian institutions like Formez (Study and Training Centre) and C.A.I.MED. (Centre for Administrative Innovation in the Euro-Mediterranean Region) have worked with local, national and international public administrations in support of public policies for cohesion and development to achieve excellent, widely published results. Projects have focused on training, experimentation/assistance, applied research, creation of Communities of Practice, diffusion/reinterpretation of best practices and benchmarking. A programme of innovation development within a vision of systemic government has been launched to facilitate dialogue among experts, public administrations and, where necessary, private partners. To achieve real innovation, it is necessary to act within a context of multi-level governance, addressing the organisation and modalities of front- and back-office work and conduct, knowledge and competences, and to continually verify the path forward.

The High Level Seminar on E-Procurement, held in Naples on 30-31 January 2006 and presented in this volume, was directed at Arab and Italian public administrations; participants presented their projects and shared significant experiences. It was organised jointly by C.A.I.MED, Formez and the Presidency of the Council of Ministers (Departments of Public Administration, Innovation and Technologies, and the Technical Unit e-Government for Development), with the assistance of the Ministry of Foreign Affairs. This volume sums up the initial results of the High Level Seminar. It includes all remarks, discussions, materials, and conclusions elaborated and shared by the delegations of participating countries, with the support of experts and representatives from the OECD, the United Nations, and the World Bank.

The volume is divided into seven chapters, in addition to the opening chapter which summarises the event's goals. The first chapter discusses the basic characteristics of e-procurement systems, their expected benefits, their weaknesses, and their normative framework: namely the organisational and regulatory changes necessary for the introduction of an e-procurement system, and successes and shortcomings of countries' current e-procurement programmes. The second chapter deals with organisational models (centralised/decentralised, direct/indirect) and responsibility for e-procurement oversight and management. The third chapter focuses on rationalisation and procedural simplification, and on the impact of new procurement methodologies in terms of transparency. The fourth chapter discusses technological aspects of e-procurement. The fifth chapter deals with the creation of the skills necessary to implement e-procurement systems, and the sixth with international co-operation efforts. The closing chapter sums up the goals that have been achieved and shared, setting out initial operational guidelines that will be useful for countries

that wish to launch and/or continue similar innovative processes; it also stresses the usefulness of holding similar meetings in the future, as well as other initiatives to promote benchmarking and critical analysis and diffusion of best practices in this area.

Reading and distributing this volume will provide food for thought and opportunities for increased collaboration and sharing of best practices to actively and concretely promote good governance for development in the Arab region.

Luigi Nicolais
Minister for Public Administration
Reform and Innovation

FOREWORD

This publication contains the proceedings of the regional MENA High Level Seminar on E-Procurement, which took place on 30-31 January 2006, in Naples, Italy, within the framework of the OECD-UNDP Good Governance for Development (GfD) in Arab Countries initiative. This initiative, launched in February 2005 at the request of 18 Arab countries, focuses on helping participating countries to design and implement policy reforms and modernise governance structures and operations in view of enhancing the investment climate and promoting sustainable economic growth throughout the MENA region.

The seminar was held at the invitation of the Government of Italy to support the activities carried out by the regional MENA Working Group on E-Government and Administrative Simplification, chaired by Dubai, United Arab Emirates, and co-chaired by Italy and Korea. The seminar was hosted by the Department of Public Administration and the Department of Innovation and Technology of the Italian Presidency of the Council of Ministers, with the sponsorship of the Italian Ministry of Foreign Affairs, and in collaboration with Formez, the Institute of the Department of Public Administration for innovation and public management training. This event would not have been realised without the strong leadership of Vincenzo Schioppa, Minister Plenipotentiary of the Italian Ministry of Foreign Affairs and Co-Chair of Working Group 2; Federico Basilica, former Head of the Department of Public Administration; and Claudia Oglialoro, Director of the e-Government for Development Program. Special thanks go to Giuseppe Pennella, Director of C.A.I.MED., who hosted the event and made this publication possible.

The e-procurement seminar brought together 18 e-government and administrative simplification experts from nine Arab countries and OECD countries to share strategic advice and practical know-how on key steps and processes for implementing e-procurement; this includes regulatory and institutional settings, re-engineering and simplification of procedures, and skills development. The implementation of effective e-procurement systems was also on the agenda.

The framework provided by the seminar has created a strong foundation for further work in this area and discussion of other e-government and administrative simplification issues. The seminar showed that Arab countries share common challenges for improving good governance arrangements – and that increased policy dialogue both with OECD countries and among Arab countries can help overcome these issues. The seminar also served as a model for a series of regional capacity building seminars that is one of the key components of the implementation of the GfD initiative in 2006 and 2007.

The results of the seminar fed into the preparation of National Action Plans for reform in Arab countries, which were presented at the GfD Steering Group meeting in Sharm el Sheik on 19-20 May 2006. E-Procurement will continue to be a central theme in the current phase of the initiative, focusing on implementation of Arab countries' Action Plans.

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1. INTRODUCTORY NOTES

Carlo Flamment[1]

Carlo Flamment, President of Formez, presided over the opening session of this important international event, and began by giving his warmest welcome to the representatives from the MENA region and the Mediterranean countries[2].

Formez – Training and Studies Center is the national agency that supports the Italian Department for the Public Administration in co-ordinating public sector modernisation policies. Over the last several years, support activities for administrative innovation processes have been aimed increasingly towards countries that are facing the challenge of public sector changes and that may benefit from Italian and European experience and know-how in terms of administrative simplification, technological innovation, local development, human resource management, trans-national and trans-boundary co-operation, and other emerging issues regarding the evolution of modern administrative systems.

There is an ever greater need – at both the national and international levels – to pay careful, specific attention to the issue of good governance in Mediterranean countries, especially Arab countries. In order to meet these needs, in May 2002, the C.A.I.MED Centre for Administrative Innovation in the Euro-Mediterranean Region was created through a memorandum of understanding signed by the Italian government (represented by the Department for the Public Administration) and the United Nations (represented by the U.N. Department for Economic and Social Affairs). C.A.I.MED is hosted by Formez; its activities aim to support innovative public administration processes through the sharing of best practices in the countries of the Euro-Mediterranean region, and to promote participative governance and encourage social and economic progress. Through in-depth research and studies, C.A.I.MED designs and manages administrative co-operation programmes to gain a more profound knowledge of the public administrations in the Mediterranean region.

Recent seminars promoted by C.A.I.MED-Formez have raised awareness of the need to launch collaborative efforts with relevant national and international organisations in order to achieve positive, tangible results and to increase the value of the organisation's programmes and interventions.

There is an increasing need to invest in organisational, institutional, and project-making efforts aimed at improving administrative systems and good governance, including benchmarking activities between European countries and those in the Mediterranean region.

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1. President - Formez

2. The meeting was organised within the OECD–UNDP intiative "Strengthening Good Governance for Development in Arab Countries"; the Italian government, with the contribution of the Department for the Public Administration and the Department for Innovation and Technology, is supporting the activities of the working group on "E-government and Administrative Simplification" that has been activated within this same initiative, and which is co-chaired by Italy and Korea.

Within the framework of its international programmes, Formez has been working for some time with a network of qualified operators in the field of administrative innovation, which includes some of the world's most prestigious training schools, research institutions, and international organisations.

Formez's contribution to the implementation of this initiative is a testimony to its commitment and efforts to play a positive role in a field (such as e-procurement) in which the experiences of Italian administrations and Formez initiatives can provide a useful reference framework for the analysis of existing problems and goals.

Formez work on e-procurement

Public administration procurement processes, which are closely linked to the need to control and contain public spending, play a highly strategic role within the sphere of administrative activities. Technological advances, international trade and increasing competitive pressures have combined to push governments and public institutions to extend their goals beyond the minimisation of costs, and to tackle new challenges such as increased transparency and the rationalisation of the full procurement process at the organisational level.

In Italy, the implementation of e-procurement in the public sector falls within a wider process of public administration reform, which is principally characterised by significant use of new information and communication technologies (ICT), and which has been decisively impacted by legislative innovation and by simplification processes aimed at the entire administrative machine[3].

In the last 10 years, public spending for intermediate consumption has received rigorous attention. Both legislative and public management efforts have aimed to define actions and instruments to contain such spending while improving the efficiency and efficacy of administrative activities, and encouraging innovation and good management of change.

Activities in Italy at the central government level include development of the Public Spending Rationalisation Programme, which was launched in 2000 after the introduction of a new system to optimise public procurement (law n. 488 of 23 December 1999); its development and operational management was entrusted to Consip SpA. In order to facilitate innovation, streamlining, and increased efficiency in public procurement models, Consip – in conjunction with the introduction of D.P.R. n. 101/02, which defines electronic procurement procedures – developed models for electronic tenders, the Convention system, and the Public Administration Electronic Market (MEPA).

In April 2004, the European Union adopted a new legislative framework for electronic procurement; it came into force in January 2006[4], by which time all European public institutions responsible for procurement were required to be fully operational through the Internet. This coherent framework for open, transparent, and non-discriminatory electronic tenders sets the rules to present

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3. About 4 000 central and local administrations have already participated in experiments with e-procurement launched by the Ministry of the Treasury through the Consip SpAfirm.

4. In Italy, the reception process began with law n. 63 of 18 April 2005 "Dispositions for the fulfilment of obligations arising out of Italy's membership in the European Community. Community law 2004", which, in art. 25, entrusts the government with the implementation, through one or more legislative decrees, of directive 18/2004 on the co-ordination of procedures for the award of public works contracts, public supply contracts, and public services contracts.

bids electronically and the conditions for modern procurement techniques based on electronic means of communication.

The European Commission has carefully evaluated the impact of this new legislative framework on pre-existing structures, and it has confirmed the need for an action plan to modernise European markets for tenders and to make them more open and competitive.

In its e-Procurement Action Plan, presented in January 2005, the Commission proposed that member states follow the three guidelines below in implementing the Directives:

- Ensuring that internal markets function well when calls for tenders are made electronically.
- Achieving greater efficiency in public tenders and improving governance.
- Pursuing the creation of an international framework for electronic public tenders.

In Italy, many regional and local administrations see electronic procurement tools as an excellent opportunity to make procurement processes faster and more innovative, as well as less expensive. They have thus begun to design, plan, and implement online auctions and marketplaces – and a number of very interesting initiatives have emerged throughout the country. Several regions have passed laws to regulate this activity, and many local institutions have included electronic procurement tools in their administrative regulations.

In this framework, it is absolutely necessary to protect administrations' external environments through adequate intervention tools, including the development of procurement skills among all institutional actors involved in the overall process of production-supply/purchase-sale of public goods and services.

In the past, the procurement process had strong judicial and administrative ties. Modernisation required identification of a specific reference point for a comprehensive analysis of the purchase-sale processes, introduction of corporate-type systems, and adoption of innovative managerial techniques within institutions themselves.

For this reason, many public management concepts – such as planning and programming of procurement, re-definition of supplier/buyer relationships, quality evaluation of purchased goods, simplification of procedures, definition of auditing systems, continuous monitoring of procurement processes in terms of both cost-efficiency and quality – have become much more important.

The institute's goal is to promote activities to support innovation, and to provide public administrations – especially at the local level – with adequate tools to simplify processes and exploit the opportunities offered by both local markets and the national system for purchasing goods and services outlined by recent legislation.

Through its programmes, Formez is monitoring the best practices in the field of e-procurement and supporting administrations (in Italy and abroad) in undertaking innovative processes to manage procurement, mostly through analyses and assistance. In particular:

- Workshops on specific issues.
- Laboratories for learning.

- Publications (research, elaboration of guidelines, surveys of Italian administrations' experiences).

- Theme-based channel on public administration procurement and patrimony.

Recent studies published by Formez on e-procurement have focused on three broad issues: organisational models adopted by the administrations; management of market relations; and ICT, which is used ever more frequently and intensely by public organisations.

These studies, which generally focus on specific programmes, examined the management of innovative public procurement processes that have been recently introduced and their impact on implementing organisations. This has made it possible to highlight the differences between electronic and traditional procurement methods (still used in many organisations) in terms of reduction of required human resources and time to complete procedures, savings achieved, and improved quality of supplies purchased.

Such innovations address not only the creation of a new regulatory framework, but also the overall organisation of procurement processes, market approaches, relationships with suppliers, and especially new technologies and e-procurement solutions. An optimal combination of these elements produces synergies that are capable of fully meeting the overall goals of the procurement function. Results achieved by the administrations depend on many factors, such as size and other characteristics of local markets, and organisation and management cultures.

The final objective of Formez's activities is to make the tools to support efficient and effective management of public procurement available to all who work in this field.

The hope is that this work will be a launching pad for transferring knowledge and best practices among administrations and creating a network of people and institutions working in this field to eventually integrate the various e-procurement systems.

It is certain that over the course of the two days of work participants will be able to determine upcoming priorities that public administrations will have to face, and identify new forms of administrative co-operation in the Arab and Mediterranean regions.

Giuseppe Pennella[5]

For some time now, the organisational culture of public administrations has been undergoing a revolution, which has stimulated radical change for every aspect of the administrative framework.

Public administration procurement activities fall within these broad and general modernisation efforts, which, in simple terms, can be broken down into two parts: identifying the administration's needs, and handling the logistics for acquiring the necessary resources for meeting these needs.

In this context, a preliminary, general overview of the technological solutions needed to implement an efficient e-procurement system is provided; this aims to define the context within which public organisations currently find themselves and identify the strengths and weaknesses of several ongoing projects, in order to offer a general survey of current innovation efforts.

An overview of the technological tools available today is indispensable; although these tools have not yet been fully accepted by public organisations, they are the main drivers behind the recent changes in the public administration's procurement processes.

E-Procurement involves conducting government procurement through an electronic medium, mainly the Internet. The physical barriers of space and time are broken down to promote transparency and efficiency and to curb corruption in public procurement. E-Tendering, e-purchasing, and e-reverse auctions are some examples of the new vocabulary in the context of electronic government procurement. E-Tendering is specific to high-value/low-volume goods and services, while e-purchasing is based on price and involves low-value/high-volume goods.

The use of ICT solutions for procurement requires base conditions that are often not present: suitable information infrastructures and instruments, availability of appropriate work stations, and skills and knowledge of the staff involved in the process. It also often happens that the ICT solutions applied to procurement turn out to be impossible, or are not cost-effective. The use of workable action plans requires detailed knowledge of the possible solutions and technological infrastructures necessary to guarantee that the system works.

Technical challenges in implementing e-procurement systems

E-Procurement depends on a level of trust between buyers and sellers. The Internet presents the following challenges:

- Proving to buyers that sellers are who they say they are.
- Proving to buyers that their personal information will remain confidential.
- Proving to buyers that sellers will not be able to refute the occurrence of a valid transaction.

Some of the most important risks are:

- **Confidentiality** – Within the business environment potential consumers are, rightly, concerned about providing unknown vendors with personal – sometimes sensitive – information.

5. Head of Research and Development, Formez; Director, C.A.I.MED.

Their concerns include the possible theft of credit card information from the vendor following a purchase, connecting to the Internet via a browser and running software on a computer that has been developed by someone unknown to the organisation, and using an online broadcast network which routs information over wide-ranging and essentially uncontrolled paths.

The risk will be less pronounced in business-to-government interactions, as unknown vendors are rarely used by government. It is also expected that contract arrangements with approved suppliers will include specific provisions for confidentiality and security. In addition, very little credit card purchasing takes place in the governmental environment, as payment is usually effected by way of electronic funds transfer. However, the transfer of information across the Internet remains a risk:

- **Integrity** – Data, both in transit and in storage, could be susceptible to unauthorised alteration or deletion through hacking or viruses. The e-business system itself could also have design or configuration problems.

- **Availability** – The Internet holds the promise of allowing business transactions on a 24-hour, seven-day-a-week basis. Availability is therefore important –any system failure would become immediately apparent to business partners and might result in delays and costs.

- **Authentication and non-repudiation** – The parties to an electronic transaction should be in a relationship that involves a high degree of familiarity and trust, and should prove their respective identities before executing the transaction to prevent man-in-the-middle attacks (*i.e.* preventing an impostor from posing as the seller). After the transaction, there should be measures to ensure that the transacting parties cannot deny the transaction and to confirm the terms on which it was completed.

Government auditors benefit from the fact that government has come late to the Internet. In the private sector, where these risks have been around for a number of years, best practices and good control frameworks have been developed. The following best practices are recommended, and can be used as a yardstick in determining the maturity of an entity in addressing the risks associated with e-procurement.

E-Procurement best practices

When reviewing the adequacy of controls in e-procurement applications, assess the application of the following:

- A set of security mechanisms and procedures which, taken together, constitute a security architecture for e-business (*e.g.* Internet firewalls, PKI, encryption, certificates and password management).

- The firewall mechanisms that are in place to mediate between the public network (the Internet) and the private networks of government.

- A process whereby participants in an e-business transaction can be identified uniquely and positively (*e.g.* using some combination of public and private key encryption and certifying key pairs).

- Digital signatures with which the initiator of an e-commerce transaction can be uniquely associated.

- An infrastructure to manage and control public key pairs (*i.e.* public key infrastructure – PKI) and their corresponding certificates, which would include a certificate authority (CA),

possibly a registration authority, a certification revocation list and a certification practice statement, which is a detailed set of rules governing the certification authority's operations.

- Set procedures to control changes to an e-business application(s) and architecture.
- Logs of e-business applications, which should be maintained by responsible personnel. Such logs would include operating systems logs and console messages, network management messages, firewalls logs and alerts, route management messages, intrusion detection alarms, application and server statistics and system integrity checks.
- The methods and procedures for recognising security breaches when they occur (network- and host-based intrusion detection systems).
- The features in e-business applications that enable the reconstruction of the activity performed by the application, *i.e.* the audit trails.
- Protection measures to ensure that the data collected with regard to the parties to the transactions would not be disclosed without their consent nor used for purposes other than that for which it was collected.
- The means of ensuring the confidentiality of data communicated between government and vendors (safeguarding resources, *e.g.* by way of an encrypted secure socket layer).
- The mechanisms for protecting government's private networks from computer viruses and for preventing them from propagating viruses to suppliers.
- The features within the e-business architecture that prevent components from failing and, should they fail, allow them to repair themselves.
- A plan and procedure for continuing e-business activities in the event of an extended outage of resources required for normal processing.
- A commonly understood set of practices and procedures to define management's intentions regarding the security of e-business.
- A shared responsibility within an organisation for e-business security.
- Communications to suppliers about the level of security in the e-business environment.
- A regular programme of auditing and assessment of the security of e-business environments and applications to provide assurance that controls are present and effective. Many of these are part of the normal general control audits performed by information systems (IS) auditors. However, the architecture used for e-business and the risks associated with transactions via the Internet increase not only the scope of a normal general control audit, but also the complexities of such computer audits – which leads to the challenges auditors face in performing financial, computer and performance audits in an e-business environment.

Vincenzo Schioppa[6] and Rolf Alter[7]

Vincenzo Schioppa, Minister Plenipotentiary, Ministry of Foreign Affairs, Italy, and Rolf Alter, Deputy Director, Public Governance and Territorial Development Directorate, OECD, chaired the meeting and co-ordinated the first session, "A Framework for E-Procurement – The Regulatory Context". Mr. Schioppa stressed that this conference represents an important step towards internationalisation – applying the methodology, long endorsed by the OECD, of peer-to-peer exchange of best practices. He stated his hope that the seminar proceedings would have solid, descriptive value, offering all participants material for further work.

Mr. Schioppa is heavily involved in this initiative, directed at countries of the Middle East and North Africa, as a founding supporter of the MENA programme in his previous role as Deputy Permanent Representative of Italy to the OECD. He has been particularly involved with the working group on e-government and administrative simplification, which first met in Dubai, United Arab Emirates, before convening in Naples to specifically discuss e-procurement.

Rolf Alter, on behalf of the OECD, expressed appreciation for the support of the Italian government towards the realisation of this initiative. The commitment has been considerable, including in the political arena. The solid commitment shown by the seminar's Italian co-Presidency and the commitment of all the parties who contributed to the realisation of thie seminar – in addition to the valuable international participation – indicate real need for and interest in administrative innovation in this area.

Italy has helped push the MENA initiative forward. As the initiative continues, it will be important to ensure that meetings are always adequately followed up, allowing monitoring and evaluation of the experiences that have been shared and analysed.

Mr. Alter said he hoped the discussions over the two-day seminar would be as practical as possible, and include discussions of key aspects of e-procurement to allow maximum benefit to everyone present, including the representatives of the United States, the World Bank and the Jordanian Government E-Government Centre.

Country-level analyses suggest that e-procurement is a crucial element in the development of e-government and for the improvement of administrative action overall. Many countries are creating their own e-procurement initiatives, but implementation will take time: it is not just about adapting the context, but also ensuring that all parties in the e-procurement system acquire a proper level of knowledge and capacity to actually use it.

The benefits of the system are undoubted in terms of transparency, and also in the possible opening of local, national and international markets. Countries at the table realising experiences in this sphere were asked to identify the obstacles hindering the development of e-procurement systems, and to understand what measures are needed to remove them.

Naturally, there are those who do not see only positive aspects in the system. For example, e-procurement favours competition, an element that can be positive at macro level but which can cause problems at microeconomic levels or in relation to consolidated interests.

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6. Deputy Permanent Representative of Italy to the OECD

7. Deputy Director, Public Governance and Territorial Development Directorate, OECD

The results of this seminar could be very useful for governments in resolving e-procurement problems. It is essential to have concrete goals, and to clearly define what an electronic offer and an electronic transaction should be. The work resulting from the seminar could help to identify the real problems blocking the creation of systems, by providing winnable challenges, not theoretical aims without real content. The seminar should strengthen the network of relationships and facilitate follow-up contacts, actions and exchanges. Everyone benefits: the final beneficiaries (the Arab countries), and the Italian hosts, so that their organisational efforts can be most useful. This initiative fits in perfectly with the bigger mosaic of the MENA programme.

Mr. Alter offered special thanks to Vincenzo Schioppa who, despite a move from Paris on account of other institutional appointments, remains a friend of the OECD and everyone working for innovation in the administrative field. He also thanked Federico Basilica for the support he has given to OECD on behalf of Italy, one of the G8 countries.

Mr. Schioppa responded that it is important for government officials at different levels and with different responsibilities to be committed to reform in the service of citizens and countries. He stressed the importance of creating a network capable of contributing to the development of real reforms.

Claudia Oglialoro[8]

Ms. Oglialoro, Director of e-Government for Development, relayed a message of welcome from Innovation and Technology Minister Lucio Stanca, who was unable to attend due to official business.

She highlighted the importance of unifying the efforts of the parties at the seminar to bring into focus the elements necessary for the realisation of a system as complex and specific as e-procurement. She reaffirmed the Department's support for the goals of the seminar, and for the action of Formez and the OECD in the field of good governance as an instrument for the growth of developing countries.

This seminar, relevant to many international debates on the general theme of e-government, gives an opportunity for a close and specific analysis of e-procurement. It is also a useful opportunity to offer support in the implementation of these kinds of policies internationally, in collaboration with countries such as Morocco, Lebanon and Tunisia, which are about to launch their own e-procurement initiatives.

Italy was one of the pioneers of e-procurement in Europe, and has had the chance to fully comprehend the added value this instrument brings to public sector action. The govern,ent is nevertheless aware of the difficulties involved in creating an integrated, mature system of e-procurement, and of the necessity to do so with proper co-ordination among the various public sectors involved. Important actions are: to safeguard and refine the technology enabling electronic transactions, to adapt organisations and procedures, to ensure infrastructures are fit for function – and, most importantly, to assign human resources to the process of acquiring knowledge and skills for new technological and management instruments.

Another element that should not be neglected is the new procedures' impact on market structure and competition. The benefits of the e-procurement are numerous – simplification of internal procedures, improved efficiency and transparency, reduction of costs, greater accountability of public managers.

However, this seminar's greatest added value is international co-operation, which can be sparked by the various gathered here to debate, to listen, to understand and to share their own experiences of innovation.

8. Department for Innovation and Technology

2. A CONTEXT FOR E-PROCUREMENT – THE REGULATORY FRAMEWORK

An overview of e-procurement and governance

Marcella Corsi, "La Sapienza" University of Rome

The purpose of this report is to identify the main challenges and opportunities presented by the implementation of an e-procurement system, leading to an introduction of the topics to be discussed during the seminar's two days. The report is general in nature, divided thematically as much as possible.

The author is a chief economist on the eG4M "E-government for Mediterranean Countries Project", an initiative financed by the Italian Research Ministry and managed by a group of Italian universities working closely with the Department of Information and Technology and other institutional actors. The main objective of the project is to contribute towards the drive to make e-procurement more accessible for all countries of the Mediterranean, while creating general guidelines for e-procurement and implementing programmes compatible with these rules. Carlo Batini, co-ordinator of the project, will participate in the seminar, allowing further analysis of the project.

E-Procurement can be defined as an Internet-based means of electronic acquisition that accompanies the traditional methods of provisioning, and which is conducted between contracting authorities and suppliers of goods and services. Its phases range from identification of needs to setting of budgets, to management of contracts, to payments, to monitoring and evaluation.

E-Procurement is attracting increased attention because it is now clear, especially in Europe, that e-procurement delivers tangible results in terms of improved public sector productivity. It also leads to economic rationality and increased GDP, and has contributed to a series of intermediate results that will be discussed below. However, important challenges arise, both in the organisational and economic/legal areas.

Organisationally, there are pockets of resistance on the part of users – this includes problems with professional and operational capacity. E-Procurement success depends upon development of specific capacities and competences. This innovation requires effort in terms of training, and redefinition of the roles and capacities involved in the organisation of electronic provisioning. These aspects are not always adequately covered in the economic literature on this subject.

The main challenges from the economic/legal point of view are:

- Creation of a correct e-procurement process and revision of the normative framework to allow increased economic development.
- Construction of a diverse technological scenario.
- Implementation of a structural reform programme to encourage a market for competitive private services.
- Launch of an education and literacy campaign.

While there are many technological issues to be faced, the most pressing matters from the economic/political perspective involve contracts, monitoring and system benefits. Although these aspects are treated in the economic literature, some implications are not addressed in the economic and political debate.

The direct (or internal) effects of "old" generation e-procurement are essentially expressed in terms of public sector efficiency, through the realisation of a broader and more competitive market for public services and better services and opportunities for users. This is commonly referred to as "user-centred e-government". This efficiency brings added public value, which must be defined and measured together with new services.

The "EG4M" project will propose a "new generation" phase of e-procurement that targets not only efficiency but also indirect effects, particularly the so-called "connectivity effect". This could have an accelerator or multiplier effect on the economy.

In order to exploit innovation in the wake of the introduction of e-procurement, and to address all the effects, it is necessary to introduce organisational/management innovations (back office and front office) in all involved administrations.

Generally speaking, the benefits from e-procurement should also bring: increased public sector productivity (and, therefore, an increased public sector proportion of GDP); a greater role for public administrations; administrative burden reduction; and overall growth of GDP. The intermediate results will be improved increased services and further cost and time savings. Expected final overall results are improved work productivity in the public sector, economic rationalisation and organisational efficiency. These entail greater administrative simplification, greater accountability by all actors in the process, more transparency, competition, democratic participation in the Information Society and greater "political efficiency".

The models. There are at least two models for activity and organisation, to be examined and debated within the general framework of a discussion on e-procurement transparency and reduction of uncertainty: *indirect* (Indirect Procurement System, IPS, as used by Consip in Italy for the central, regional and local public administrations) and *direct* (Direct Procurement System, DPS). In the indirect model the contracting authority does not come into contact with the ordering body, and while the direct model includes such contact. Procedural differences are important.

The organisation-based models are basically of two types: centralised models, in which procurement is managed on behalf of the administration as a whole; and decentralised models, in which individual organisational units manage the provisioning processes themselves.

The various models produce a diverse range of effects, benefits and disadvantages. For example, with regard to economic rationalisation, the indirect model carries notable benefits in terms of control of costs and co-ordination of stocks, but may be less advantageous for monitoring and co-ordination of costs.

A major advantage of the decentralised model is the high level of autonomy of the individual administration, but one of its big drawbacks is the lack of co-ordination of the balance of procedures and non-uniform solutions for standard problems. This could have effects on simplification and accountability.

On the subject of accountability, the strong points of the IPS are a standard decisional process and greater control, as there are fewer decisional units. Although the higher number of decisional units with DPS decreases overall control, a benefit is increased control of corruption and greater social and business accountability.

The e-procurement regulatory framework: The Italian experience in light of Community Directives 17 and 18 of 2004

Davide Colaccino, Consultant, Presidency of the Council of Ministers – Italy

1. The European context: E-Public procurement in Directives 17 and 18 of 2004

Public contracts represent 16% of GDP in the European Union, totalling EUR 1 429 billion; they constitute one of the strategic sectors of the market. Despite its economic importance, the European Union public contracts market is not yet sufficiently open and competitive[9]. Inefficient management of public contracts at the European level has been damaging for productivity.

In April 2004, the European Council and the European Parliament adopted Directives 17 and 18, formalising the strategy to overhaul the public procurement sector. Directive 17 relates to tender procedures for suppliers of water, energy and transport services ("special" or "excluded sectors"), while Directive 18 relates to adjudication procedures for public contracts governing supplies, services and works ("classic" or "ordinary" sectors")[10].

The "legislative package" is considered essential for the consolidation and modernisation of the current public contracts system, and for the creation of the necessary conditions for the development of a more efficient and competitive European contracts market. The new Directives have three main aims:

- Simplification and strengthening of legislation, and unification of regulations.
- Flexibility, achieved through the introduction or strengthening of procedures and innovative institutions that recognise greater freedom of action for public procurers in drafting contracts.
- Modernisation, fully applied to the contracts sector, and the full use of new information and electronic technologies (*e-public procurement*).

Electronic public procurement refers to the ensemble of technologies, procedures, operations and organisational modalities derived from information communication technology. The use of ICT in contract procedures represents one of the most rapidly changing areas of public administration. It allows the reorganisation and simplification of the public procurement management process, and also guarantees greater transparency, competition, economy and timeliness in the tendering process.

The most important e-procurement developments introduced by the new legislative package are as follows[11]:

- Use of electronic means in communications and presentations of offers.
- Electronic tenders.
- Dynamic purchasing systems.

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9. Communication of 7 May 2003, Strategy for the internal market. Priority 2003 – 2006.

10. On directives 17 and 18 of 2004 see Aa. Vv., Le nuove europee degli appalti pubblici, edited by L.Fiorentino and C. Lacava, in Giorn. dir. amm., Quaderni, n. 9, Milano, 2004.

11. The relevant clause for such procedures is the so-called "clause of return to the national system". In effect, this gives member the states the option (and not obligation) of allowing contracting authorities to have recourse to instruments of e-procurement.

1.1 Use of electronic means in communications and presentation of offers

The new Directives significantly support technology, requiring use of electronic media for the communication and presentation of tenders and excluding all other methods (such as sending hard-copy communications via post).

Considerando 33 stated: "In view of the effects of the new information and communications technologies, such as the simplification they can bring to publicising contract tenders, as well as increased transparency of adjudication procedures, it is advisable that electronic media be placed on the same plane as the classic instruments of communication and information exchange".

The relevant norm is Directive 18, article 42 (rules applicable to communications), paragraph 1, which states: "All communication and information exchange referred to in this Title may be by post, by fax or by electronic means, in accordance with paragraphs 4 and 5, by telephone in cases and circumstances referred to in paragraph 6 or by a combination of such means, according to the choice of the contracting authority"[12].

Naturally, the use of electronic means must not imply the construction of "technical barriers". This means that the instruments used for electronic communication and their associated technologies must be non-discriminatory in nature, as stated in paragraph 4 of article 42, "commonly available to the public and compatible with information and communication technology products in general use".

The provisions in the new Directives are not limited to the use of ICT instruments in contract procedures, but are also intended to reduce deadlines for tender applications and submissions submitted through electronic means. Article 38, paragraph 5, establishes that the deadline for receipt of submissions in open, restricted and negotiated procedures and in competitive dialogue can be reduced to seven days for tenders drafted and submitted electronically. A further reduction in submission deadlines to five days is determined by paragraph 6 of article 38; it covers in cases in which, beginning from the publication of the invitation to tender, the contracting authority offers, in accordance with Annex VIII, free, direct and complete electronic access to the tender document and to every complementary document, with a text reference to the electronic address of the documentation.

1.2 Electronic auctions

The electronic auction is an instrument for the adjudication of public contracts, 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, which occurs after an initial full evaluation of the tenders, enabling them to be ranked using automatic evaluation methods" (article 1, paragraph 7)[13]. The electronic auction is therefore not a new tender procedure, but rather a negotiating instrument that allows offers to be classified automatically. This means that the classification of tenders and the selection of the best offer is not performed by a commission but by a completely automated system. It therefore follows that contracts for the provision of intellectual services, such as the design of works, cannot be subject to the electronic auction process, as the technical specifications cannot be converted into mathematical algorithms. Electronic auctions can be used in open, restricted or negotiated procedures with calls for tenders, in the context of the dynamic purchasing system and in the case of the reopening of competition between parties to a framework agreement.

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12. This refers to the provision of article 48 (Norms applicable to communications) of directive 17, which is largely identical.

13. The definition stated in directive 17, article 1, paragraph 6 is basically identical.

Use of the electronic auction allows requests to be made to tenderers, after an initial thorough evaluation of their offer, for further reductions in their prices and possible changes to other elements, provided that these can be evaluated electronically. The legislation enables administrations to hold an auction in which tenders are submitted and evaluated exclusively by electronic means, on the condition that the evaluation criterion is represented by price; or, when the adjudication criterion is the most economically advantageous tender, by other quantifiable factors. In accordance with article 54, paragraph 4, all admissible tenderers are invited simultaneously, by electronic means, to submit new prices and/or new values. The invitation must contain:

1. All information necessary for individual connection to the electronic device used.
2. The time and date of the start of the auction (at least two working days in advance).
3. The results of the complete evaluation of the offer from the tenderer concerned (when the evaluation occurs according to the criteria of the most economically advantageous tender).
4. The mathematical formula used during the electronic auction for determining automatic reclassifications in consideration of new prices and/or new values submitted.

Obviously, the use of electronic auctions for contract adjudication must be expressly stated in the call for submissions. The invitation to tender or the contract document must indicate:

1. The elements subject to automatic evaluation in the course of the electronic auction.
2. Any minimum or maximum values of the elements of the tender, as indicated in the contract specifications.
3. The information to be made available to the tenderers during the electronic auction, with an indication of when it will be available.
4. Information regarding the execution of the electronic auction.
5. The circumstances in which tenderers may make renewed offers and any minimum changes required for the submission of renewed offers.
6. Information regarding the electronic device used, as well as the methods and technical specifications of the connection.

1.3 Dynamic purchasing systems

The dynamic purchasing system is a wholly new, entirely electronic procurement procedure, for current use purchases, limited by time and open for its entire duration to any operator that satisfies the selection criteria and that has submitted an indicative tender pursuant to the contract specifications. Through the creation of a list of already admitted and prospective new tenderers, this electronic device system allows contracting authorities to solicit a wide range of offers, and therefore assure optimal, competition-based use of public finances.

The methods and rules stated in article 33 of Directive 18[14] require contracting authorities to follow the norms of the open procedure in all its phases through to the award of the contracts (paragraph 2).

There are two main phases in the execution of the procedure. First: in order to institute a dynamic purchasing system, the contracting authorities must publish a call for submissions and a contract document indicating the selection criteria, the nature of the purchases and the indicative offer requirements, as well as

14. This corresponds to article 15 of the directive, “excluded sectors”, which is almost identical.

all necessary information regarding the electronic system. The contracting stations, from the publication of the call for submissions through the conclusion of the system, must offer electronically direct and complete access to the specification and any complementary documents, indicating in the call for submissions the Internet address at which such documents can be consulted (paragraph 3). All economic operators who satisfy the selection criteria and who have submitted an indicative offer pursuant to the contract document and any complementary documents are admitted to the system for its entire duration (maximum four years, exceptional cases permitted). Indicative tenders can be improved at any time providing they remain in accordance with the contract document (paragraph 4).

In the second phase, each specific contract must undergo a competitive comparison (paragraph 5). For each contract, authorities therefore publish a further "simplified call for submissions", inviting all interested economic operators to resubmit an indicative offer (in order to be admitted to the dynamic system, which for this reason is consequently permanently open)[15] within at least 15 days from the date on which the simplified call for submissions was sent.

Administrations can proceed to the competitive comparison only after evaluating all indicative offers from new tenderers. After this evaluation the contracting authorities invite all tenderers admitted to the system to submit a specific offer relative to the contract (possible award by electronic auction). A suitable deadline is set for the submission of tenders.

The awarding of the contract to the best offer is based on the adjudication criteria indicated in the call for submissions for the establishment of the dynamic purchasing system and as stated in the invitation to offers for a specific contract (paragraph 6).

1.4 European Commission: Action Plan for institution of legal framework for electronic public tenders

The inappropriate adoption of electronic auctions creates a serious risk of fragmenting the market. And there are legal, technical and organisational barriers that can result from online contracting. In order to ensure the timely institution of the new regulatory context established by the Directive, and the correct operation of the "common market of electronic public contracts", the European Commission worked with member states to produce an action plan for the creation of the legal framework for e-public procurement, called for by Directives 17 and 18 of 2004.

The objectives and actions stated in the action plan are as follows:

1. Guarantee of an internal market for electronic public contracts:
   - New standard forms for publication in the TED.
   - CPV (Common Procurement Vocabulary).
   - Identification of functional requirements and accreditation systems (digital signatures, platform certification).
   - Interpretative document, demonstrators.
2. Greater efficiency in contracts, improvement of governance and competitiveness:
   - National programmes with measurable performance priorities and objectives, and programmes of the largest national purchasing authorities.

15. They conclude the evaluations within 15 days of the submission of the indicative offer. They can however lengthen the evaluation period on condition that no contract is placed in competition with it in the meantime. The contracting authority shall contact the tenderer as soon as possible, with a decision regarding its admission to the dynamic purchasing system or the rejection of its indicative offer.

- Electronic provision of commercial information and enterprise certificates.

3. Implementation of electronic catalogues:
   - European public contracts networks for use in exchanging experiences.

4. Commitment to working for an international context of electronic public contracts (as part of the overhaul of GPA).

2. The Italian context: E-Procurement and its relation to the Code for contracts and current legislation

What is the situation in the Italian regulatory context?

Italy is ready to implement Directives 17 and 18 of 2004 and acknowledge EC directions on e-procurement. The existing system should be compatible with the norms of the Directives, since a thorough and detailed e-procurement system has been developed in recent years, in anticipation of the EC arrangement, on the normative level and in terms of practice.

In accordance with member states' obligations to implement Community Directives by 31 January 2006, the Italian legislature responded with Law no. 62 of April 2005: "*Directions for fulfilment of obligations deriving from Italy's membership of the European Community. Community Law 2004*". With this measure, Parliament authorised the government to adopt one or more legislative decrees designed to define the regulatory framework for the two Directives. To this end, the Presidency of the Council of Ministers created a Commission of sectoral experts, appointed to elaborate the implementation text. As article 25 of the delegate law requires, the task of acknowledgement was achieved largely by drafting a text pursuant to the principles of the EU Treaty.

The necessity of implementation within Community norms presented an opportunity for the organic reorganisation of the rules for public contracts, achieved by bringing them into line with the principles elaborated by Community case law: the Code for public works, services and supply contracts. The scheme was approved on 23 March 2006 by the Council of Ministers and is proceeding towards publication. The Code has acknowledged, with some degree of variation, the e-procurement instruments called for by the Directive.

2.1 Current Italian legislation: Presidential Decree 101 of 2002

Consideration of the Italian e-procurement system must involve reference to the regulations, approved in Presidential Decree 101 of 4 April 2002, containing the "criteria and modalities for public administrations execution of electronic purchase procedures for the procurement of goods and services".

Presidential Decree 101 of 4 April 2002, anticipating the Community Directives, regulates the criteria and modalities for the execution of electronic procurement procedures on the part of public administrations. The norm governs two distinct procedures (with specific times and modalities): electronic tendering above and below the Community threshold, and the electronic market below the Community threshold[16]. These two procedures bear certain similarities to the procedures called for in Directives 17 and 18.

16. See: L. Fiorentino, Gli acquisti on line. La disciplina normativa, in Giorn. dir. amm., 6/2002, 585; D. Colaccino, E – public procurement, in Aa. Vv., Le innovazioni nei processi d'acquisto delle pubbliche amministrazioni. L'esperienza di e-procurement della Presidenza del Consiglio dei Ministri, Il Sole 24 Ore – Rome 2005.

The electronic tender is capable of supporting online management of the entire contracting process. It is arranged as a specific, distinct procedure that exists as an alternative to traditional tender procedures governed by Community and national legislation. It is more than just another instrument for the submission of documents or a new means of delivery – the innovations introduced by the decree allow electronic submission and evaluation of tenders, as well as adjudication. Provisioning procedures can also be supported by the use of electronic instruments.

Electronic tendering, in accordance with Presidential Decree no.101/2002, is distinguished by four specific procedural phases: the issue of the prequalification notice of invitation to tender (to aspiring participants), the call for submissions, the invitation to participate in the tender, and the online negotiation phase (online opening of the envelope containing the offer).

As per article 11 of the regulations, the electronic market consists essentially of an IT structure that contracting authorities can use – pursuant to the regulations governing the purchase of public administration goods and services – to make direct purchases or to request further offers through catalogues provided by selected prequalified users.

The marketplace allows the contracting authority to operate according to two different electronic procedures for the provisioning of goods and services: Direct Purchase and Request for Quotation. Through Direct Purchase, ex paragraph 1, the administration purchases "directly from the catalogues provided by the selected users ". With Request for Quotation, ex paragraph 2, it requests "further offers from the users". When an offer is requested, "the electronic negotiation system makes an automated evaluation of the offers received, and compiles a classification table based on the criteria the contracting authority has selected from among the options proposed by the system itself".

All goods and services available in the marketplace must therefore be identified in the electronic catalogue, which constitutes the database from which products and/or services can be ordered from authorised suppliers.

3. Conclusions

The use of e-procurement is governed both by Community norms, in acknowledgement of the Code for contracts, and by current national legislation, which regulates the electronic market and electronic tenders, in accordance with Presidential Decree no. 101 of 2002.

The normative framework seems to have reached a level of development that allows the full functioning of electronic provisioning modalities and the full development of e-procurement. Despite this, the adoption of electronic contract procedures in the public sector has not yet taken off. Although normative arrangements are close to completion, there is still a need for an organic implementation plan that will back the definition, co-ordination and activation of objectives and strategies for the computerisation of public contracts. The effective fulfilment of these objectives requires action that will result in more efficient implementation of e-procurement in the public administration.

There appears to be a need for regulatory, institutional and organisational change[17]. Legislation must be accompanied by a solid strategy for the implementation of general guidelines for e-public procurement and effective co-ordination of policies promulgated at various levels (European, state, regional and local).

17. See D. Colaccino, Piano strategico per l'implementazione dell'e-public procurement. Spunti di riflessione, in Astrid Rassegna n. 2 del 2006 – www.astrid-online.it.

Topics for further discussion

An account of the main discussion topics emerging from participants' contributions and moderators' comments follows. The contributions provide summary information in response to questions posted, *i.e.* information on the general normative framework of public contracts in each country, on the introduction and modification of state laws and regulations for e-procurement development, on administrative and procedural innovation, and on main obstacles to e-procurement.

a) Challenges arising from the development of e-procurement in the Arab states

Najat Rochdi, UNDP (United Nations Development Programme), Information Society for Arab States

This section aims to draw together the general scenario presented during the seminar's first session, and highlight significant issues. E-Procurement, as an initiative in itself, is not very effective; it should be part of a broader framework of administrative reform through e-government.

Governance is an important challenge to e-procurement, including the overall system of all actors involved (suppliers and local, central, national and international administrations).

In addition to technical issues, any e-procurement launch plan must from the outset address the organisational/management aspect, and within that, the front-office/back-office relationship. The diffusion and exchange of information and experiences with other authorities could be very useful for administrations entering this phase.

Another challenge, tying in with governance and organisational issues, is the political process required to introduce a system of e-procurement integrated with e-government and governance process; this is an issue in all areas, including the Arab zone.

It should be pointed out and discussed that many non-Arab countries are negotiating framework agreements with other countries. For example, Morocco and Jordan have established a contract of free exchange with the United States, and some Mediterranean countries have signed agreements of association with European countries. These agreements will clearly have effects on actions and behaviours at the national level, but Arab countries have not taken this into account when considering what normative and administrative reforms to introduce.

There is no doubt that e-procurement spurs the private sector towards increased competitiveness and therefore steers the overall system – both private and public players – towards a lower level of corruption. The new procurement methods require a standard mode of provisioning; this could help administrations replace their individual purchase methods, which are not always based on sound functional bases, and therefore facilitate the fight against corruption. In this sense, e-procurement presents a real opportunity to find ways to overcome current obstacles, to launch standard procedures that can help reduce corruption, to increasing social and business accountability, and to promote more efficient public/private partnerships.

E-Procurement is an excellent operational instrument for making decentralisation a practical, useful policy rather than a theoretical objective to be pursued solely because it is supposed to deliver a better system of government.

b) Algeria

Abdel Razak Henni, Ministry of Justice

The development of e-government in Algeria does not yet include digital signatures or any real form of e-procurement. However, the assembly should soon examine a commission-approved decree on these issues. The general process for public contracts proceeds as follows:

The administration must publish the invitation to tender in two national magazines – one in Arabic and the other in French. Those who use the Internet must be able to view this preliminary information. The tender proposal is submitted in two sealed envelopes – one containing the technical offer, the other containing the financial proposal. The technical proposals are evaluated, a classification table is compiled and then the financial offers are considered. A ministerial commission deals with offers over EUR 200 000, while offers of more than EUR 1 million are handled by a national commission.

c) United Arab Emirates

Rehab Lootah, Acting Director of e-Services, Dubai

In the United Arab Emirates, all electronic transactions are based on the law for e-commerce. Digital signatures have not been introduced, but late 2006 should see the introduction of a common platform for identity management of private companies. The existing system has proved valid and has produced a return on investment.

d) United States

Julie Basile, Office of Federal Procurement Policy, United States

The United States plans to modify the normative framework for public contracts, in order to facilitate the introduction of e-procurement.

Most (sub-federal-level) states have eliminated the hard-copy publication of contract notices, at least for the moment if not definitively; however, full e-procurement is dependent upon the elimination of the digital divide and ensuring Internet access in all areas.

The introduction of e-procurement has resulted in the simplification and speeding of procedures (many contracting authorities are now capable of reacting in real time) and an increase in the transparency of administrative actions.

A widespread feature is consultation with the community of users whose feedback is used to improve public policies. Although the amendment of laws and regulations is possible, but it is important that the administration becomes more accessible and facilitates interchange and communication, in order to better respond to the wishes of users.

The competitiveness and quality of offers constitute the basic qualifying conditions for participation in the electronic market. The goods and services offered to the administration must respond to these criteria and must satisfy a real demand.

A pragmatic approach to problem-solving, typical of North American culture, stems from a declared willingness to listen and to exchange information, knowledge and experiences. Such an approach can also contribute to the resolution of the main problems hindering the diffusion of e-procurement in the United

States. They include insufficient capacity to define and rationalise the various procurement procedures, especially those susceptible to rapid and far-reaching change.

e) Tunisia

Khaled Elarbi, National Observatory of Public Contracts

The National Observatory of Public Contracts is the body appointed to implement e-procurement in the Tunisian administration.

The general normative framework for e-public procurement in this country is about to change; at the moment online contracts are not possible. In the private sector, however, the law on e-commerce has already altered the general legal picture. In 2002, the issue of e-procurement was put on the agenda of the broader process of change in the Code for public contracts. For now, administrations can go as far as publishing invitations to tender and associated contracts on the Internet on an official Web site.

The World Bank and the Gateway Foundation are currently collaborating closely in the preparation of a Tunisian E-Procurement Action Plan. The presentation of this plan has been postponed.

f) Bahrain

Elham Saleh, Electronic ID card project, Central IT Organisation

In Bahrain, the government has launched an e-government project that is quite advanced, given the country's general context. Administrative instruments and procedures have been modified. A law on electronic transactions will introduce the use of digital signatures; structural investments have been made. With technical and normative preparations already complete, work will soon begin on an online services portal. Because three administrative actors, including the Ministry for Information Technology, are responsible for this process bureaucratic procedures are slowed. This has resulted in delayed implementation of some programmes; however, intense efforts are being made to ensure that all procedures will be available online soon.

Intervention of the moderator

The co-ordination of the various institutions involved in the implementation of an e-procurement programme is a very important issue. In Italy, this problem has been addressed through the development of synergetic relations. It is possible that useful information could emerge from the direction of Italian colleagues in Consip and the Department for Innovations and Technologies.

g) Jordan

Hussein Hiyassat, E-Gov for development initiative, Ministry of Finance and the UNDP

The Jordanian project "E-Gov for Development" has just been launched. In 2002 Jordan passed an initial generic, non-sector specific law on electronic transactions. Normative changes are necessary at the ministerial and provisioning levels. A further legislative change will probably be made within two years. It is regarded as important that the government's approach to the reform process relates to all stages of electronic transactions (provisioning, contracts, etc).

h) The World Bank

Rachele Gianfranchi, Global Infocomm Technologies Policy Division, World Bank

Referring to the problems raised by the Jordanian representative, the World Bank offered a practical example of the methods and criteria adopted by the Bank for the launch of e-procurement in individual countries.

The introduction of e-procurement has been a subject of analysis and evaluation even before the implementation phase. Each country's case is reviewed generally, without reference to specific aspects such as the normative framework or electronic signatures. Instead, attention is focused on a series of innovations and implementations:

- The provisioning plan.
- The spheres covered by e-procurement procedures.
- The provisioning of specific, key sectors (Defence, Security, Health).
- The identification of criteria that can render a country fit to enter the electronic market.
- Internal e-procurement procedures, such as: the rules for invitations to tender; levels of security for the resubmission of online tenders; payments, technical specifications of goods/services to be purchased; the presentation, opening and evaluation of offers; adjudication of contracts; accounts.
- Integration of national e-procurement systems with general and supranational normative framework.
- Implementing mechanisms.

This represents a first step in the evaluation of the progress of countries' overall innovation process. A more thorough evaluation phase follows during which procedures are analysed, recently introduced laws and regulations are modified and/or simplified, etc.

The World Bank has taken part in many e-procurement projects in the Arab region, at a time when less bureaucracy was in place. An important theme Emerged: it is essential to simplify processes, rather than introducing complex problematic elements in the transition from one system to another. This is relevant to the idea of *business process re-engineering* (BPR). Many projects in the Arab region are very streamlined technologically, but are insufficiently strategic and efficient in re-engineering aspects. This causes co-ordination problems among the various entities involved that can impact the effectiveness of actual processes. The principal actor is often the Ministry of Finance, whose approach can be excessively accounts-based, rather than focusing on the definition of strategies that could be useful for programming and control.

The computerisation of data and notices is important for all e-procurement projects in all countries. Many governments publish calls for submissions on Web sites; others go further. Waiting times for payments by public administrations to firms continues to be an issue, as is the associated factor of corruption. Waiting times are sometimes so long that they play a part in the failure of business activities.

OECD

Christian Vergez, Head, Innovation and Integrity Division

The use of new technology is essential for the improvement of public contract processes, but it is also important that Arab and OECD countries consider effectiveness, efficiency and the benefits deriving from

procurement methods. They should also address transparency and trying to reduce corruption. Whether e-procurement or traditional procedures, it is important to refer to the three phases of public contracts:

- The definition of the contract and of buyer/seller needs (electronic and computerised procedures can introduce elements of transparency and further information).
- The awarding of the contract.
- The execution of the contract, including addressing problems in the payment phase and any revision of amounts and costs.

New technologies can introduce transparency into these three phases because they allow actors to review the full process, and permit administrations to provide more useful information to participating firms.

Technology alone cannot solve problems, but it helps maximise the accomplishment of objectives defined at the political level in terms of economic effectiveness, transparency and simplification. The normative framework contributes to this process by establishing the specific values of traditional and electronic procurement models, so as to maximise the benefits from each.

Contribution of the moderators (Schioppa, Alter) and the Bahrain representative

Discussion so far confirms the importance of political input in the definition of strategic lines and in the consideration of economic and social needs. In this sense, it could be interesting to hear participants' views on the effective capacity of new norms to respond to social and economic needs.

An interesting model for Italy is Bahrain, which has general laws which cannot be continually modified; changes can only be applied to the rules for implementing them. Administrative procedures are always evaluated on an ongoing basis. High-level officials participate in various sectoral committees, which guarantee efficiency by meeting to evaluate how much has been done and making recommendations for future actions.

Conclusion

Administrative reform linked to e-procurement must take an integrated approach, including dialogue between the various actors involved in the elements of the purchasing process (economic/financial aspect, purchasing, payments to suppliers). The whole process must be conducted in an integrated mode if real benefits are to be generated for purchasers and suppliers.

A comprehensive integrated reform process is successfully taking place in the United Arab Emirates, entailing budget reforms and reform of the federal law on e-commerce, with the specific introduction of e-public procurement and changes to the payments system. Such an approach has produced significant benefits for the entire e-procurement process. It also helps prevent a situation where any attainable savings are considered more heavily than other aspects. After the adoption of this strategy the entire process was decentralised, and very efficient payment procedures have been achieved.

3. A CONTEXT FOR E-PROCUREMENT – ORGANISATIONAL STRUCTURES AND ACCOUNTABILITY

Consip

Giuseppe Fiore, Director General, Consip

In recent years, economic pressures on government have continued to mount. At the same time, technological development has increased public and business demands that government improve services, simplify interactions, and reduce response times. Devolution has resulted in the transfer of powers and responsibility from central to local administrations. Increased attention has been paid to spending on social security, health and purchases for intermediate consumption (goods and services necessary for the public administration to operate and discharge its functions).

The government's response to these various situations is coming together, and beginning to take shape as a coherent, co-ordinated response. One example is the health card project. The Lombardy Region is leading the way, and is on the verge of full implementation of a card that will enable citizens to book appointments through an ATM machine. In many regions the public can use "citizens kiosks" to request and obtain online certificates or respond to normative obligations. These results have been achieved through significant investment and co-ordination, particularly regarding structural aspects such as the diffusion of broadband, which is necessary for connecting citizens and businesses with the government system.

The reduced level of available resources since the year 2000 has highlighted the importance of the programme for rationalisation of spending on public goods and services. It involves all types of administrations (health boards, universities, research institutes, local bodies and state administrations) and also includes suppliers (such as category associations, Confindustria, Confcommercio and SME representative bodies). In Italy, 80% of GDP is produced by SMEs; a public procurement spending rationalisation programme that does not take account of these facts would seem destined to fail.

The complexity of this type of policy is illustrated by the fact that the legislature intervened three times in four years – modifying rules, methods, and areas where compulsory measures are needed. A further step forward was taken in the 2005 financial law (applicable to 2006) in which some paragraphs addressed Consip and local administrations. Areas where compulsory measures regarding purchases made through Consip were identified on the basis of trends in public accounts. Many important results have been achieved, but much remains to be done.

Francesco Licci, Head of the Special Projects Unit and Studies Office, Consip

Consip is a public stock company owned by the Ministry of Finance. It works in two areas of intervention: ICT, in which it provides services and initiatives and computerisation projects; and spending rationalisation.

Consip has a staff of 500, about 150 of whom are assigned to the PA Online Purchasing unit, responsible for the spending rationalisation programme. The aim of the programme is to identify a centre of competence where demand and supply can meet. For the PA market, Consip works towards the rationalisation of demand from the public sector and the supply of value-added services, aiming to achieve a reasonable trade-off between costs sustained and quality of goods and services purchased. Regarding the

supply market, Consip works to create innovative e-procurement instruments and to ensure access to this new channel from the PA.

These strategies are designed to guarantee high quality standards for PA purchases; this is achieved by constant focus on the supply market, offering a wide range of goods and services, and continual assessment of quality of goods and services offered.

The programme aims to create efficiency in two ways:

1. By reducing direct costs, through aggregation of demand, increased competition among suppliers, and standardisation of products.
2. By reducing indirect costs, through e-procurement, simplification of procedures, and centralisation of the needs evaluation process.

In the short/mid term the programme provides three main operational lines. The first anticipates the use of framework agreements, *i.e.* the *national accords* system; the second aims to support specific needs of the PA; and the third calls for the development of the electronic market of the PA as a genuine marketplace. The first two instruments are used for purchases above and below the Community threshold, while the third currently applies only to purchases below the Community threshold. It runs on an Oracle e-procurement platform that provides an "office" for each instrument. There are electronic stores, and online tenders, which suggests the possibility of online issue of orders to suppliers.

One of the many possible projects to provide support to the PA involves creating a platform that administrations can use to make purchases autonomously by electronic tender or online auction, or through a virtual marketplace.

Some focal points

The agreements

The agreements system is based on a trilateral relationship between Consip, public administrations and suppliers. Consip enters into an agreement for goods it requires, after sounding out the market for demand and supply. The agreement is made available on the Internet, where administrations can use it as a basis on which to make quality-based electronic purchases at pre-arranged prices. Purchasers who wish to opt out of the system despite the existing legislation can do so on the condition that they respect the price and quality parameters established by Consip.

The Director General of Consip's idea has prompted the Arab area countries to consider launching various projects that aim to lead to centralisation of purchasing, This idea, based on the Italian experience, avoids the adoption of a system that requires administrations to use a specific instrument. Such a system would be difficult to administer and maintain because, although the control bodies co-operate in its management, pressure from suppliers and PAs who see themselves as disempowered could render the programme unmanageable. Instead, it is important to establish a relationship with suppliers from the outset – and it is preferable to look towards mechanisms that confer decisional flexibility on the public operator and that subordinate controls only where PAs do not respect the reference parameters.

The agreements systems help reduce direct costs, as resources and time are focused on activities of greater added value; Consip manages four phases of the purchase cycle. PAs analyse their needs in advance, and use a contract that has been drafted in the context of the programme and pre-selected suppliers; furthermore, Consip manages any disputes following the awarding of the contract, as stated in the contract appendices.

Consip's spending has gone through various trends. The programme had high start-up costs, peaking at EUR 15 billion; this was followed by level spending, then a sharp reduction, and then a reverse in the trend. If spending is defined as the total commodity categories that have been included in agreements, there is a potential for savings in public spending that follow the same trend – first an increase then a reduction in 2004, and then another upward movement to EUR 2.3 billion in 2005. The effective value of transactions through the e-procurement system is about EUR 1 billion.

Projects that specifically support PA requirements

Consip has an annual budget to allocate to PA needs, subject to evaluation of priorities. Actions vary widely; they may involve support for the management of an autonomous purchase, assistance in the creation of a directly managed agreement, technical support for the use of the Consip platform, legal assistance, an advisory or consulting service on a variety of matters (*e.g.* re-engineering of processes). In 2005 new products/services became available, including interoperability with existing peripheral or regional e-procurement platforms (programmes are underway in the regions of Lombardy and Emilia Romagna). These efforts lead towards developing collaboration to facilitate centralisation, a goal of Consip's Director General.

The PA marketplace

Through this virtual market, PAs can select goods and services offered by approved suppliers, for purchases (for the moment) below the Community threshold. The criteria are not especially restrictive, as the main goal is to make available a large variety of goods and services from an equally wide range of suppliers (especially SMEs) – not to create cost savings. The marketplace has also focused on articles that are not suitable for inclusion in the agreements. The PA can make purchases in the marketplace, either directly through catalogues or by request to participating suppliers.

The number of articles in the marketplace increased 68% from 2004 to 2005, while the value of orders completed has more than tripled, rising from EUR 8 million to EUR 29 million. The number of PAs has increased from 3 000 to 9 600. Of the 600 suppliers registered, 80% are SMEs.

The initial central concept of the programme – a system of national agreements aimed at maximising savings – has now been meshed with efforts towards decentralisation. The marketplace, which aims to foster transparency, process savings and involvement of local suppliers, helps to achieve this objective.

The overall process unfolds through continuous interventions, such as: targeted projects; joint development of commodity categories and work tables; frequent two-way communication; and strong collaboration with both watchdog authorities (AGCM, Cnipa) that monitor compliance with competition regulations and local e-procurement agencies.

The Lebanon government

Hala Makarem Saab, ICT Project Manager, Office of the State for Administrative Reform, Lebanon

Lebanon's National e-Strategy aims to point the country towards an economy based on information and knowledge, while helping the government to address existing and forthcoming challenges and opportunities. The strategy includes the following elements:

- Creation of technological infrastructures.
- Implementation of national policies and normative bases to support development of the system.

- Development of ITC as a productive sector in itself and as a promoter of social development through the reduction of the digital divide.
- Development of necessary human skills and capacities.
- Research and economic development.
- E-Government.

The current focus of the e-government programme is creation of a platform that allows PAs to use ITC to supply citizen and business information and services. This platform supports transparent, efficient government services, aiming to provide relevant information to users who need it, at the right time, in the right format.

In November 2005 the government launched a detailed implementation plan including priorities defined with input from stakeholders from the private sector, civil society, NGOs, universities and PAs – e-procurement was identified as a priority at this time. The goal was to create a government-business and business-government service through an existing online provisioning portal, supporting both users and suppliers of e-commerce.

What is the structure and organisation of e-public procurement in Lebanon? The current model is partially centralised, but some aspects remain decentralised. It is based on a system of relationships between various bodies of the PA and the contracts committee, a central management and government control agency that oversees the public contracting process.

Direct purchases or requests for quotations within the public administration, and public contracts follow a specific procedure. PAs conduct their own needs evaluation, define technical specifications, and prepare tender documents. The entire package is then sent to the Contracts Committee for inspection and approval. The Committee is responsible for management of contract notices (usually published online and in the Official Gazette) and execution of contract procedures. It also participates in the evaluation of tenders. Once the recipient of the contract has been selected, the public administration prepares the contract, monitors and supervises the execution, and completes the process by accepting the goods/services and making payments.

The Committee draws up a list of the provisioning needs of the PAs, based on a well-defined catalogue of goods and services. Contract processes are activated by the publication of notices in the Official Gazette and online. The Committee offers any clarification required and makes recommendations for awards by auction, conducted online in Arabic (the government is considering conducting auctions in English as well, as it is the language of international business).

The State Office for Administrative Reform (OMSAR) manages a donor-financed e-procurement pilot programme. Similar to other Arab and western countries, the Lebanon government has encountered difficulties in developing a workflow management process for the purchase of goods and services. However, the process has helped standardise internal procedures and has contributed to the preparation of a map of provisioning procedures of collaborating donors (the World Bank, the Economic Development Fund, the European Union) which will serve as a starting point for creating such a system in Lebanon.

An important benefit has been the creation of an integrated online database, where suppliers register and declare their specialisations. Decisional support is available through an information archive detailing the history of relations with each supplier. This system is integrated with the OMSAR Web portal for purchase notices, centralising acquired contacts for use by all projects and providing information on stock provisions.

This experience has formed the basis for the development of a project proposal for e-procurement. A pilot project document – underwritten by the Lebanese Government, Italy (through the DIT) and the Gateway Foundation – was presented in November 2005. The programme aims to:

- Consolidate requests to obtain better offers from suppliers.
- Prequalify a significant number of suppliers.
- Improve and standardise purchase policies and spending controls.
- Improve the monitoring of transactions, create accurate statistics, and monitor spending on the national scale.
- Negotiate better contracts.
- Offer more transparent and better-organised e-procurement services.
- Standardise e-procurement policies.
- Improve budget management.
- Minimise purchase constraints and increase transparency and accountability.
- Gain savings on volume spending.
- Reduce order costs.
- Speed approval times and reduce procedure times.
- Increase productivity and capacity insofar as they apply to public sector purchasing.
- Strengthen public-private partnerships.

It is important to take into account the context in which e-procurement policies unfold and the human capital necessary for their development, including defining and describing the competences required. Additionally, strong and lasting leadership is important to the development of all initiatives.

The Ministry for Administrative Reform (OMSAR), one of the main actors in this initiative, reports directly to the Council of Ministers. In order to ensure the sustainability of e-government processes, it operates through three organisational divisions: strategy and planning, implementation, and management. The management division will be responsible for oversight of the e-procurement programme.

The Lebanon government considers international co-operation, the sharing of best practices and innovative experiences among Arab countries, and creation of communities of practice as very important factors in the development of e-government.

Topics for further discussion

Why did the Italian government create an independent agency – well resourced and operating outside the organisational structure – to manage a public spending rationalisation programme? Do Consip's action strategies infer a political line that conforms to the organisation or a government policy?

For quite some time Italy has had strict rules regarding hiring for the PA. Consip has made it possible for the PA to access the best skills available on the market, allowing contractual flexibility quite apart from PA recruitment regulations.

There is always a very subtle balance of power, not only between the relevant MEF administrative bodies and Consip, but also between the political organism and Consip; this is especially true for the

section that handles the spending rationalisation plan. Such a plan necessitates an unequivocal political stance. From a political leadership standpoint, the programme assumes the existence of strong, clear, well-defined leadership to establish the application contours and parameters. If this is not the case, only the innovation and transparency parts of the programme can function.

Many countries have turned to the independent agencies for the management of public functions or services (e.g. France), raising many issues. How has Consip tackled the main issues in e-procurement?

E-Procurement is a cross-cutting initiative. How does Consip interface with the Ministry of Economy and Finance and other PAs? Are there problems with conflicting mandates?

How is the programme financed? Does funding come from value-added service to user administrations? Is there a service fee?

Political responsibility for the programme rests with the Ministry of Economy and Finance (MEF), where a delegate deputy minister is charged with the ongoing supervision of the programme and is in continuous contact with the Director General of Consip. Other state administrations involved at the bureaucratic level are the State General Accounting Department and a Department Head.

Through government has decree, Consip is funded directly by the MEF, subject to presentation and discussion of an annual budget, debate over activities to be performed, and organisational and structural changes to be undertaken. Three-year work output contracts are agreed for the spending rationalisation programme and for computerisation activities.

Consip, being an independent organisation, has a board of directors. The Ministry-appointed directors represent all positions on the political spectrum. The administrator delegate is a ministerial appointee.

Conflicts of mandate among the various political institutions have not been a problem because sole responsibility lies with the MEF to determine priorities in public finance, pursued through the innovative programme that calls for the use of e-procurement procedures and instruments.

E-Procurement can unfold on an organisational spectrum that ranges from 100% public to 100% private, with a grey scale in between for the various partnerships. Consip and the Lebanese model seem to be closest to the public model (although Consip is a public stock company, the only investor is the state). What advantages can be derived from this position rather than one much closer to the private sector?

Is there a system of monitoring and evaluation for the payments phase? If so, is it the responsibility of Consip or the administration that effects the payments?

Is there distinction between registered and non-registered suppliers in terms of access to contracts? How difficult is it to register?

Is there a starting figure at which it is possible to utilise Consip services? The Italian PA is big and there are many projects – if everyone could turn to Consip, the system would be too unwieldy to manage.

In the Arab region, the internal and external development disparities between countries are much more pronounced than in those in Italy and Europe. Bahrain, Jordan, Morocco, Egypt and Lebanon are the more advanced countries; Sudan, Yemen and Djibouti have very different contexts. Some countries are more ready than others for the launch of e-procurement projects; and when consider policies in this sector it is important not to create further gaps. Has Italy launched any projects designed to prevent an increase in differences that may already exist at the central, regional or local levels of administration?

In the Arab region, and more so in Italy, many suppliers are small or medium-sized enterprises that need support to take advantage of e-procurement. How has this been addressed in Italy?

Lebanon's e-procurement project is defined by the public administration. OMSAR offers technical know-how and assistance, and manages the procurement service on the basis of rules established by donors regarding the use of funds. OMSAR representatives and public agency representatives participate in the evaluation of offers.

Since the establishment of OMSAR in 1995, and from the outset of the process, collaboration has been ongoing with both representatives appointed by the Ministry in charge of the project and public administration decision makers. OMSAR also ensures that suppliers discharge their role correctly, and that conditions are fair for both electronic and traditional procurement transactions (non-computerised suppliers can register by filling out and submitting a form).

Many projects include ITC elements as part of a broader programme of administrative reform. They typically generate high expectations in users, who often wish to know the benefits of participation in advance. It is therefore important to undertake a valid evaluation of needs before the development of the operational interface. Each PA is responsible for the realisation its own projects, but OMSAR remains available to provide technical assistance at all project phases.

In Italy, the criteria used to select goods and suppliers for the marketplace are not particularly restrictive; they generally set out baseline requirements (*e.g.* a minimum turnover or number of employees) that ensure that the supplier is able to provide the goods or services requested. Contract notices are published at periodic intervals or whenever similar goods are needed, allowing new suppliers the opportunity to compete.

Questions regarding the establishment of an external agency have been asked since Consip – a completely public model, backed by the EEC – was created in 2001. Italy's experience during the last four years suggests that this model works, and should be maintained. Because external private firms are used, contracts and choices are revised periodically. The stability of this model, and the relationships it fosters between suppliers and PAs, strengthens public procurement processes. Additionally, because Consip is

connected to the public finance programme, it makes sense that this agency is linked both executively and through its competences to the MEF.

Italian law establishes rules on payment times and backdated interest payable by defaulting administrations. Contracts signed by administrations via Consip usually require payment within 60 days of release of the invoice, but responsibility lies with the administrations that execute the contracts and the suppliers themselves, who decide whether to request the application of the law.

The State General Accounting Department is currently considering the possibility of introducing a procurement card into the electronic market, with the aim of making online payment possible for purchases under the threshold. The major complications with this project relate to the necessity for compatibility and organic functionality among the large number of subsystems involved, due to the complexity of the system of national administrations addressed by the project. Spending control is also a complex and delicate issue.

Consip can clearly have an impact on prices and value for money, but not on quantity, as demand depends on the individual administrations.

Control of supplier performance has received quite a lot of attention in recent years. Initially, Consip prepared contract frameworks, and each PA had executive responsibility for its own contracts. However, administrations were unable to accurately and uniformly monitor supplier performances, so a dedicated monitoring structure was developed. After a Europe-wide tender notice, the job was awarded to an external certification body that provides Consip with necessary verifications and consultation. This model was integrated with a customer care system, which allow for penalties in the case of inadequate performance. The associated normative issues must also be addressed, in accordance with the Italian legal system, which governs enterprise in the management of public auctions. The system does not contemplate “reputational” mechanisms, so an firm that does not fulfil a contract cannot be excluded from the following call for tenders, nor can preferential treatment be accorded to a firm that has performed well.

There are no thresholds governing accession to the electronic market – only minimum rules for participating PAs. Current legislation does not oblige administrations to use the electronic market sponsored by the MEF. They can opt out; as long as they respect the price/quality parameters established by the current agreements, they can look autonomously to other suppliers to purchase required goods and services, provided that value for money is equal to the electronic market. Firms, as well, can choose whether to participate in the electronic market. Consip plays only a promotional role in its relations with suppliers.

In Italy, some administrations are more advanced than others in their use of computerised instruments. Consip has created its own market structure, intended to help develop relations with PAs. It offers basic support to help enable the PAs to participate in e-procurement, depending on what resources are available. There are now plans to work with Italian universities to develop education activities for this type of instrument.

Where possible, SMEs have been offered direct assistance in the use of the instruments. The “Enterprise One Stop Shops” opened in 2004/2005, through a collaboration involving the main category associations (Confapi, Confindustria, Confartigianato, Confcommercio). Education activities have been conducted with the associations, and the Shops now provide businesses with support and assistance to use the various instruments available on the electronic market. This allows Consip to delegate activities that it otherwise would be unable to undertake. The investment required on the part of suppliers is small; all that is needed is a small server with two workstations connected to the Consip site. This clearly shows the value added to businesses.

4. A CONTEXT FOR E-PROCUREMENT – THE PROCESSES OF RE-ENGINEERING, SIMPLIFICATION AND TRANSPARENCY

Rationalisation and transparency in e-procurement processes: The American experience

Julie Basile, Office of Federal Procurement Policy, United States

In the United States, national e-procurement policies have been grafted onto budget laws. Funds are raised through taxation; decisions are then made as to how these funds should be spent by the public authorities, who must follow clear objectives and focus on prioritised areas. Although levels of development and awareness of the possibilities of applying electronic technologies to public procurement vary, public sector modernisation must carry forward.

What are the objectives of US public policy for e-procurement?

The field of public procurement deploys a considerable workforce (about 47 000 purchasers), who are provided with a list of firms offering a wide range of services and products. The system's main aim has been to maximise competition and to increase standards of accountability. Efforts to promote e-commerce have included offering incentives to some categories of businesses, particularly firms owned by women and those offering opportunities to the disabled. The issues of transparency and accountability are important, along with information security, and the treatment and quality of sensitive data. Progress has been made in simplifying e-procurement processes.

The procurement process includes the following phases:

- Analysis of needs.
- Search for sources of funding and purchase approval.
- Drafting of contract.
- Issue of orders.
- Completion of contract.
- Acceptance and payment.

Many of these phases were duplicated by individual purchasing agencies in the United States. This led to creation of a completely decentralised agency to carry out procurement processes, while the sharing of services remains centralised. The United States Division of Technological Services is part of the General Service Administration, similar to Consip, but not privatised. It manages thousands of contracts, ensuring that the work processes of the decentralised agencies follow uniform rules and processes. The agency also issues rules for procurement procedures.

Before the rationalisation process, each agency used its own processes for research, provisioning and evaluation; each agency produced different types of orders. Current efforts are aimed at simplification through uniform procedures. Simplification has also been advanced by the creation of a single online register of all suppliers wishing to enter into contracts with the federal government. This amounts to about 400 000 suppliers.

Problems have emerged in relations with other government agencies; and regarding the organisation's ability to charge commissions for services provided (as it functions almost as a private company).

An additional Web portal has been created to centralise procurement procedures, information and examples of best contracts. This has been very helpful in providing suppliers with needed information about procurement processes and regulations.

Another step forward was the government's pledge to evaluate suppliers' performances. Agencies now share evaluation results and distribute them for use in assessing offers. Suppliers can view their position but not that of their competitors. The e-procurement system also allows sub-supplying, a change that was made in response to requests by suppliers.

There is a data system/database for e-procurement, containing all important elements necessary (the value, terms, conditions, validity, etc.) for awarding contracts. User requests are channelled through the database, which has helped facilitate the drafting of good contracts and resulted in work and financial savings.

Quality of information is a central issue in the e-procurement process; information must be accurate, up to date and coherent if it is to be useful to operators. They, in turn, should maintain efficiency in the contracts information system. Purchase management agencies in the United States often combine a number of catalogues into one in order to facilitate the provision of information to users, including the elimination of badly structured or low quality information, which would be of little use to purchasers.

The simplification process so far has moved forward with the involvement of stakeholders. Twenty major purchasing agencies act in co-ordination, allowing the government to gather accurate information on trends in spending and resources available. However, it has not been possible to confirm whether the new system has contributed towards the simplification of the overall e-procurement process.

Transparency in e-procurement: The Italian perspective

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This study assesses whether electronic tools effectively contribute to a feasible, affordable, reliable, transparent and accountable technological solution to reducing corruption and increasing transparency in the purchasing process of the public sector in Italy. It is based on social science literature on e-procurement, but also on qualitative and quantitative data and on two case studies – the Province of Mantua and the University of Bologna – supported by *ad hoc* interviews with the project managers.

The executive summary starts with a brief presentation on the introduction of electronic tools in the purchasing sector of the public administration (PA) and then proceeds to analyse the feasibility, affordability, reliability and transparency of the Italian e-procurement system.

E-Procurement in Italy: Background

The e-procurement rollout started with the Rationalisation Programme on Public Spending for Goods and Services – part of the wider Italian public sector reform of the 1990s – aimed primarily at the optimisation of public spending and the modernisation of the PA through electronic purchases, but

also at the reduction of corruption. In this context, transparency was an important aspect, albeit a side effect, of the reform; through e-procurement the Italian government aimed primarily at achieving significant savings in expenditures for procurement of goods and services and at opening the government supply market to make it more competitive. The resulting system has succeeded in generating substantial savings, but transparency is considered as a spillover naturally emerging from the automation of the purchasing procedure and has not been an explicit policy commitment. This partially explains why most public administrations did not adopt specific governance tools to support the online procurement, *e.g.* rotation of public officials participating in the Adjudicating Commission, conflict of interest rules, guidelines for communication between buyers and suppliers, etc.

The then-Ministry of the Treasury decided to implement an "untying model," which follows three principles: promotion of the new economy and of e-commerce in general; autonomy of the public administration in managing its own purchases; simplification and innovation of purchasing procedures. Development of the procurement process was outsourced to a private entity: Consip, a joint-stock company totally and directly owned by the Ministry of Economy and Finance.

Consip's strategy is threefold:

1. It regulates National Frame Contracts with suppliers and allows PAs to purchase directly online via an e-shop.
2. It runs online auctions on behalf of public agencies, or supports them in the bidding process.
3. It sets up the public administration's e-marketplace.

National Frame Contracts (NFCs) are created by Consip directly with suppliers and include both the technical and the economic features of the negotiated goods and services. The public administrations' position towards NFCs has changed over time. In 2000, central public administrations were obliged to purchase through Consip, whereas local entities were not obliged to buy through NFCs, but were simply required to take into account the price and quality displayed in the agreements. This provision facilitated market start-up, enabled expenditure aggregation and brought about a price reduction; it also served as a killer application for the diffusion of ICT competencies among civil servants. However, small and medium-sized enterprises (SMEs) felt cut out from the market, which was left open only to a few big firms, while public agencies were unprepared to switch to the new procedures and reported poor supply quality, late deliveries, excessive ties imposed by NFCs and limited assistance by Consip in the assessment of their needs and in follow-up operations.

To respond to the pressures from both SMEs and public agencies, in 2003 and 2004 the "mandatory market" was lifted and public agencies were allowed to negotiate their own contracts, provided the conditions were more favourable than the NFC conditions.

Thus the Italian experience reveals the need to strike a balance between the promotion and rollout of e-procurement through a compulsory market, and the possible subsequent restriction of competition.

Another milestone on the path towards e-procurement is marked by Presidential Decree N. 101 of 2002, which introduced both online auctions and the electronic marketplace in Italy.

The auction includes four phases – the decision of what to buy (internal to the PA), the qualification of the bidders, the online auction itself, and the adjudication. The auction is run in a single or multiple rounds through an electronic platform where suppliers and buyers meet to negotiate goods and services, at either the lowest possible price (reverse auction) or at the most economically

advantageous solution (weighing price, technical characteristics and service level). Commodities sold through auction are those that are not frequently purchased and that can be evaluated mainly on objective terms. The entire process can be followed online by interest groups.

Auction prices are optimal if the starting price is established in a fair manner and collusions among bidders are avoided. Auctioneers first analyse PAs' needs and then verifies if there are enough competitors on the market for the specific negotiated commodities. In these efforts, Consip co-operates with national antitrust authorities.

At the end of the process, the selected supplier is notified through an automatic e-mail message. Finally, offers are digitally signed. The selection of suppliers is simplified due to the reduced time and costs of the bidding process. Moreover, the cost for suppliers to participate in the auction is abated through digitalisation of the procedure, which ensures and clarity and equity.

Presidential Decree N. 101 of 2002 also allows administrations to purchase from the e-marketplace: a new business channel for enterprises, a complement to NFCs, and a virtual area where the PAs' demands meet with suppliers' offers. Goods best suited to the e-marketplace are those bought regularly in small quantities and available only for orders below the EU threshold. Once qualified, vendors and the registered public agencies can "meet" virtually to negotiate. Administrations can order commodities directly via the e-catalogue or ask for price quotations. The system automatically evaluates the offers using pre-established criteria chosen by the administration. In brief, Consip's marketplace:

- Allows immediate comparison of different offers and qualities of suppliers.
- Favours interactions with numerous selected suppliers.
- Increases competition by allowing local dealers to participate.
- Supports and facilitates the evaluation process (to note the difference with online auctions, where offers are simply classified and not evaluated).
- Reduces the phases in which human intervention is necessary. The search for suppliers and their qualifications – delicate areas for bribery – is left to a centralised procedure.
- Reduces time-consuming and, at times confusing, paper procedures.
- Offers the opportunity to follow transactions and keep record of purchases and bargaining phases.
- Allows internal monitoring of PAs' expenditures.

Finally, Article 5 of Presidential Decree N. 101 of 2002 allows local entities to converge and create local e-marketplaces that promote innovation and process re-engineering at the local level, aggregate demand to reduce costs and increase entities' bargaining power, obtain better quality products and rationalise expenditures. *Ad hoc* e-procurement systems were created in some of the most advanced municipalities and regions, based on Consip's experience; this shows how Consip's expertise and knowledge of the subject has been capitalised.

Feasibility and affordability

Savings and efficiency are key factors in determining the feasibility and affordability of the Italian. Estimated savings reached EUR 3.196 million in 2003, primarily from mobile and fixed telephone service contracts; among technological goods, major savings were obtained in the purchase

of laptops. E-Procurement savings figures are controversial, as it is not subject to routine monitoring at the agency level.

Moreover, the incidence of unexpected costs – *e.g.* formalities, legal obligations and general non-bid-related information requested by firms and aimed at guaranteeing fairness during online auctions and equal access to procurement opportunities – cannot be underestimated. If these obligations become too stringent, they become a serious barrier to e-procurement uptake and may reduce the potential benefits of the use of ICT in the purchasing process. In Italy procedural requirements related to the publication of a call, for example, are quite expensive and can discourage smaller public administrations.

Another important element for evaluating whether the Italian e-procurement solution is feasible and affordable is to assess the status quo of the instruments needed to use e-procurement tools: *i.e.* broadband connection, digital signatures and ICT skills in general. During online auctions, large amounts of data are transferred; therefore, a dial-up connection can be a serious obstacle. In addition, old PCs or local servers might be unable to store voluminous records. Technical features also impact system security and reliability (discussed later). Italy's public administrations are in the process of updating their digital infrastructure and training public employees to use ICT, moving towards readiness to use e-procurement platforms.

Reliability

There are two major issues concerning reliability of the procurement system: guaranteeing security during auctions and online transactions in general; and selecting "reliable" suppliers to ensure high-quality products. Both concerns should be adequately considered in order to reduce corruption.

For security, Italy has created a new valuable position – the System Manager (SM), whose task is to guarantee the correct technical functioning of the negotiating tools and to oversee system security while preventing privacy violations. In the event of a problem, the SM can even face criminal responsibility for not having adopted the necessary measures to guarantee data security and civil liability for damages caused in the management of personal data. The SM's role is now crucial, particularly in view of the fact that while technologies allow increased transparency, they also facilitate the transmission of sensitive information. The person in charge of e-procurement for the University of Bologna declared that "at present a totally secure environment for data protection cannot be fully ensured; intrusion by hackers or possible opening of offers before time cannot be excluded." Tina Soreide of the Michelsen Institute also believes that: "One of the benefits deriving from the use of the Internet is the new opportunity for a quick and paperless exchange of critical business information. This will, however, also imply a simplification of the opportunities for corruption. Electronic documents can easily be copied, changed and forwarded to companies offering bribes" (Soreide 2002).

Reliability of suppliers' reputations and quality of transacted goods has also been considered by Consip. A recent study[18] points towards the adoption of the "eBay model" as the choice of NFCs and of e-marketplace contractors. The reputation mechanism should be unilateral, use non-negative ratings, and measure the reputation as the average of recent transaction ratings in order to allow

18. Dini Federico and Spagnolo Giancarlo, *Meccanismi reputazionali e mercati elettronici: problematiche economiche e possibili soluzioni per il public procurement*, in Quaderni CONSIP, November 2004 and in English Dini Federico and Spagnolo Giancarlo, *Reputation Mechanisms and e-Markets: Economic Issues and Proposals for Public Procurement*, powerpoint presentation available at www.consip.it.

comparisons of recent dealings. Susan Rose-Ackermann[19] suggests that performance rating may help to reduce malfeasance and encourage good performance; underperformance on a contract or low-quality products are often by-products of corruption; The Italian attempt to keep this phenomenon under control is therefore remarkable.

The National Framework Agreements do include measures to limit the risk in case of vendor underperformance. The latter is particularly relevant in the fight against corruption; by-products can often result in substandard goods and services, unfinished projects and other waste[20]. The NFCs provide for penalties in case of late delivery and for resolution of the contract in case of non-execution on the side of the supplier. Consip not only requires records from suppliers to oversee the performance of each contract and of enterprises in general, but also offers consultancy services to PAs for the interpretation of the contract and the management of possible litigation with suppliers. Moreover, Consip adheres to the "Guidelines on the quality of ICT goods and services for the management of PA's contracts" drawn up by CNIPA[21] in co-operation with other institutions and Consip itself.

Transparency

Consip's experience and the analysis of concrete case studies reveal significant findings concerning transparency in the Italian e-procurement system.

To begin with, the introduction of e-procurement tools has led to increased competition. According to interviewees, the number of suppliers has risen in Bologna from five or six suppliers for traditional tenders to 17 bidders for online auctions; in Mantua suppliers nearly quadrupled, from three to 10 to 12 bidders. Competition has also expanded geographically, overcoming regional borders. Mantua, a province situated in the north of Italy, reported that enterprises from the south participated in – and won – a recent auction. Moreover the use of electronic means, such as the e-marketplace, favours interactions with numerous selected suppliers at the same time. Finally, the government market has been opened to local dealers, a category which was traditionally excluded from PAs' auctions.

Although an increase both in the number of bidders and in the level of overall competition cannot *per se* point to reduced corruption, it certainly signals the existence of a wider array of opportunities for potential suppliers.

Furthermore, the possibility of accessing information about auctions online provides real-time notification of new business opportunities, reducing the so-called "power of invitation" whereby a public official decides which enterprises to invite to the tender and/or tries to keep the call secret for as long as possible. (For example, Della Porta and Vannucci report a case in Parma where a corrupt public official published the call during the summer period, with a very tight deadline for the submission of applications[22].) In brief, online publication reduces the exclusive power of the administration to detain information, re-balancing the information asymmetry which is typical of the procurement "game".

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19. Rose-Ackermann, Susan, *Corruption and Government. Causes, Consequences and Reform*. Cambridge University Press, Cambridge, 1999.

20. See Weber Abramo Claudio, *Institutional risks in Public Procurement – A Study of the Regulations of Latin American Countries*, Interim Report for Transparência Brasil, November 2004.

21. National Centre for the Informatics in the Public Administrations.

22. Della Porta, D and Vannucci, A., *Corrupt Exchanges: Empirical Themes in the Politics and Political Economy of Corruption, as quoted by Soreide (2002).*

Italian procurement opportunities are now published in newspapers and on the auctioning administration's Web site at least 60 days prior to the bid, while the tender alert is repeated 30 days before the tender. The criteria for participating in the call are set as low and as wide-ranging as possible to avoid creating unnecessary entry barriers; the same is true for admission to the e-marketplace. Standardisation of products and clear technical specifications for products on the marketplace or in online auctions also generate anti-corruption benefits in Italy.

Suppliers have to meet only a single online qualification to be invited to the relevant tenders occurring in the following 24 months; this simplifies the pre-qualification procedure and brings a substantial cost reduction. The Province of Mantua considers simplification a significant benefit of the introduction of e-procurement. Clear and simple procedures, in contrast to uncertain and unpredictable rules, drastically reduce opportunities for corruption. Moreover, managing the entire procurement procedure online reduces time-consuming and confusing paper procedures and favours process standardisation. In particular, during an auction or on the e-market, offer evaluation is to some extent free from human intervention, reducing the opportunity to extract bribes.

Auctions can be followed online, allowing transactional transparency. Consip's auctions are even open to interest groups, while the bids of the Province of Mantua and the University of Bologna can be followed online exclusively by qualified bidders.

The use of ICT, however, does not guarantee a clean process; governance tools are even more necessary. Preparation of auctions is the result of a network of technological/economic capabilities, of policies for disciplining conflicts of interest and avoiding restriction of competition. None of the interviewed administrations (apart from Consip) has adopted specific "guidelines" for conflicts of interest. The interviewees from both Mantua and Bologna seemed surprised that such situations may arise and referred to the general loyalty obligation of all civil servants. Adequate training could remedy the lack of awareness by e-procurement responsible officers while, at the same time, warning them about collusion during bids. Professionalism remains one of the best antidotes to corruption.

Specialised training is also necessary for enterprises, particularly for local dealers who often lack the necessary technological skills and legal knowledge to participate in online auctions. The experience of the University of Bologna points in this direction.

Finally, e-procurement tools enable record-keeping of purchases and bargaining phases. The Province of Mantua believes that archival transparency is one of the major benefits from their e-procurement experience. Consip shares the same view. (See interview in the Annex.)

To conclude, the Italian experience is particularly valuable. Italy was the first European country to set up an e-procurement regulatory framework allowing online purchases above the EU threshold. The Italian case has turned out to be exemplary – the Italian model has been adopted by the EU PHARE programme for e-procurement projects in both Turkey and in Cyprus[23].

Introduction

Definitions of e-procurement vary across specialised literature in the field. To quote a few definitions: Is electronic procurement "any technology designed to facilitate the acquisition of goods

23. The PHARE programme is one of the instruments financed by the European Union to assist the candidate countries of Central and Eastern Europe in joining the EU.

over the Internet"[24] or "the electronic management of all procurement activities"[8]? Or simply "aspects of the procurement functions supported by various forms of electronic communication"[8]? The World Bank suggests a three-layered definition of e-procurement[25]. While the second- and third-level definition make a subtle distinction between e-tendering and e-purchasing, the first-level definition states that "electronic Government Procurement is the use of information and communication technology (especially the Internet) by governments in conducting their procurement relationships with suppliers for the acquisition of goods, works and consultancy services required by the public sector."

The Italian definition overlaps in part with the World Bank classification, as the doctrine tends to regard e-procurement as the set of technologies, procedures and organisational steps that allow purchasing of goods and services online, through opportunities offered by the development of the Internet and of e-commerce[26]. Compared with the World Bank designation, the Italian omits the "acquisition of works".

The definition appears complete, albeit somehow biased towards the technological aspect of e-procurement. The organisational and "democratic" impacts of the process – *i.e.* increased transparency and supplementary choice – are also important. In particular, e-procurement in Italy was conceived as part of the overall public sector reform and as an instrument of the country's wider e-government strategy. Like all e-government tools, an e-procurement system is fully beneficial only if preceded by, and supported by, back-office transformations[27]. E-Procurement in Italy has brought about widespread changes both in the regulatory and in the socio-organisational framework, including new legislation, new competencies, creation of *ad hoc* professional figures to manage the purchasing process, disintermediation, etc.

From the economic point of view, the purchasing sector of the public administration is an area of intense public interest, where there is much scope for savings. Douglas C. North determined that for a modern economy, 45% of GDP can be accounted for by the cost of public transactions[28]. Additionally, in consideration of the non-bid related information required by firms[29], the use of electronic media can

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24. Davila, Tony, Mahendra Gupta and Richard Palmer, *Moving Procurement Systems to the Internet. The Adoption and the use of E-Procurement Technology Model*, in *European Management Journal*, 21(1), 2003.

25. World Bank, *Electronic Government Procurement (e-GP): World Bank Draft Strategy,* Procurement and Policy & Services Group, The World Bank, Washington DC, October 2003.

26. See Sarzana Fulvio di S. Ippolito, *L'e-procurement pubblico*, in (same author), *E-Government, profili teroici ed applicazioni pratiche del governo digitale*, La tribuna, Piacenza, 2003; see also Gatti Mauro, *E-procurement. Il D.P.R. 101/2002 e gli acquisti in rete della PA*, Edizioni Simone, 2002.

27. EUREXEMP, *Does e-Government pay off?* November 2004 Paper realised under the authority of the Dutch Ministry of the Interior and Kingdom Relations to investigate whether it was worth investing in eGovernment initiatives, and to identify the back office changes required for that. The study is made by collecting information on a number of "European exemplary public services – Eurexemps". The analysis framework, selection criteria, etc. were discussed with the E-government Working Group of the European Public Administration Network (EUPAN).

28. Wallis, John J and Douglas C. North (1986), *Measuring the Transaction Sector in the American Economy,* in S.L. Engerman and R.E. Gallman, (*eds*) *Long Term Factors in American Economic Growth*, Chicago, University of Chicago Press.

29. See COWI, *Monitoring Public Procurement in the European Union using Firm Panel Data,* Lot 1, Final Report, July 2003. It is a study based on questionnaires addressed to sample firms from 8 countries in Europe drawn from nine economic areas corresponding to sectors that account for 66% of

make a difference in reducing high procedural costs and ultimately gaining a better value-for-money ratio[30].

Efficiency is not the only question. The use of ICT in the procurement process may lead to reduced costs – and time – for managing information (*i.e.* increased transparency), to integration, comparability and rapid update of data coming from different sources (*i.e.* enhanced monitoring), and, finally to disintermediation and reduction of discretion (limiting the opportunities for bribery)[31]. The transparent tender brought about by e-procurement tools is also conducive to increased competition among bidders, thanks in part to cross-border procurement when the value of a contract makes it worthwhile for foreign firms to participate to the tender.

However, at the national level the costs of introducing e-procurement systems must not be underestimated, and at the international level the risk of "fragmenting" the market by implementing national non-interoperable solutions should be taken into account. Moreover effective savings stemming from e-procurement are difficult to assess and to measure[32]. The EU maintains that generalised e-procurement could save governments up to 5% on expenditures and 50-80% on transaction costs[33].

Policy makers should also consider possible market failures. According to Celentani and Ganuza, a larger number of potential suppliers in the procurement market and increased competition in the market for procurement agents may result in increased corruption. Increases in competition are always desirable, and to some extent beneficial, but "it is reasonable to expect that corruption and competition will grow together in certain markets"[34]. Soreide admits that firms exposed to increased competitive pressure are also more likely to resort to unethical business practices[35].

These statements reinforce the need to support e-procurement, and e-government in general, through governance tools. In order to avoid collusion in bids, for example, interaction between the

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all published tenders in the EU (chemicals, machinery, office equipment, medical products, motor vehicles, motor repair, construction, business service and sewage).

30. Asian Development Bank, Interamerican Development Bank, the World Bank, *Strategic Electronic Government Procurement*, March 2004, pages 8-9; See also European Commission, *A report on the functioning of Public Procurement markets in the EU: Benefits from the Application of EU directives and Challenges for the future*, February 2004, page 22.

31. See Bhatnagar, Subhash, *E-government and access to information*, in Transparency International, *Global Corruption Report*, 2003; Heeks Richard, *eGovernment for Development. Role of ICTs in Transparency Projects*, University of Manchester, UK, 2004; for the benefits of e-procurement like increased transparency and probity see OECD, *Synthesis of Lessons Learned of Donor Practices in Fighting Corruption*, June 2003.

32. See Tonkin Christine, *E-procurement in the Public Sector: Story, Myth, Legend*, Working Paper, the Policy Institute, Trinity College Dublin, November 2003, pages 6-7.

33. Commission of the European Communities, *Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the regions. Action Plan for the implementation of the legal framework for electronic public procurement*, Brussels, December 2004 , p. 3.

34. Celentani Marco, Ganuza Juan-José *Corruption and competition in procurement*, Universidad Carlos III de Madrid Universitat Pompeu Fabra January, 2001.

35. Soreide, Tina, *Corruption in international business transactions: The perspective of Norwegian firms*, CMI Report R 2004:10, available on www.cmi.no, Chr. Michelsen Institute, 2004.

public procurement body and the national antitrust authority could be increased. Controlled or affiliated suppliers could be banned from taking part in the auction, or contracts could be split into lots accessible to SMEs[36]. To supervise the behaviour of the purchasing entity, policy makers may use a mixed system of codes of conduct and monitoring authorities.

Aim of the study

The Italian e-procurement system has been examined in order to assess whether it provides a transparent, accountable, reliable, feasible, and affordable technological solution to reduce corruption and increase transparency and accountability in the purchasing process of the public sector. Transparency is here defined as "accessible information on laws and procedures as well as on specific procurement opportunities" (OECD, 2004)[37].

Methodology

The study is based on social science literature dealing with e-procurement, which in Italy is focused on the juridical aspect of the subject, and also on official papers reporting both qualitative and quantitative data supplied by the Ministry of Economy and Finance, the National Centre for Informatics in the Public Administration, the Observatory on the Information Society and Consip (the company created to introduce e-procurement tools in the public sector). Complementing this theoretical framework are Consip's concrete experience and two case studies – the Province of Mantua and the University of Bologna – supported by *ad hoc* interviews with the corresponding project managers.

Structure

E-Procurement is first placed within the Italian public sector reform. At the same time, in order to assess the effective feasibility of the Italian solution and its affordability for the central and local public administration, the report illustrates the presence of the so-called enabling factors needed for the introduction of e-procurement – the diffusion of ICT in Italy and the development of the e-administration (digital signatures, etc.).

The analysis then delves into the existing Italian reality by examining the functions of e-procurement tools such as e-shops, online auctions and e-marketplaces. The study is not limited to the technological and procedural aspect, but also verifies whether specific corruption prevention mechanisms are in place, such as policies for conflicts of interest, the possibility of redress for unsuccessful bidders, and the existence of principles of equity at the regulatory level. Finally, two case studies are offered.

E-Procurement: A central element of the government strategy for administrative simplification and efficiency

Public sector reform and e-procurement in Italy: Blazing a new path

36. See Piga, Gustavo and Zanza Matteo, *An Exploratory Analysis of Public Procurement Practices in Europe*, in *Quaderni CONSIP*, September 2004.

37. OECD, The role of Transparency in Preventing Corruption in Public Procurement, paper distributed at the OECD Global Forum on Governance-Fighting Corruption and Promoting Integrity in Public Procurement. Paris, 29-30 November 2004, p.2.

"Over the past ten years, progress on improving the environment for business and on modernising the public administration in Italy has been rapid, broad and impressive. Although Italy started reforming later than many countries, modern Italy is far advanced compared to the Italy of 1990. The public sector itself needed reform. Unclear and complex laws that were difficult to implement had resulted in unnecessary burdens on citizens and businesses, as well as low compliance, sowing fertile ground for corruption. The public administration suffered from inefficient use of resources, low productivity, fragmentation and duplication, and inadequate training of civil servants."[38]

The public sector reforms of the 1990s were viewed as necessary not only to respond to a different budget reality, but also to re-establish citizens' trust in government[39]. Accordingly, the reforms brought in:

- Vertical subsidiarity by transferring responsibilities to the institutions and organisations closest to the citizens (Regions, Provinces and Municipalities).
- A reshaping of the central government to improve co-ordination, to avoid duplication and to reduce the number of ministries.
- A range of simplification tools, *inter alia* the Observatory on Simplifications, the regulatory impact analysis, one-stop shops for business, the combined services conference.
- Civil service restructuring, making it more similar to the private sector, *e.g.* link between wages and productivity, new forms of flexible contracts.
- The e-government action plan to speed the administrative simplification process, increase transparency and deliver better and faster online services. This came with appropriate legal tools to regulate digital signatures, the use of electronic documents and ID cards.

Within this framework, the purchasing sector of the Public Administration attracted special attention as the constant increase in public spending[40] gave opportunity for substantial savings, and as significant differences in adopted procedures created high expectations for innovation. A few administrations experimented with the use of electronic tools in pilot e-procurement projects, while the majority were still validating offers with sealing wax.

In 2000 the then-Ministry of the Treasury laid down in the Budget Act for that year[41] the "Rationalisation Programme on Public Spending for Goods and Services" with the aim of:

- Optimising public spending through the use of electronic means.
- Guaranteeing efficiency and simplifying the purchasing process.
- Promoting e-procurement tools.

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38. Jacobs, Scott, *Statement for FORUM PA on regulatory reform in Italy*, Rome, 7 May 2001.

39. On the need for governments to regain legitimacy and trust see OECD, *Government of the Future*, Paris 2000 pages 23 *et seq.*

40. The analysis of the last ISTAT data relating to "Consolidated Economic Account of the Public Administration" shows that in the period 2000-2003, there was a constant increase in public spending for the purchasing of goods and services in Public Administration (so-called intermediate consumption), an increase of +8.8% in 2003 compared to 2002, that is EUR 5.611 million.

41. Law of 23 December 1999, n. 488.

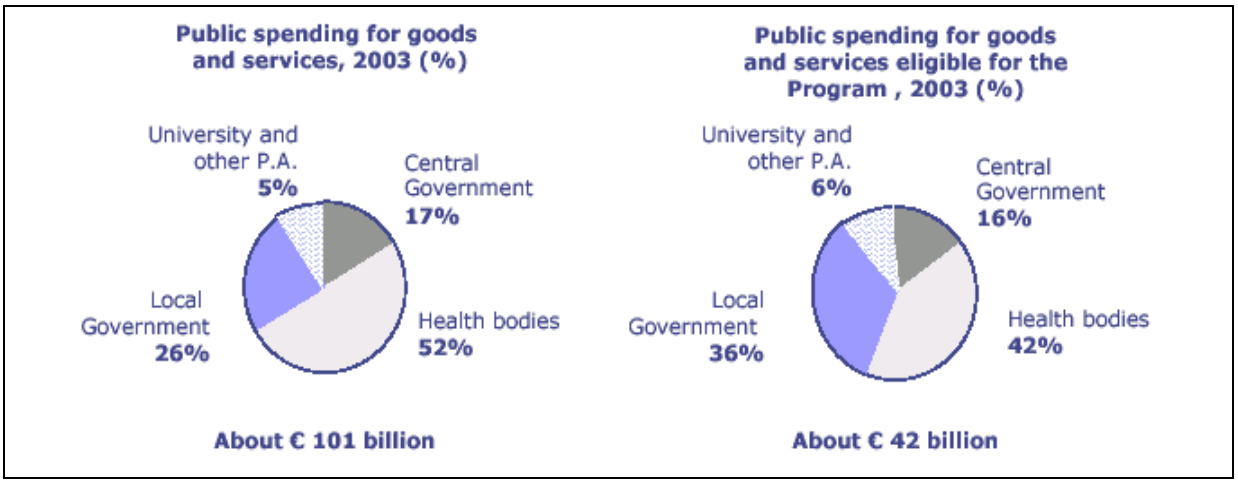
- Supporting innovation of the public administration.

And side effects of:

- Increasing transparency and timely tracking of PA expenditures.
- Enhancing market dynamics (*e.g.* favour competitiveness of the country).

Public expenditure for goods and services amounted to approximately EUR 97 billion (15% of overall public spending in Italy and 7.9% of GDP). It was calculated that about 40% of expenditures – EUR 40 billion – were eligible for the Rationalisation Programme. The latter activity covered about EUR 16 billion in 2003.

Figure 1. Public Spending for goods and services eligible for the Rationalisation Programme



Source: Consip.

The Ministry of Economy and Finance[42] entrusted development and management of the Programme to Consip[43], a joint-stock company totally and directly owned by the Ministry itself, which also monitors the enterprise's activity. Within this outsourcing model, Consip was given the task of delivering, promoting and monitoring the use of innovative e-procurement tools in the public administration. The Ministry centralised the management of the public administration's demand for goods and services, but not the administration of the purchases themselves[44].

The purchasing system offered to the public administrations was – and to a certain extent still can be considered – a "mixed untying" model. It foresees that the Ministry, through Consip, stipulates National Frame Contracts directly with suppliers. In the year 2000, central government administrations

42. The Ministry of Economy and Finance (http://www.mef.gov.it/welcome.asp , hereinafter MEF) has taken over the responsibility of the Ministry of the Treasury, Ministry of Budget and Economic Program and of the Ministry of Finances (Article 23 of the legislative Decree 30/07/1999 n.300).

43. Public Information Services Agency (Concessionaria Servizi Informatici Pubblici), www.consip.it .

44. This is the opinion of Bertini, Leonardo and Sciandra Luisa, *La riforma del procurement della P.A. Il nuovo modello di gestione e le estensioni alla sanità*, paper based on a research made for the Technical Commission on Public Spending -Ministry of Economy and Finance-, October 2001, chapter I.4.

were obliged to purchase within the limits established by such contracts (tied system), whereas local bodies were free to either adhere to the contracts or to run their own tenders provided the price and quality of the frame contracts were taken into account (untied system).

Legal evolution has progressively freed public administrations from their obligations to purchase through Consip , substantially loosening the procedures in use. A cornerstone in this process is Presidential Decree N. 101 of 2002, which entrusts the Ministry with the development of the public administration's e-marketplace; for the first time in Italy, major phases of the procurement process – the presentation of offers, their evaluation and the adjudication of contracts – could take place online.

Savings and ICT endowment as enabling factors for e-procurement: Conditions making e-procurement affordable

The Italian government initially viewed e-procurement as a way to realise public interests by achieving efficiency, savings and transparency.

Considering financial savings is fundamental to understanding whether the Italian e-procurement system is feasible, advisable for the country and affordable. In 2003 purchases of goods and services through National Frame Contracts amounted to EUR 1.959 million, 1.092 for the central public administration. Approximately 183 000 supply orders reached Consip. Only 12% of administrations used electronic means to send their orders to suppliers; the remaining agencies still followed the fax procedure. However, in 2004, 62% of administrations registered online for Consip's purchasing system, compared to 58% in the year 2000, with 42% registering offline.

Estimated savings reached EUR 3.196 million, primarily from mobile and fixed telephone service contracts; among technological goods, major savings were obtained in the purchase of laptops. (This figure is not the result of routine monitoring at the agency level, but rather a calculation based on percentage reduction in unit costs for goods and services managed through the Programme.)

Table 1. Main items managed through the Rationalisation Programme in 2003 (million EUR)

Volume	Central PA	Health sector	Local entities	Universities	Other PAs	Total
Value of purchases through NFCs in 2003	1.092	210	527	118	11	1.959
Annual estimated expenditure for goods and services	3.876	4.949	4.328	543	1.341	15.036
Estimated savings	1.267	587	899	135	309	3.196

Source: Ministry of Economy and Finance, Office for the Rationalisation of PA's Online Purchases.

Savings include both direct savings from purchases made by public entities through the frame contracts, and indirect savings, stemming from the so-called "benchmarking effect". The latter occurs when administrations run their own procurement procedures taking into account the unit prices shown in Consip's NFCs.

An important element for evaluating whether the Italian e-procurement solution is affordable for other countries is to assess the status quo of the e-tools needed for the diffusion of e-procurement. These are the so-called "enabling factors" for the development of e-procurement: digital signatures (identifying both the bidder and the administration), e-mail for PAs' internal mailings, ICT skills of public employees, and general ICT penetration in the country (broadband, PCs, etc.).

The table below shows the development of some of the 10 objectives adopted by the Committee of Ministers for the Information Society[45] in February 2002; one is specifically addressed to e-procurement while others relate to the development of the e-administration in general. The National Centre for Informatics in the Public Administration[46] – an entity created to speed the modernisation of the central and local public administration – monitors the advancement of the public sector towards the aforementioned objectives.

Table 2. Italian e-government programme: Status of objectives

Objectives	2001	2003 (target for 2003)	Comments
Digital signature tools	585 000 (value for 2002)	1 121 700 (1 000 000)	On track
Public e-procurement expenditure (million EUR)	293	1 959 (3 000)	Behind
E-Mail use for internal mailing	10%	61% (40%)	On track
E-Payments	300 000	24 655 000 (20 000 000)	On track
Public employees with certified ICT skills (ECDL)	0.1%	1.2% (60%)	Behind

Source: CNIPA data, commented and revised by the author.

Digital signatures are widely used because Italy was one of the first EU countries to confer binding legal effect to electronic documents and to put digital signatures on par with traditional signatures. Businesses now use such signatures for legal obligations with the Public Register for the Enterprises, with an estimated savings of about EUR 260 million per year. The police forces (Carabinieri), the Ministry of Justice, and the National Council of Forensic Research have also adopted digital signatures[47].

The number of employees with an e-mail account – an indicator used as a proxy to measure the percentage of internal mail sent electronically – shows a steady increase, totalling 34.9% since 2002.

The certified training of employees, although behind government schedule, is not particularly worrying. Currently, 91% of employees who need training already use a PC and 50 000 employees have attended to ECDL courses or similar.

A final useful element for evaluating the Italian system from the point of view of its affordability is the status of the digital infrastructure in the country (see Box 1).

One of the risks associated with the introduction of e-procurement solutions is the ability of these systems to "talk" to external constituencies. Suppliers (mainly SMEs) and customers (public employees) must be ready (ICT penetration) and prepared (diffusion of the culture of innovation, *e.g.* PC per student) to accept the change. Measuring the time new products need to penetrate the European

45. To promote the development and use of information and communication technologies in the various sectors, a Committee of Ministers for the Information Society has been set up http://www.innovazione.gov.it/eng/intervento/riunioni_comitato_eng.shtml.

46. In 2003 the National Centre for the Informatics in the Public Administration (hereinafter CNIPA) took over the responsibilities of the Authority Centre for the Informatics in the Public Administration (AIPA) and of the Technical Centre of the Presidency of the Council of Minister. www.cnipa.gov.it.

47. See http://www.innovazione.gov.it/eng/comunicati/2004/2004_03_22.shtml.

markets shows that, while in Finland innovative products penetrate the market within 4.6 years, in Italy it takes 6.7 years (Source: European Innovation Scoreboard 2003). This may be point to an Italian reluctance to innovation. The person responsible for e-procurement in the Province of Mantua reported, in fact, that SMEs were suspicious about the new system, mainly due to a lack of specific technical knowledge. However, the quantitative data provided show that Italy is undergoing profound changes; increased Internet and broadband penetration, together with steady development of online services to citizens, reveal transformation of the country and readiness to take on e-procurement solutions.

According to Consip, the toolkit needed to use e-procurement tools is quite simple – broadband connection, digital signature tools and limited ICT skills. The Italian public administration has recently updated its digital infrastructure and is proceeding to train its employees to use ICT; it seems prone, albeit not immediately ready, to use e-procurement platforms.

The Italian system has generated substantial savings, which makes the solution viable for other countries. However, measurement of the savings is controversial given the fact that it does not derive from routine monitoring at the agency level.

Lastly, the incidence of unexpected costs – such as formalities, legal obligations the general non-bid related information required from firms – can represent a serious barrier to e-procurement uptake in Italy.

Box 1. ICT penetration and the development of e-government as enabling factors for e-procurement

- Household Internet penetration: 42%; + 17% since 2001.
- Internet penetration in businesses: 45.5% average; maximum 98.4% in big enterprises; minimum 43.2% in SMEs.
- % of enterprises with Internet access using broadband: 45%; +120% since 2003.
- % of households with Internet access using broadband: 38%; + 107% since 2003.
- PCs per student in 2001: 1 per 28 students; in 2004: 1 per 11 students.
- % of surfers visiting PA Web sites: 53.9%; + 17% since 2003.
- Compared to other OECD countries like Spain, where the percentage is around 50%, Germany (37%), the UK (42%) or France (55%), the Italian public sector's Web sites seem well placed to attract more and more users.
- Satisfaction of citizens using PA Web sites: 62% are very satisfied; 2% are totally dissatisfied; 10% are not satisfied and 26% do not have an opinion.

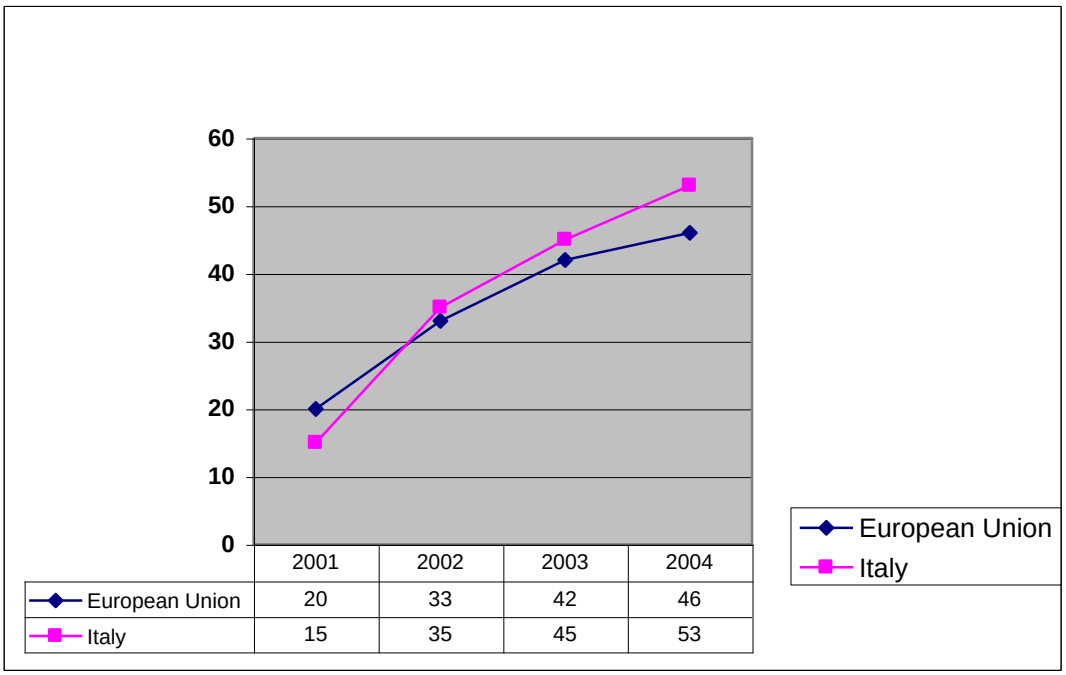
Maturity of online services

According to the latest European measurement of the maturity of online services, in Italy the sophistication of online services has increased from an average of 39% in October 2001 to 72% in October 2004. While in 2001 Italy was below the EU average (39% vs. 45%), now it is perfectly aligned with the EU average (72%). As far as the percentage of services totally available online is concerned, Italy is above the EU average (53% vs. 46%). (See Figures 2 and 3.)

The best results are registered for the services supplied to businesses; their maturity reaches an average of 90% (+ 10% since October 2003), 6% above the EU average (EU 15 + Iceland, Norway, Switzerland). On the other hand, the maturity of online services to citizens is lower at 60%, but with a substantial increase since 2003 of 14%.

Source: Observatory on the Information Society.

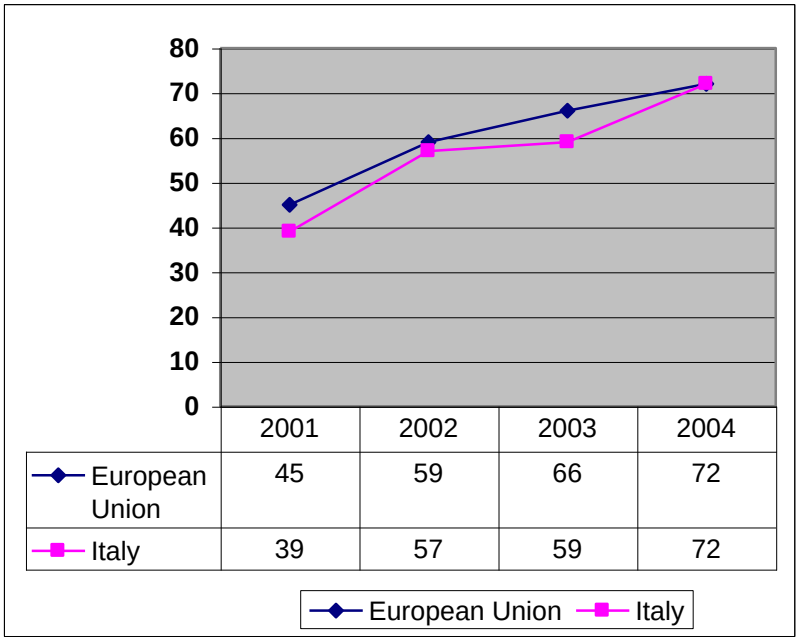
Figure 2. Percentage of services totally available online in Italy and the EU



	2001	2002	2003	2004
European Union	20	33	42	46
Italy	15	35	45	53

Source: EU, revised by the Research and Studies Unit of the Minister for Innovation and Technology.

Figure 3. Sophistication of online services in Italy and the EU



	2001	2002	2003	2004
European Union	45	59	66	72
Italy	39	57	59	72

Source: EU, revised by the Research and Studies Unit of the Minister for Innovation and Technology.

E-Procurement tools as a means to foster transparency: E-Shops, e-marketplaces and online auctions

After analysing the context in which e-procurement takes place, it is important to examine of Consip and the regulatory framework in which it operates, and to examine the opportunities for increased transparency offered by the individual e-procurement applications available in Italy.

Consip's role in the Italian regulatory framework for e-procurement

Before the year 2000, laws disciplining procurement auctions – sometimes in the form of royal decrees – did not make any reference to the use of electronic means in the procurement system.

In Italy, the first administrations to introduce electronic tools in the purchasing process were decentralised local entities: the regions. In 1997, the Lombardy region, in the North of Italy, passed legislation opening the possibility of operating auctions through electronic means, both for collecting information on suppliers and for presenting offers. More recently, local entities – such as provinces and municipalities – were given substantial autonomy from the central government through a constitutional reform (in 2003). These bodies are now free to adopt their own rules in the procurement field (provided EC regulations are respected). This leaves room for the introduction of digital means in purchasing – and the first e-procurement experiences can be traced to the municipality level.

The Budget Law for the year 2000 marks a watershed in the e-procurement rollout in Italy. Consip's role for the rationalisation of public spending was consolidated in that year, when the company – totally owned by the Ministry of Economy and Finance – was made responsible for the optimisation of public expenditure for goods and services. In particular Consip was given the tasks of:

- Defining purchasing strategies.
- Drawing up competitive frame contracts for public administrations.
- Promoting the use of e-procurement within PAs.
- Providing monitoring tools for PAs.

National Frame Contracts (NFCs) are stipulated by Consip directly with suppliers and list both the technical and economic features of negotiated goods and services. NFCs are an efficient tool, as they lower the unit cost of goods and services and simplify purchasing procedures when applied to standardised goods and services and whenever demand aggregation is feasible. In the first case, benefits derive from economies of scale, whereas in the second case suppliers are required to make an offer for huge quantities of commodities, negotiating a price reduction. In particular, demand aggregation reinforces the bargaining power[48] of the public administration, favouring smaller municipalities that are often unable to negotiate substantial discounts with local suppliers if left to their own devices. According to a recent study by the European Commission, e-procurement generates major benefits when used for the acquisition of goods that are standardised, not technologically complex, of low value and ordered either frequently or very rarely (*e.g.* office furniture). In brief, at least some e-procurement tools are best used when quality evaluation is reduced to a minimum[49].

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48. See Barbiero Alberto, Osimo David, Spagnolo Laura, *L'e-procurement nella Pubblica Amministrazione: guida pratica all'acquisto on-line di beni e servizi*, Maggioli Editore, 2001, p.24.

49. European Commission, *Analysis of Electronic public procurement pilot projects in the European Union, November 2000*; see also IDA, Public eProcurement. Analysis of Public eProcurement Initiatives,
May 2002, pg. 4.

Consip's role in managing NFCs is to define a tender strategy, act as auctioneer by selecting suppliers through a tender following EC stipulations, and monitor agreements. Consip is a crucial interface between the public and private sectors (see Figure 4). By endorsing the NFCs, suppliers are obliged to satisfy orders coming from PAs within the limits of the agreements themselves.

The public administrations' position towards NFCs has changed over time and needs further attention. Article 26 of the Budget Law for the year 2000 mandated that central public administrations adhered to the frame agreements unless they could provide an "adequate reason" for not doing so and for resorting to alternative solutions (*i.e.* prove that the goods or services were available elsewhere at better conditions or that the commodities needed were not included in the NFCs). A subsequent internal document of the Ministry of Economy and Finance[50] specified that administrations had to identify public servants "responsible for the optimisation of the initiatives to rationalise the expenditure." The aim was to increase the accountability of public officials. Local entities were not obliged to buy through NFCs, but were required to take into account the price and quality displayed in the agreements.

In brief, PAs were free to assess their needs (*i.e.* to decide when and what to buy), but when the choice to purchase was made they either had to adhere to NFCs or refer to them within the limits specified above. The orders were then sent directly to suppliers (the latter part of this procedure is still valid today). Adhesion to the agreements can be carried out both online by registering through a portal (www.acquistinretepa.it) or by traditional means (mail/fax). In this way, e-procurement tools work as a killer application for the diffusion and use of ICT in the public sector.

NFCs are operated through an electronic catalogue available on the procurement portal. The catalogue is easy to integrate into agencies' traditional procurement processes; they need only click on the items that interest them and choose the quantity required at the price displayed in the NFCs. The e-shop is efficient, especially for standard goods that have well-known technical features, stable high prices, are ordered frequently and have numerous buyers.

The agreements include measures to limit risk in case of vendor underperformance. This is particularly relevant in the fight against corruption, which can often result in substandard goods and services, unfinished projects and other waste[51]. The NFCs provide for penalties in case of late delivery and for resolution of contracts in case of non-execution on the side of the supplier. Consip requires records from suppliers to oversee the performance of each contract and of enterprises in general, and also offers consultancy services to PAs for interpretation of contracts and management of possible litigation with suppliers. Consip also adheres to the "Guidelines on the quality of ICT goods and services for the management of PAs contracts" drawn up by CNIPA[52] in co-operation with other institutions and Consip itself[53].

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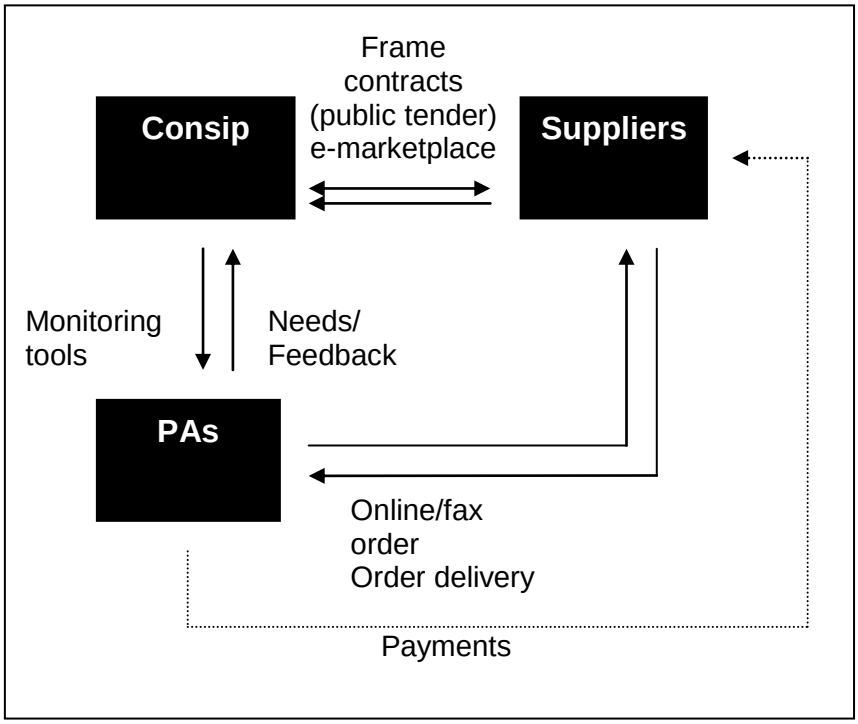
50. *Circolare* N. 1/2000 of the Ministry of Economy and Finance.

51. See Weber Abramo Claudio, *Institutional risks in Public Procurement – A Study of the Regulations of Latin American Countries*, Interim Report for Transparência Brasil, November 2004.

52. National Centre for the Informatics in the Public Administrations.

53. (www.cnipa.gov.it/site/it-IT/In_primo_piano/Qualit%c3%a0_dei_servizi_ICT) guidelines presented on 25th January 2005; see also the Interview with Ferranti director at CONSIP.

Figure 4. NFCs: Consip as a crucial interface between the public and private sectors



Source: Consip.

This analysis reveals that transparency is obtained through simplification and personal exposure, *i.e.* smoothing the procurement cycle. Some phases of the process are managed by Consip directly, leaving to PAs the "onus" of emitting orders, reducing paper procedures and consequently minimising errors in documents, standardising the procurement cycle, shortening the time required for the procurement process, and clearly identifying public officials responsible for purchasing decisions (see Figure 5). Moreover, at the end of the year 2000, Law N. 340 established that PAs were obliged to publish bids below European thresholds on one or more Web sites specified by the Presidency of the Council of Ministers. This form of publication has replaced the traditional practice since 1 July 2001 (provided EC legislation was respected and that advertisements in major newspapers were maintained). Transparency is facilitated by the free flow of information between the PA and the constituency – in this case enterprises and interest groups.

The budget law for the year 2000, together with subsequent legal specifications, extended the scope of application to almost all public agencies until the year 2003, creating (at least initially) a "compulsory market" for e-procurement and facilitating its rollout. If goods and services were present IN the electronic catalogue, most purchasing entities were obliged to use this instrument to carry out their purchases. As a result, during the period 2000-2003, 61 NFCs were concluded for 35 different categories of goods and services ranging from telecommunication services to copy machines, desktop computers, laptops, vehicles for rent, stationery, etc. Overall, 90% of public agencies also applied to NFC (the percentage is calculated as the ratio between the number of registered users and the number of potential ordering bodies: 44 982 vs. 45 609 entities).

Tighter conditions were also established for bids[54]. Contracts worth over EUR 50 000 had to be negotiated through open bids to ensure equal opportunities and transparency. Consip could even act as auctioneer and replace agencies in carrying out procurement tenders. Although this situation contributed to an increase in the number of orders through NFCs, it produced different reactions from PAs and vendors.

While a few public agencies decided to stop purchasing in order to avoid using unfamiliar procedures, others spent more money than necessary to take advantage of the reduction in unit costs determined by the NFCs. However, this increase in spending could also be attributed to the satisfaction of previously unexpressed needs, such as innovation and modernisation of offices (*e.g.* purchases of desktops and laptops). Moreover, some PAs lamented they could not find the specific commodities required for their activities (material, surgery products, etc.).

In general, public agencies found it difficult to switch to the new procedures – the personnel was not adequately trained and had limited technical skills – and reported poor-quality supplies, late deliveries, excessive ties imposed by NFCs and limited assistance by Consip in the assessment of their needs and in follow-up operations[55]. Consip, on its side, is limited by current legislation to act generally as facilitator in the negotiations between the public administration and the supplier, and may not intervene in individual contracts or supplies.

From the vendors' standpoint the "compulsory market" used to start up e-procurement crowded out local dealers, mainly SMEs with special ties to public administrations. In protest these enterprises gathered and set up a dedicated Web site with the explicit aim of contrasting Consip, as per its very name "againstconsip" (controconsip.it). In their opinion, Consip was displacing small firms, as proven by the fact that only large companies responded to Consip's invitations for bids. Some of the larger enterprises even created cartels to monopolise offers; in one case an oligopoly of eight enterprises bidding for restaurant tickets was actually sanctioned by the Italian Antitrust Authority with a fine of EUR 34.1 million. Public agencies also complained about insufficient specifications of technical features in bids and unclear requirements for participation in auctions.

The Italian Audit Court intervened on the subject and pointed out that the alleged savings advertised by Consip were difficult to verify due to the lack of an agreed system for gathering information on purchases at both the central and local levels (*e.g.* changes in the composition of budget lines over the years)[56]. There were therefore no reliable data to compare expenditures for goods and services before and after the introduction of NFCs.

Finally, legal doctrine maintained that the role of the central government was exceeding the limits imposed by the recent constitutional reform on decentralisation. In other words, the mixed untying model and the state-supply driven approach were too stringent – especially for regions and local bodies; and while the model was well tailored to obtain savings, it failed to respect decentralised autonomies[57].

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54. Article 24 of the law 289 /2002.

55. See Galletti Anna, *Dossier sulle criticità degli acquisti tramite convenzioni CONSIP*, available on www.codau.it and Marra, Mita, *Innovation in e-Procurement: the Italian Experience*, IBM Centre for the Business of Government, November 2004, p. 15 *et seq.*

56. See Marra Mita, *op.cit.* p. 14.

57. See in this respect: Greco Maurizio, *Gli approvvigionamenti di beni e servizi nelle P.A. mediante sistemi elettronici e telematici*, available on http: //www. lexitalia.it ; Sarzana, Fulvio, *op.cit.*

Box 2. The experience of the province of Pisa in using National Frame Contracts

While using CONSIP's NFCs, the province of Pisa experienced both disadvantages and advantages:

- (-) Quality issues: Laptops' features did not adhere to the Administration's expectations.
- (+) Knowledge management: Online information on suppliers and products on CONSIP's Web site have made possible clear and efficient bidding calls and access to related documents.
- (+) Internal procedural simplification.

Box 3. The experience of the University of Bologna in using National Frame Contracts

Bologna University has offered criticism of the NFCs regarding:

- Poor quality of products.
- Late deliveries.
- Prices for stationery higher than those available on the local market.
- Difficulties in accessing the Web site and long registration procedure.

To respond to pressure from SMEs and public agencies alike, in 2003 and 2004[58] the "mandatory market" was lifted and public agencies were freed to negotiate their own contracts, provided the conditions established therein were more favourable than those displayed in the NFCs. The EUR 50 000 threshold was first interpreted by the Audit Court as a compulsory communication to be made to the Court itself and then abrogated *tout court* at the end of 2003[59]. The Audit Court asked Consip to set up a monitoring system in collaboration with ISTAT (the National Statistics Office) on the execution of NFCs. Consip made an effort to gain a better insight on pricing and on the consumption dynamics of products purchased by public agencies, and decided to set up a performance rating system with certified authors verifying the quality of supplies. In brief, Consip decided to customise its support to the public sector. Consip's recent study on how to select a reputational mechanism for the frame contracts and the e-marketplace. The study argues that the "eBay model" is efficient, if adapted to the specific needs of the public sector. The reputational mechanism should be unilateral and use non-negative ratings, and should measure reputation as the average of recent transactions' ratings in order to allow comparisons of recent dealings and avoid the risk of "resting on the laurels"[60].

58. Law 212/2003; legislative Decree n. 269/2003; Budget law for the year 2004.

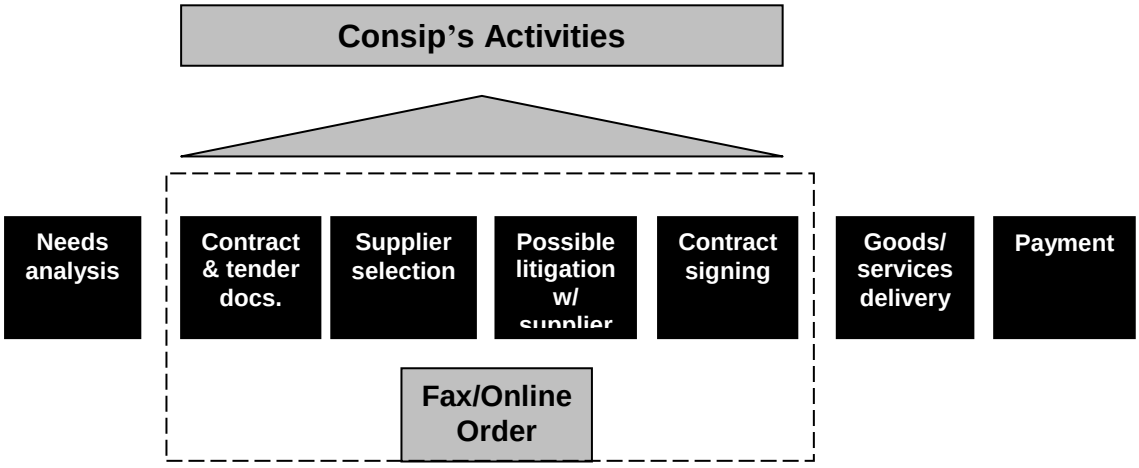
59. See Ferrara Marina and Panassidi Giuseppe, *Gli acquisti di beni e servizi nella legge finanziaria 2004*, available on lexitalia.it ; Pitocchi Fiorella, *Acquisti in economia di beni e servizi*, available on www. lexitalia.it; Scerbo Danilo, *L'acquisizione di beni e servizi secondo la disciplina prevista dall'art. 24 della legge finanziaria 2003*, available on www. lexitalia.it.

60. See Dini Federico and Spagnolo Giancarlo, *Meccanismi reputazionali e mercati elettronici: problematiche economiche e possibili soluzioni per il public procurement*, in Quaderni CONSIP, november 2004 and in English Dini Federico and Spagnolo Giancarlo, *Reputation Mechanisms and e-Markets: Economic Issues and Proposals for Public Procurement*, powerpoint presentation available on www.consip.it.

Deeper analysis has revealed that poor quality of supplies meant for PA and displacement of SMEs reflect market distortions that are only partially due to the introduction of the NFC system. Contract underperformance does not depend solely on the size of the firm. Local dealers value their customers, but are often unable to procure special and specific goods needed by government, while large firms often sell their leftover stocks to the PA, which they consider a less demanding customer.

A recent analysis of the procurement environment in some Eastern European countries reveals similar competition between local dealers and big corporations. An interviewee explains that: "In a recent tender (…) the requirements were set in such a way (quality of the equipment was not essential in evaluation of offers) as to tip the scales in favour of a local company, which in the end won the tender, but which was offering low-quality products at high prices"[61]. Specific to Italy, instead, is the fact that public agencies are usually late making payments, which in turn leads to supplier inefficiency. Additionally, the personnel in the procurement sector are often underqualified and not adequately considered within the internal organisation of the institution.

Figure 5. Consip's activities for NFCs: Procedural simplification



Source: Consip.

Online auctions: Transparency at different stages of the public procurement process

Presidential Decree N. 101 of 2002 marked another milestone in the path towards e-procurement; it introduced both online auctions and the electronic marketplace in Italy. The decree also provided *ex post* regulation for experimental online purchases that were running since 2001 in municipalities such as Siena.

Online auctions are feasible both for purchases below the EC threshold and for contracts exceeding EUR 160 000 (for central PAs) and EUR 250 000 (for other public agencies). Electronic tenders are also run to select suppliers for NFCs. The decree is mandatory for those central

61. See Grødenland Åse, *The use of contacts and Informal Networks in Public Procurement: Findings from in-depth interviews with public procurement officials, representatives of local and foreign companies in the Czech republic, Slovenia, Bulgaria and Romania*, Paper presented at OECD Global Forum on Governance, *Fighting Corruption and Promoting Integrity in Public Procurement*, Paris, 29-30 November 2004, p.9.

administrations making online purchases, while local entities may apply the provisions of the decree if they wish.

All public agencies running a tender are obliged to respect so-called "public evidence" procedures, which include the principles of transparency, respect of equality among bidders, adoption of favourable conditions to participate in bids, etc.[62] The same principles are repeated and listed in Presidential Decree N. 101 of 2002.

The auction consists of four phases – the decision of what to buy (internal to the PA), the qualification of the bidders, the online auction itself and the adjudication – which are all governed by public/administrative law. A fifth phase, which disciplines the execution of the contract, can be added – this phase is governed by the civil code.

The first phase, the decision to enter into negotiation (*i.e.* identifying what and when to buy), concerns only the public administration so future bidders have no legitimate expectations.

The second phase starts with the publication of a call to bid that contains the criteria required for admittance to the tender – volume and technical features of the goods (divided by type) and the identification of levels or classes for which suppliers can be registered according to their technical, financial and economic capabilities. These criteria are set as low and as wide-ranging as possible to avoid creating unnecessary entry barriers. The process is structured as follows: the call is published on the Official Italian and European Gazette, in newspapers and on the auctioning administration's Web site at least 60 days before the bid takes place. The tender alert subsequently appears on the Web site 30 days before the auction, while the invitation to bid to qualified suppliers is sent out only 10 days before the actual tender[63]. This procedure, albeit transparent, is quite expensive for public administrations and can discourage smaller entities from participating.

Web publishing reinforces transparency by offering real-time notification of new business opportunities. However, the State Council has recently decided that bidders can contest illegitimate provisions in a call only after the adjudication of the contract – that is, when the suppliers' legitimate interest (to be selected) becomes concrete. Sole exceptions to this process are provided for by the clauses of the call directly addressing participation in the bid, which can be appealed immediately[64].

Suppliers need qualify only once to be invited to all relevant tenders occurring in the following 24 months, concentrating the pre-qualification procedure with substantial cost reduction. Those suppliers who have not responded to the first qualification call can still be admitted to the bid if they apply after the tender alert. In this case, however, they may qualify only to take part in that specific offer and would need to re-qualify for a different tender. Selected enterprises that intend to participate in the tender are sent a password and ID and asked to pay a deposit.

The registration procedure can take place either online or offline. In this context, clearly stated bid specification and selection criteria are extremely important. Reducing human intervention in defining the terms of the tender is a major issue in the analysis of procurement in Eastern European

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62. See Gatti Mauro, *E-procurement. Il D.P.R. 101/2002 e gli acquisti in rete della PA*, Edizioni Simone, 2002, page 27.

63. For further information on the publication procedure followed by CONSIP see the recent directive on "the Timing and Ways to diffuse information to stakeholders", published on 3rd March 2005.

64. See Flore Raffaella, *Responsabilità precontrattuale della PA nei contratti ad evidenza pubblica*, in *Amministrazione in Cammino*, available online on www.luiss.it.

countries[65]. The University of Bologna points to reduced discretion as one of the major benefits of e-procurement.

Finally, in the run-up to the event, both procurement officers and suppliers must be adequately trained, in order to ensure that the auction runs smoothly and that the bidding tactics are properly monitored, and that collusion is avoided. A possibility is to rotate public officials who normally participate in the Adjudicating Commission or are called upon to run tenders. An example of efficient training can be found at the University of Bologna, which trains officials and enterprises before running an online auction; however, the university neither has policies to solve conflicts of interest nor rotates the officials responsible for the procurement process (see interview in the Annex).

The "real" auction (third phase) is run through an electronic platform where suppliers and buyers meet to negotiate goods and services. The price obtained through the auction is optimal, if the starting price is established in a fair manner and collusions among bidders are avoided. In order to do so, the auctioneer first analyses the PA's needs and then verifies if there are enough competitors on the market for the specific negotiated commodities. To this end, Consip co-operates with the national antitrust authorities: AGCM, the Guaranteeing Authority for the Competition and the Market; and AGCOM, the Communication Regulatory Authority.

It is important to draw up clear policies for conflicts of interest before the actual auction takes place to deal with those situations where "(…) the public official has private-capacity interests which could improperly influence the performance of their official duties and responsibilities"[66]. The code of ethics adopted by Consip[67] is applicable to Consip's personnel, to anyone who co-operates with the company – including Commission members – and to Consip's suppliers. The code forbids activities and behaviour which may be in conflict or in competition with Consip, and decisions that involve a monetary interest or any other benefit to the (interested) person or to his/her spouse/partner, relatives and friends or of organisations of which the person is an administrator or manager and that are in conflict with Consip or with the PAs for which Consip operates.

Consip clarifies that conflicts of interest may arise *inter alia* when:

- It is possible to obtain a personal advantage of any nature through access and improper use of information.
- Someone works for Consip's suppliers.
- Someone divulges, even at informal meetings, secret information on Consip's activities.
- Someone exploits his/her position to obtain a personal advantage which conflicts with Consip's interests.

In all of these cases Consip's employees, suppliers and anyone to whom the code is addressed should abstain from taking any decision or initiative which may have an impact on Consip. Communication of a potential conflict to one's superior is required if someone detains bonds of a

65. See Grødenland Åse, *op.cit*, p.8.

66. OECD, Guidelines on Managing Conflict of Interest in the Public Service.

67. CONSIP, in recognition of the fact that e-procurement in the public sector is a delicate area due to possible commission of offences against the Public Administration, has introduced a self-regulatory organisational ethics code in response to the legislative Decree 231 of 2001 (adopted by Italy to implement the OECD Convention against corruption) and has diffused the culture of social responsibility within the firm through various *ad hoc* seminars.

company involved in a Consip auction. The code also nominates an internal monitoring body (Organo di Vigilanza), which depends on the board of directors and verifies the effective application of the code. The Organo di Vigilanza ensures that the code is up to date, facilitates its dissemination, and investigates those situations where crimes such as corruption, embezzlement, fraud, abuse of power by public officials or "concussione[68]" are committed.

None of the administrations interviewed had policies to solve conflicts of interest.

At this point, it is time for the online auction. The negotiated goods are usually special commodities that are not frequently purchased and that can be evaluated mainly on objective terms. The offers are automatically classified by the electronic platform, which also highlights those that are excessively low in comparison to the others. (The auctioneer, in this case, asks for further details and may disqualify the bidder.) The entire process can be followed online even by interest groups.

The subjects involved in the online auction are the Administrations, the Suppliers (defined by the decree as "qualified users") and the System Manager (SM). The SM is a new professional official (an IT expert) in either the private or the public sector whose task is to guarantee the correct technical functioning of the negotiating tools and whose activity is crucial to the online auction. Responsibilities of the SM can entail:

- Criminal responsibility if the necessary measures to guarantee data security are not adopted.
- Civil liability for damage caused in the management of personal data, as gathering/storing of economic offers amounts to treatment of personal data[69]. If these data are lost or the secrecy of the offers is violated (*e.g.* through a virus or insufficient protection) System Managers can be liable for damages, unless they prove that they had in place all the necessary measures to avoid the damage. The activity of the System Manager (data handling) is considered "dangerous" by law, and thus requires special attention[70].

The minimum measures foreseen by the law[71] are the use of a password and its autonomous substitution by the person entitled to handle personal data, clear and written identification of the administrator entitled to manage data, assignment to this person of a code, and protection of the system from intrusions like viruses. Bologna University officers believe that data security is one of the major issues for guaranteeing fair online auctions and that new feasible solutions still need to be found (see interview in the Annex).

The auction run in a single or multiple rounds allows adjudication (fourth phase) at either the lowest possible price (reverse auction) or at the most economically advantageous solution (weighing

68. The crime of "concussione" is set out in Article 317 of the Italian Penal Code, which describes it as the case in which a public official takes advantage of his/her functions or power to oblige or induce another to unduly give or promise money or other assets to him/herself or a third party. In this situation criminalisation is not extended to the payment. The OECD Working Group on Bribery met to examine the compatibility of the Italian legislation against corruption with the OECD 1997 Convention against bribery; when faced with this provision it voiced its concern that the concept of concussione "may weaken the effective application of the Convention". See OECD: "Italy: Review of Implementation of the Convention and 1997 Recommendation". www.oecd.org/pdf/m00007205.pdf.

69. In Italy data belonging both to physical and to juridical persons can be protected.

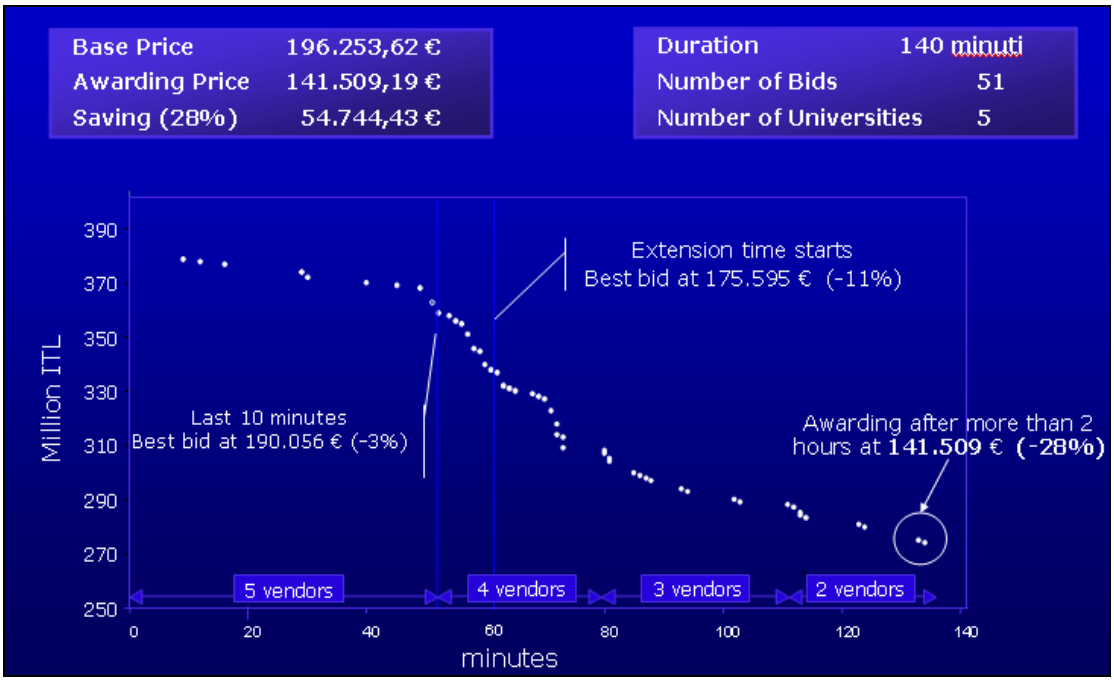
70. Article 7 (1) and Article 3 refer to Article 36 and Article 15 of the new code on data protection (former Article 18 of the law 675/1996). The latter, finally, refers to Article 2050 of the civil code, *i.e.* responsibility for dangerous activities.

71. L. 675/1996 and Presidential Decree N. 318 of 1999.

price, technical characteristics and service level). Offers are clearly shown, although the source is hidden; at the end of the process, the winning supplier is notified via an automatic e-mail message. Finally, the offers are digitally signed. The selection of the supplier is simplified due to the reduced time and costs of the bid. Moreover, the cost for suppliers to participate to the bids is abated thanks to the informatisation of the procedure and the clarity and equity ensured.

In this phase bidders have a legitimate interest to ask the PA for damages in case of unethical behaviour by the administration. Unsuccessful bidders are not debriefed, but can make their own evaluations by following the auction directly online. The University of Bologna and the Province of Mantua follow this procedure.

Figure 6. Online auction for beaming projectors



Source: Consip.

The e-marketplace

Presidential Decree N. 101 of 2002 allows administrations to purchase from the e-marketplace, a new business channel for businesses. It is complementary to NFCs, a virtual area where PAs' demands meet with suppliers' offers. Goods best suited for the e-marketplace are those bought regularly in small quantities and available only for orders below the EU threshold (since the e-marketplace is a selective procedure).

Procedure

The procedure starts with a qualification call to select suppliers and goods to be shown online. Suppliers download the call and the annexed documents, upload their catalogue in an Excel file, fill in an *ad hoc* qualification form and then sign it digitally. A Qualification Commission set up by Consip evaluates the form and the catalogue, obtains any further specifications, and admits or denies registration to the supplier.

Public agencies are also required to fill in an online form and obtain a user ID automatically generated through the system. A password and a PIN are chosen by the public agency, which downloads the completed form and signs it digitally.

Once qualified, vendors and registered public agencies can "meet" virtually to negotiate. Administrations, in fact, can either order commodities directly via the e-catalogue or ask for a price quotation. In this case, the system automatically evaluates the offers using the criteria proposed by the system itself and chosen by the administration. The System Manager regularly updates the catalogues.

Benefits of e-marketplaces

The description of e-marketplaces shows that the system seems well suited to favour an increase in transparency. Although some of the following characteristics are shared by e-auctions and online processes in general, Consip's marketplace:

- Allows immediate comparisons of different offers and qualities of suppliers.
- Favours interactions with numerous selected suppliers.
- Increases competition by allowing local dealers to participate, levelling the playing field for big and small enterprises alike (EUR 20 000 turnover is enough to be admitted to the e-market). SMEs can restrict the selling of their products even to the territory of a single Province, eliminating the need for big investments in terms of transport and delivery.
- Supports and facilitates the evaluation process (to note the difference with online auctions, where offers are simply classified and not evaluated).
- Reduces the phases in which human intervention is necessary. The search for suppliers and their qualifications – delicate areas for bribery – is left to a centralised procedure. In this way, valuable resources at the agency level are freed and buyers can concentrate on developing managerial competencies (deeper analysis of the agency's needs, monitoring of the markets, support to other offices, purchase innovation, etc.) rather than focusing on administrative procedures (formalities).
- Reduces time-consuming and, at times confusing, paper procedures (*i.e.* eliminates mistakes and reduces the exclusive power of the administration to detain information which is put online, rebalancing the information asymmetry typical of the procurement "game". (This characteristic is in common with e-auctions.)
- Offers the opportunity to follow transactions (transactional transparency) and keep record of purchases and different bargaining phases. The latter are qualified as archival transparency and are important not only for enhancing efficiency but also for allowing future inspections and independent reviewers to verify that the procurement process is not affected by external factors, such as favoured buying or bribery[72]. (This is also the case with online auctions.)
- Allows the internal monitoring of PAs' expenditures (as do online auctions).

Initiatives at the local level

Finally, Article 5 of Presidential Decree N. 101 of 2002 allows local entities to converge and create local e-marketplaces aimed at: favouring innovation and process re-engineering at the local level; aggregating demand in order to reduce costs and increase entities' bargaining power; obtaining

72. See Eurochambres, *Contribution Paper 2004, contribution to the EC consultation on e-procurement,* November 2004, p.3.

better-quality products; and rationalising expenditures. *Ad hoc* e-procurement systems were created in some of the most advanced municipalities and regions, as spillovers of Consip's experience. In a few cases, independent portals for e-shopping were set up in addition to online auctions, which shows how Consip's expertise and knowledge has been utilised. Now the question is how to co-ordinate the different initiatives at the local level, where there are at least 17 e-procurement systems[73].

Box 4. The Province of Mantua: A case of excellence

The Province of Mantua in the North of Italy is among the most advanced administrations in the use of e-procurement tools. The province is an aggregating and co-ordinating entity of a pilot project, "Online purchases", which intends to run electronic auctions (both below and above the European threshold) for the procurement of goods and services. Where feasible, it will work for the province itself and 22 of the 70 municipalities included in the Mantua territory, along with eight centres for the elderly. The aggregation of entities is specifically covered by Article 59 of the Budget Law for the year 2001 with the aim of preparing common purchasing strategies, providing standardisation of orders, and adhering to regional frame contracts.

The model chosen by the Province of Mantua resembles CONSIP's – the selection of an external partner to implement the project (Pleiade ltd.), the rules governing the tender which take into account Decree 101 of 2002, the creation of an online register for qualified suppliers (which now counts over 900 enterprises), use of NFC prices as a benchmark, and creation of an open source electronic platform and a dedicated Web site (www.provincia.mantova.it/acquistionline). In 2004 Mantua ran more than 50 auctions online. Main advantages of the use of e-procurement tools are:

- Substantial savings: EUR 525 000 on a total tender value of EUR 1 590 000, so 33% (in 2004 alone).
- Creation of a network among public agencies operating in the territory.
- Simplification of procedures for both agencies and suppliers: *e.g.* reduction of formalities to participate in the auction due to a single registration for suppliers, which lasts for 24 months; elimination of paper procedures linked to reception of offers.
- Increased transparency through the possibility to follow the auction online.
- Enhanced competition among bidders.

Box 5. E-Procurement at the University of Bologna

In 2007 the University adhered to the Rationalisation Programme and started an intense collaboration with CONSIP, which turned out to be quite useful in the running of three online auctions (two with other Italian universities). One of the auctions, in particular, was run following Decree 101 for goods above the EU threshold (240 PCs). The University acted as auctioneer.

Special contributions of the University to the e-procurement rollouts are:

- Co-operation with CONSIP in drafting technical specifications of NFCs.
- Analysis of common expenditures – on goods and services whose features are the same for most public agencies (stationery, telephone services, cars, and meal coupons) – and of specific expenditure – on goods and services that are sector specific. The analysis was used for NFCs and for the PA marketplace.
- Revision of internal University norms related to purchasing to guarantee uniformity of application.
- Evaluation of the impact of the new procurement system on the University buying department.

Example: Online auction for chemical goods run on 14 February 2002. Bologna acted as aggregating entity of three universities (Padova, Bari and Bologna itself). The auction starting price was EUR 70 000. Achieved savings: 31%.

73. See www.buoniesempi.it.

Figure 7 presents a summary of the paper's main points regarding actions that administrations should undertake and the mistakes they should avoid to enhance the transparency of online auctions.

Figure 7. "Do's" and "Don'ts" to increase transparency of online auctions

	Preparation	Event	Follow Up
DOS	-Train procurement managers, suppliers - Decide # of suppliers to ensure competition - Announce tenders in advance using online and traditional tools - Agree and publicise bid specifications: describe goods/ services, event format and timing, evaluation criteria -Set clear communications rules between buyers and sellers -Establish conflict of interest policies	-Make online auctions accessible to public (NGOs, interest groups) -Provide reliable technology for auctions -Show offers but mask offerors -Respect time limits for offer evaluation -Montior bidding tactics directly online	-Provide feedback to all suppliers (win or lose) -Monitor contract performance -Identify and list or suspend poor-performing or unethical contractors -Provide prompt means to seek redress against bid awards -Provide for e-payment -Pay on time -Keep records of auctions (to enable later inspections) -Rotate officials responible for procurement -Incorporate knowledge management
DONTS	-Underinform participants -Plan the event at the « wrong » time	-Act unethically (reveal confidential data) -Search only for the lowest price	-Underestimate the need to follow up -Ignore lessons learned

Normative and administrative simplification and the challenges of e-procurement

Luca Varrone, Department of Public Administration

This section examines the legal aspects of modifying the regulatory framework for the development of e-procurement models in Italy. The aim is to understand how to best introduce instruments in to the legal system without weighing it down, while endowing the instruments with the legal authority necessary to safeguard the rights of the parties concerned (citizens, companies, public administrations). New technologies open new opportunities and create new challenges for the legal system.

Administrative simplification is an elastic concept, which has not been clearly defined. Its aim is to make administrative action as efficient as possible and bring it close to citizens. Components can include: liberalisation, creation of more space for the private sector in public activities; deregulation, reduction of rules that hinder the action of the PA; outsourcing, the transition from a primary source to a secondary source; rationalisation; and innovation.

It is important to distinguish between normative and administrative simplification – the former involves simplifying the rules of administrative action to achieve what is desired, and the latter refers to the rules that govern administrative procedures.

The first example of normative simplification in Italy was the transition from a primary source to a more flexible secondary source. In Italy, the principle of legality is related to Parliament – a law can be modified or rescinded only by another law. This has created problems confusion in the governance environment, as it can be unclear which statute is current and should be applied. The government now gathers texts and codes from primary and secondary sources into a single text, in an ordered and organic manner. This simplification mechanism has helped to clarify legal doctrine in Italy.

In Europe, simplification is often associated with reducing bureaucracy in order to encourage development, reduce costs, and increase productivity – particularly in dealings with business. In Great Britain, for example, a simplification Task Force is charged with simplifying relations between enterprises and PAs aims to create savings of 4 to 5% of GDP. Italy is also making efforts in this direction, for example the Enterprise One Stop Shops.

The economic perspective is important, but other views should also be considered. This includes the social approach, aimed at simplifying the everyday life of citizens *vis-à-vis* both PAs and enterprises. In Italy, citizens face great administrative burden, much emanating from the Department of Public Administration.

An important step to reduce burden was the approval of the law on administrative procedure, which moved government towards the concept of administrative function and public service to citizens, placing public service users on a level playing field with the PA. This law set transparency, openness and timeliness as general principles of administrative action. It made instruments available that made it easier for citizens to get information and assistance from the administration[74]. Procedures were streamlined, recent plans will continue in this direction. The principle of horizontal subsidiarity has been affirmed (as in other European countries). An example is the case of expropriation: the PA

74. See the institution of silent assent or the discussed possibility that of citizen to going directly to the judge to oblige the administration to act upon expiry of a certain term, without having to bring a default action

must first attempt to seek agreement with the owner; if agreement is not reached, expropriation may take place, with fair compensation.

For the first time the law on administrative procedure calls for obligatory compliance with European Community law. Although this was already sanctioned by the Constitutional and the principle was respected as a matter of course, this measure is a clear sign that national and European systems are becoming one system rather than two separate systems that communicate with each other.

Many procedures have been subject to simplification measures, *e.g.* renewable energy sources, electricity, the enterprise registry (business startup procedures), consumers' rights, construction, bankruptcy law. There have also been measures on the use of new technology to allow citizens to participate in administrative process, and on the use of new technology for inter-institutional communication about online government services.

The general picture is positive, but formal difficulties arise because the reforms must take place in a context of legality, and substantive difficulties emerge because simplification means loss for those who act as intermediaries or consultants between citizens and the PA. Another problem is convincing administrations themselves to accept the new instruments; such internal cultural, organisational and technological changes are costly and time consuming.

Normative and administrative simplification are inseparable processes. Normative simplification can and must be put into practice through innovative instruments, such as analysis of regulatory impact. Such studies can show when and why to apply new rules, whether new regulations are necessary, and whether outsourcing is necessary for a public regulatory intervention (this concept is not well known in Italy). Impact analysis involves users in the preparation phase of new regulations, allowing regulatory agencies the opportunity to hear their opinions and identify potential obstacles on the path to regulation. It therefore puts decision makers in the best possible position from which to act.

Administrative simplification is important in supporting a country's competitiveness, as it directly concerns economic development and the elimination of dysfunctional systems.

Topics for further discussion

Simplification, re-engineering of processes and indicators

Legislative simplification is necessary and in line with other innovation processes. Legislative simplification must proceed in parallel and at the same pace as simplification of administrative procedures, avoiding counterproductive effects. The United States has tackled this issue by elaborating "secondary guidelines" as useful practical suggestions that are simple and general, so that if the need arises, modifying them will not be too complicated.

As for the re-engineering of procedures, non-computerised purchasing processes often have to be reconstructed and rationalised before electronic processes can be changed. Mapping competences and correctly organising people with the necessary professional profiles can greatly improve work processes. This extends the re-engineering framework beyond the mere modification of legislation and administration procedures.

The re-engineering process needs time for correct implementation and requires prior awareness-raising actions. As previously noted, it serves to rationalise the processes of work, and therefore obtain benefits in terms of economic cost, time, transparency and accountability.

One early method for singling out and re-engineering the most important sectoral processes involves identifying the 20% of processes that contribute 80% of total work. In the case of Italy, this was measured in terms of public purchases. In the United States in the 1990s, the term “best in class” was coined to identify the services that brought the greatest benefits to the sector, based on criteria such as cost sustained for expenditure of one dollar.

Clearly the choice of what should be improved first depends on the most important goals. For example, in Italy the priority objective is containing public spending, so those services that can best achieve this objective are chosen.

Italy, like many countries, generally undertakes re-engineering first offline and then online, to avoid any possible overlap of phases. Italy began by modifying back-office work processes, and then moved on to the transformation of the front office with the new legislation,. The rationalisation of processes also creates a need for greater co-ordination among involved parties (within each organisation, among administrations, and with external experts). In this sense the American experience could be a useful model – putting initial re-engineering outputs online and making new procedures widely accessible, allowing online access and use in real time, and soliciting proposals for further improvement and problem resolution from all actors.

It is difficult to identify a set of indicators to measure the benefits of rationalisation or purchase processes and the introduction of e-procurement. However, it is important to have reliable measurements as a guide for decision makers.

It would be useful if different countries could use a set of common indicators (modified according to their own specific needs) and a time series to enable valid comparative analysis and benchmarking. Although standardised indicators could help decision makers, the definition of such data is still in its early stages, even in the most advanced countries. Articles published by the World Bank point out that no country is yet capable of correctly measuring the savings gained; even the OECD has not yet produced guidelines on the matter.

An indicator often proposed for online tenders is the percentage reduction in unit cost, applied to estimated annual spending on goods and services managed through the programme. Revision bodies perform controls, but it is difficult to determine exactly how much each public administration spends and, consequently, how much it is saves. Additionally, it is not easy to measure the economic cost of the work that goes into purchasing procedures.

Evaluations of yield rates for investments in e-government and e-procurement are sporadic rather than systematic. Nevertheless, it is important to move towards a common outlook – perhaps adopting methods used in this seminar – to create indications that can steer spending decisions towards the sectors that offer greater net benefits.

This lack of indicators can lead governments to evaluate areas of little significance or that do not show the whole picture. For example, an e-government indicator used in many international bodies is the number of services available online; the more services online, the better. This measurement can lead underestimating the relevance and effective usefulness of these services, and encourage allocating public resources in non-optimal ways and misdirecting investment policies.

5. TECHNOLOGICAL CHALLENGES IN THE EFFECTIVE IMPLEMENTATION OF E-PROCUREMENT SYSTEMS

The Italian "Eg4M" project: Technological challenges in implementing e-procurement systems.

Carlo Batini, University of Milan - Bicocca

This section provides in-depth analysis of the "Eg4M" project, and particularly the technological aspects connected to the implementation of e-procurement systems.

Technology is always a means to an end, rather than an end in itself. Therefore, technological aspects of each e-procurement or e-government project must be analysed alongside organisational and legal issues; they must be adapted to the organisational modalities of national PAs, as well as to the social, economic, and territorial characteristics of each country. In choosing the most efficient technologies from all these points of view, PAs must follow a systems evolution path.

Traditional information systems are monolithic and rigid; they do not offer different options, nor the chance to tailor technological choices to the needs of specific public administrations or users.

Co-operative systems, created for different administrations to supply shared services, aim to standardise heterogeneous data from individual administrations, taking into account preferences and characteristics of their users. User-oriented approaches are particularly feasible for systems which offer users access to the front office via various channels. This evolution of information systems over the past 20 years must be kept in mind when choosing technological infrastructure.

In monolithic models, citizens and firms must interact with and provide data to each individual PA, creating an asymmetric balance of information. Administrations in this position must ask how they can provide high-value-added information and services to users while meeting a reduced demand for data.

Both back-office and front-office analyses are required to determine how to create information flows among the various administrations, using existing data and streamlining services. This requires a shared and co-operative back office system, in which data can be exchanged in a standard format, and in which PAs can use search engines to access information stored in the databases.

With regard to the front office, it is necessary to create a shared space in which all details of individual administrations' different procedures are "hidden" by the system. In this case, PAs deal with the citizens through a shared "smart" portal.

For back offices, the key word is "co-operation"; for front offices it is "efficiency". In order to meet these goals, information technology should focus on Service Oriented Computing, which is very useful for front-office work, and information quality, which is very useful in order to harmonize and raise the quality level of shared information, and to encourage the exchange of information between users and the PA.

Service Oriented Computing, and its use in e-procurement processes and other new services, shows that phases of new procedures can be completed using different channels, allowing users to interact with a single system using different tools. Unlike previous approaches that generally required *ad hoc* information systems for the development of new services, Service Oriented Computing does not require any new software, as new services are borne out of the integration of existing services. Furthermore, Service Oriented Computing is completely client oriented; its services can be adapted to the needs of the client, especially when they do not link front and back offices. For example, a blind user can be provided with tools to interact directly with the PA, while a blind employee of the PA can have the same technology installed on his or her PC.

Service quality – expressed in terms of usefulness, accessibility, and time – is very high when this approach is used, since qualitative aspects can be accurately described and measured. Services can be adapted to the local context. Finally, since services are Web-oriented, they can be used by many different operators.

The quality of information is very important in the management of administrative processes, and even more so for e-procurement. PAs need extensive data to provide services; as information can be considered its main resource, low-quality information leads to low-quality services, which in turn leads to significant economic losses for the private sector. The four most relevant factors for information quality are:

- Currency (updating to capture changes that occur over time).
- Accuracy.
- Completeness (full representation of existing phenomena and situations).
- Coherence (description of the same phenomenon in two different databases provides coherent information)[75].

Participating in several Italian and European projects, the University of Milan – Bicocca has acquired extensive expertise on the relationship between Service Oriented Computing and information quality. The institution has produced guidelines for e-government processes, which are now being adapted for e-procurement.

The impact of new e-procurement technologies

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E-Procurement requires PAs to use information technologies that are now quite widespread (networks, Web, databases) to purchase goods and services. There are four main models of procurement, along with many intermediate models. Countries that want to introduce e-procurement systems may find it useful to implement more than one model, showing that complexity is a fundamental factor in this type of application.

E-Procurement experiences have been rather complex in the private sector as well. Although the private sector was first to use e-procurement, early experiences – which did not concentrate on

75. An example involving e-procurement. If a PA needs to book a hotel, and finds the same hotel described in different ways on different Web sites, it will have a difficult time trying to determine whether it meets its requirements.

innovative processes integrating technological aspects with other measures to achieve successful overall governance of the system – were often unsuccessful.

When a government decides to introduce e-procurement systems, it is changing both the way it purchases goods (with an eye towards savings) and its overall national market. By changing the way it makes offers and presents itself, it is changing the overall system; since the system is Internet-based, it also affects the behaviour of individuals and of learning organisations. By using certain low-cost, high-impact technologies PAs generate long-term outcomes that must be kept in mind. Some results that emerged from an early 2005 learning lab on e-procurement systems in EU countries and future members (Romania, Turkey, Bulgaria) are informative.

One of the results is that procurement can be understood as an ensemble of inter-dependent processes. The systems identified in the EU go from entirely traditional (paper-based); to systems that use office automation tools (Office, Word, Excel); to systems in which only a few phases of the process are automated; to online integrated e-procurement solutions, which include a wholly-automated, Internet-based version, and an intermediate version in which information transfer takes place via e-mail.

Ranking certain phases of e-procurement according to degree of automatisation – from 1 to 5 in increasing order of automatisation – shows that many European countries have low to medium-low degrees of automatisation for most phases of e-procurement. Completely automated solutions exist for some central phases of procurement, but on average the shift towards e-procurement is weak, despite the fact that the European Commission strongly encourages it.

The costs of e-procurement include the relative costs of software applications, along with a residual category that includes all other costs. A study conducted in the United States showed that the latter is five to 10 times higher than the former. This confirms the importance of using the best available technology, but also demonstrates that the highest costs – and the risks for failure associated with them – actually lie outside the technological realm.

Noting the high degree of failure for e-procurement projects in the United States, in 2002 Gartner Inc. prepared an e-procurement checklist including series of questions to help administrations interested in implementing such systems to consider all aspects of the issue. This approach can be very useful for countries transitioning towards the adoption of e-procurement models.

The United States (which provides a series of data that is rather significant, given the fact that some time has elapsed since the first innovations) experience shows that between six and 15 weeks are needed to install new technologies, while the overall launching of e-procurement systems requires between 18 months and two years. Therefore, the choice and purchase of new technology is relatively easy, once all relevant issues have been taken into consideration; reaping its full benefits is rather complicated and takes time.

The main criteria to evaluate technological choices include:

- *Technological architecture*. This architecture includes software to be used in e-procurement, integration of components, quality of interface, etc.
  - Purchased software should be compatible with previous investments made by the PA. The trade-off between being able to re-use what is already in place and new possibilities is an important issue. Users will be more willing to accept new technologies which are easily accessible.

- New processes often start in an experimental manner, as prototypes which are then extended to an entire organisation, or to the public administration of an entire country. As a result, operators will suddenly be faced with very high volumes of transactions made with new technologies. This issue should be addressed during the planning phase.

- *External integration requirements*. The way purchasing administrations deal with electronic catalogues or classification systems of private firms can cause problems. From a technological point of view, it requires careful studies of market perspectives. Because many suppliers are international, and technologically equipped to operate on an international scale, they are capable of influencing the choices of national governments.
- *Internal integration requirements*. E-Procurement simplifies purchasing, and shifts the decision-making process to so-called white-collar employees, who are endowed with tools that are new to them (digital signatures, purchases through Internet portals). This is quite delicate; if it is not managed properly new technologies may not be accepted, reducing the number of process phases in which these technologies are used. In certain countries and during certain phases, it may be useful to keep certain decisions outside of the automated process, in order to better manage potentially difficult situations (such as payments or budget allocations).
- *Information on products to be purchased*. Many believe that e-procurement is more suited to purchasing products than services, which are often more complex. Product purchasing raises two challenges: catalogue choice, and where to insert catalogues and who is responsible for their preparation. Each supplier has its own catalogue, as well as its own standards for classifying the goods offered. During the planning phase of the e-procurement system, the administration must choose whether to adopt one or more external catalogues, or whether to create a new catalogue. When creating new catalogues, they may solicit input from suppliers as to how they can facilitate the process. This can lead to different standards of compatibility between catalogues (for example, those who use Oracle will have different standards than those who use a different suite).
- *Payment systems.* The development of new modalities depends on each country's environment; a 2004 study showed that in the Middle East, e-commerce systems (of which e-procurement is a sub-system) that include online payment options remain poorly developed.
- *Costs.* These include start-up costs and management costs; the latter are generally much higher.
- *Technical evaluation criteria for the e-procurement system.* A survey conducted by the EU in 2003 showed that 13 of 19 evaluation criteria are very important. E-Procurement systems are subject to a high risk of failure unless all relevant concerns are taken into consideration. No matter what model is chosen (an outside firm in charge of e-procurement for all government agencies, or different e-procurement systems for each administration), the fact management different buyers and different suppliers can cause problems.
- *Security*. As with all online services, security is a fundamental issue.

E-Procurement in the United Arab Emirates

Rehab Lootah, Acting Director of E-Services, Dubai

The United Arab Emirates has acquired extensive experience in the management of e-procurement, using an international solution in which all phases of the negotiation take place online. The so-called "Dubai approach" is a mixture of various e-procurement models. All government units are required to use a shared internal electronic information-gathering system.

The normative framework is set out in the 2002 law on e-commerce. A federal law on e-procurement has been drafted but not yet approved. Since 2000, all government departments use an ERP (Enterprise Resource Planning) system and an integrated e-procurement system called "Dijari". Over 9 000 users have been trained in the system. The ERP system, which is linked to the accounting and invoicing system, can be used to make purchasing requests.

All users – both buyers and suppliers – must be registered. Suppliers' costs depend on the number of auctions and the use of requested services. Lengthy bureaucratic procedures are not required; users simply enter their ID, password, and registration number to access Dijari's electronic market. Government agency employees can use either ERP or the internal electronic system (they are compatible). Both ERP and Dijari are based on Oracle. Suppliers do not need to have their own electronic system to perform online transactions.

Since e-procurement was introduced in 2000, USD 2 billion worth of orders have been placed, including USD 1 billion worth of government purchases. There are over 3 600 registered suppliers, over 41 000 online offers, and over 100 000 available items in the catalogue.

The benefits of the system have been widely discussed. Remaining obstacles include the need to raise awareness and train staff, on both the buyers' and suppliers' sides. Training activities include online basic training for all government employees, who need a certificate in computer proficiency to access the system, and activities focusing on the system's technological applications.

Online purchases have been made in two important sectors of the public administration: the Armed Forces and the Ministry of Health, leading to average savings of 40% on equipment and 14% on hardware compared to traditional purchasing modalities.

Today, 70% of purchases take place online. Over 700 auctions took place in the first semester of 2005, and as many as 6 000 since the launching of the Dijari system. An *ad hoc* government agency with its own budget is responsible for the electronic market.

Topics for further discussion

This topic offers many opportunities for further discussion. It highlights issues that are very important to the OECD and to all the countries interested in the costs – financial and otherwise – of e-government and e-procurement processes.

It is not just a matter of changing working modalities, but of changing the way citizens perceive the administration, and the way administrations perceive themselves. The processes of change management and informed management can prevent indirect negative impacts that can lead to the failure of new systems, and cause even wider-ranging negative impacts.

The implementation of e-government and e-procurement implies financial and management costs that can be very high and lead to resistance and (often perfectly legitimate) refusals on the part of the administration, suppliers, or citizens. This can lead politicians to give up on such programmes.

It is therefore very important to think through the planning and implementation of administrative reform, with regard to training, and re-defining competences and structures in order to create a safety net around these projects. Technological revolutions require good relationships with the ministers in charge of reform processes, and with those in the administration in charge of staff training processes.

Further ideas for discussions that emerged during the debate

- Since the 1980s, Bahrain has been aware of the importance of gathering quality citizen information. It has thus created a centralised population registry and an automated fiscal code – a unique experience in the Arab world. Each citizen has a government record that includes all of his or her personal data, which have been gathered through relevant original sources in order to reduce the possibility of error. All available databases are linked and compatible; with a simple query one can obtain complete, correct, and up-to-date information directly from the relevant source. When a private firm registers, the data entered is automatically checked by the e-procurement system; all available data is checked with the Economy Department, and firms are accepted on the basis of this information only after its legitimacy has been established. Once a firm is accepted, it pays a registration fee and provides additional information to validate its license. For international firms, information is requested from the relevant departments in their country of origin; for international calls for tender, the participation of foreign firms is ensured though *ad hoc* international agreements. A similar, albeit more complex system exists in Italy; in the past there were two population registries at the municipal level, one for residency and a more detailed one for civil status. At the national level, municipal data was conveyed to the Interior Ministry's national registry, where it was cross-referenced with Ministry of Finance data.
- A typical OECD recommendation: the introduction or improvement of e-government and e-procurement models must take place in full respect of the principles of competition, and inclusion of the weakest subjects (citizens and firms). In particular, with regard to e-procurement, in order to avoid the risk of exclusion, it is necessary to make sure – in both the planning and implementation stages – that everyone has the opportunity to access the opportunities connected to the new market.
- Opening e-procurement markets to international investments would lead to increased competitiveness, but it also implies a series of short-, medium- and long-term impacts that must be carefully evaluated by national governments. In some cases, the signing of *Free Trade Agreements* (FTAs) has led to changes in national rules for e-procurement (example: United States-Bahrain agreements).

6. THE CREATION OF SKILLS, IDEAS, KNOWLEDGE AND COMPETENCES

E-Procurement in a Euro-Mediterranean comparative context

Giuseppe Pennella, Director, C.A.I.MED.

E-Procurement refers to the use of information and communication technology (ICT) by the public administration to manage its relationship with suppliers for the acquisition of supplies, services, and labour for the public sector. It is one of the many ways in which e-government is implemented.

In planning and implementing e-government systems, much attention is typically paid to optimising relations with the citizenry through the use of ICT to supply public services. Such initiatives are becoming increasingly widespread, and they lead to an ever more advanced degree of interactivity between public administrations and their citizens.

As with other types of e-government, e-procurement projects are differentiated mostly by the degree of ICT use. The simplest applications use ICT only in the publicity phase; tenders can be published online, or, even more simply, news about the publication of a call for tenders can be made available online. More complex ICT infrastructures are necessary to allow potential suppliers to accept offers online. Even more complex systems are needed for the electronic management of purchased supplies, which requires shared standards for electronic data exchange in the ordering, invoicing, accounting, and payment phases.

Within the galaxy of e-government applications, e-procurement is characterised by an inverse of the typical relationship – the administration is requesting the services of the private sector. The positive effects of using new technologies manifest themselves mostly through an *improved allocation of resources in the public sector*. The use of electronic means makes it possible to cut the transaction costs of public sector purchases through automation and centralisation of the fulfilment of administrative requirements. This allows re-allocation of the administration's human resources towards organisational units directly responsible for furnishing services to the citizenry.

Financial advantages for the public administration can also arise from lower unit costs for the goods and services required. Centralisation of orders makes it possible to purchase goods in bulk, and improved functioning of competition and market mechanisms lead to this reduction. Electronic management of procurement process – if implemented correctly from a technical point of view and supported by an adequate normative regime – can make such processes more transparent, widen the base of potential suppliers (both in geographic terms and in terms of the size of potentially interested firms), and improve the flow of information; these are essential conditions for competition.

It is evident that public administrations' main motives in implementing e-procurement programmes are often financial in nature. Citizens enjoy these benefits indirectly, since they lead to more efficient use of public funds. E-Procurement programmes also have other objectives, which are more difficult to quantify but probably more important.

Process automation is an excellent tool to promote *transparency* in public tenders. For example, an e-auction system can register bids automatically, and does not allow consultation before the closing

of bids. Minimising human intervention also makes it easier to identify the individuals managing the process, making them more responsible. These characteristics make e-procurement a particularly valid solution in places in which corruption is widespread and negatively impacts the functioning of markets within which public administrations operate.

The introduction of new management modalities is also an opportunity to re-organise workflows, for both the public administration and private economic operators. ICT can be speed and optimised procedures, pursuing the *simplification* goals usually associated with e-government programmes.

The implementation of e-procurement systems can also be seen as a *development* policy to promote electronic commerce, and generally encourage the computerisation of the private sector. Public administrations that automate their supply systems encourage the private sector to invest in ICT in order to participate in public tenders, introducing and disseminating communications standards and protocols for the exchange of documents that can then be used for transactions between private firms; in other words, creating an electronic market in which e-procurement's efficiency and transparency benefits are transferred to the private sector.

E-Procurement in Europe

The European Union adopted common rules for public contracts with Directives 1993/36 (supplies), 1993/37 (public works), 1992/50 (services), 1993/38 (water, energy, transportation, and telecommunications). These Directives did not include specific norms for the use of ICT in public procurement processes.

In order to harmonize, simplify, and modernise these processes the EU adopted two new Directives: Directive 2004/18, which consolidates and updates the norms on tenders for public works, supplies, and services; and Directive 2004/17, which updates these norms for the water, energy, transportation, and postal services sectors. The deadline for adoption of these two Directives by member states is 31 January 2006.

The use of common standards in the regulation of public contracts is seen as a further step to perfect the European market, which suffers from barriers on private transactions and a lack of homogeneity in the norms adopted by individual countries[76].

Notes on the contents of the new Directives

For goods, services, and public works, Community norms are applicable to purchases that exceed a given amount, which is updated by the Commission every two years. Certain types of contracts are excluded –particularly those that have to do with a country's fundamental interests. In order to guarantee the transparency of procedures, several types of publicity are required; some are facultative (pre-information announcement and announcement of the publication of tenders) while others are compulsive (public calls for tenders, announcement of contracts that have been awarded and results of calls for tenders). The templates for these documents are prepared by the Commission.

Participation of economic operators in public contracts is subject to verification of their eligibility, based on criteria related to economic and financial capabilities, as well as professional and

76. According to European Union international agreements, certain privileges of paritary treatment are extended to: countries participating in the European Economic Area (Iceland, Norway,, Liechtenstein); Bulgaria and Romania (European Agreement); countries that signed the WTO's Government Procurement Agreement (including Canada, Hong Kong, Israel, Japan, South Korea, U.S.A.).

technical knowledge and skills; there are also criteria to exclude economic operators that are a risk in terms of fraud and corruption (ongoing competition procedures, convictions for crimes that have to do with professional morality, instances of fiscal evasion).

Criteria for awarding tenders can be based exclusively on the lowest price, or they can be based on the most economically advantageous offer. In this case, criteria other than price must be specified, and their weighed coefficients must be explained.

There are different ways to award public contracts: open procedure, in which any interested economic operator can make a bid; or restricted procedure, in which any economic operator can ask to participate, but only those invited by the administration can make bids; negotiated procedure, in which the administration consults with the economic operators it has chosen and negotiates the conditions for bidding with one or more of them. Negotiated procedures are applicable only in limited, exceptional circumstances. Particularly complex contracts call for the competitive dialogue procedure, in which the public administration publishes the call for tenders and selects a minimum of three candidates to participate in a dialogue in which the technical, economic, and judicial aspects of the contract defined. At the end of the consultation, the candidates make their bids and the administration chooses one on the basis of the most economically advantageous offer.

E-Procurement discipline

The two Directives call for detailed norms on the use of electronic communication in public tender processes, which is equal to traditional communication means. In keeping with general principles of equal treatment, transparency, and lack of discrimination, the electronic transmission of tender procedure documents must offer certain guarantees[77]. Electronic communication tools must be easily available to the public and compatible with ICT products generally in use. Furthermore, necessary specifications for applying to participate and bid must be made known to the interested subjects; this includes specifics for data coding.

Technology used in communication systems must guarantee the integrity and confidentiality of the data being transmitted. In particular, it must be possible to precisely determine the date and hour in which bids and requests for participation were made; authorised persons must be present to allow access to data at the agreed upon time. Violations of these access procedures must be clearly identifiable.

New types of negotiation based entirely on ICT have been introduced: the e-auction[78] and the dynamic purchasing system or DPS[79].

E-Procurement implementation in Europe

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77. Directive 2004/18, Art. 42 and Appendix X.

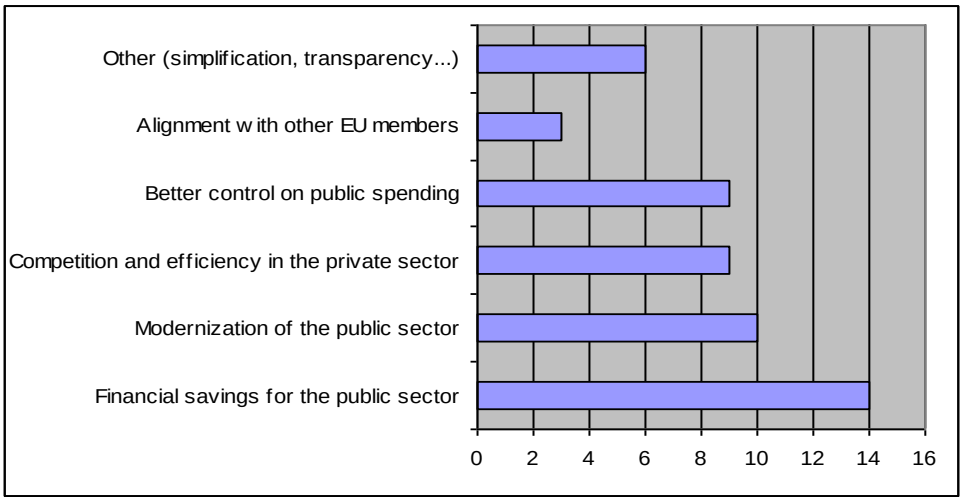
78. "An 'electronic auction' is a repetitive process involving an electronic device for the presentation of new prices, revised downwards, and/or new values concerning certain elements of tenders , which occurs after an initial full evaluations of the tenders, enabling them to be ranked using automatic evaluation methods" (Directive 2004/18, Art. 1).

79. "A 'dynamic purchasing system' is a completely electronic process for making commonly used purchases, the characteristics of which, as generally available on the market, meet the requirements of the contracting authority, which is limited in duration and open throughout its validity to any economic operator which satisfies the selection criteria and has submitted an indicative tender that complies with the specification" (Directive 2004/18, Art. 1).

Although the relevance of e-procurement has been widely acknowledged, its implementation in EU member countries has been relatively limited. Often, the first e-government applications implemented are those providing services to the citizenry; this is due to the fact that improving services is the primary goal of the public administration. Because the benefits of these programmes are immediately felt by the citizenry, the political incentive for their implementation is quite strong.

That being said, all EU countries have tackled e-procurement, at least at the project phase. A survey undertaken on behalf of the European Union[80] identified the main motivations and goals of e-procurement projects in EU countries.

Figure 8. Main motivations for planning an e-procurement system



It should be noted that the simplification of administrative tasks and transparency in public contracting are at the bottom of the list. Public administrations' main motivation for implementing e-procurement remains the opportunity to achieve financial savings.

An e-procurement system can be considered fully implemented when each step of the process is handled through ICT[81]. These steps include:

- Notification about tenders.
- Publication of tenders.
- Submission of tenders.
- Evaluation of tenders.
- Ordering.
- Invoicing.

80. Impact Assessment: Action Plan on electronic Public Procurement, Ramboll Management, December 2004.

81. Directives 2004/17 and 2004/18 explicitly regulate only the steps related to publicising requests for supplies and the bid acceptation process. Issues related to ordering, invoicing, and the digital signature of contracts are disciplined by other directives, such as 2000/31 on electronic commerce and 1999/93 on digital signatures.

Generally, automatisation occurs in steps, starting with publication. More sophisticated applications call for electronic invoicing and payment. European Union sources[82] provide an overview of e-procurement implementation in each country.

Table 3. Implementation of each e-procurement step in EU countries

	Project	Automated step (including pilot projects and partially automated steps)					
	E-Procurement project exists	***Notification about tenders***	***Publication of tenders***	***Submission of tenders***	***Evaluation of tenders***	***Ordering***	***Invoicing***
Austria	yes	yes	yes	yes	-	-	-
Belgium	yes	yes	yes	-	-	-	-
Cyprus	yes	-	-	-	-	-	-
Czech Republic	yes	yes	yes	-	-	yes	-
Denmark	yes	yes	yes	yes	yes	yes	yes
Estonia	yes	yes	-	-	-	-	-
Finland	yes	yes	yes	yes	yes	-	-
France	yes	yes	yes	yes	-	yes	
Germany	yes	yes	yes	yes	yes	-	-
Greece	yes	-	-	-	-	-	-
Hungary	yes	yes	-	-	-	-	-
Ireland	yes	yes	yes	yes	-	-	-
Italy	yes	yes	yes	yes	-	yes	-
Latvia	yes	yes	yes	-	-	-	-
Lithuania	yes	-	-	-	-	-	-
Luxembourg	yes	-	-	-	-	-	-
Malta	yes	yes	yes	yes	-	-	-
Netherlands	yes	yes	-	-	-	-	-
Poland	yes	yes	yes	-	-	-	-
Portugal	yes	yes	yes	-	-	-	-
Slovakia	yes	-	-	-	-	-	-
Slovenia	yes	-	-	-	-	-	-
Spain	yes	yes	yes	yes	-	-	-
Sweden	yes	yes	yes	yes	-	-	-
United Kingdom	yes	yes	yes	yes	yes	yes	-

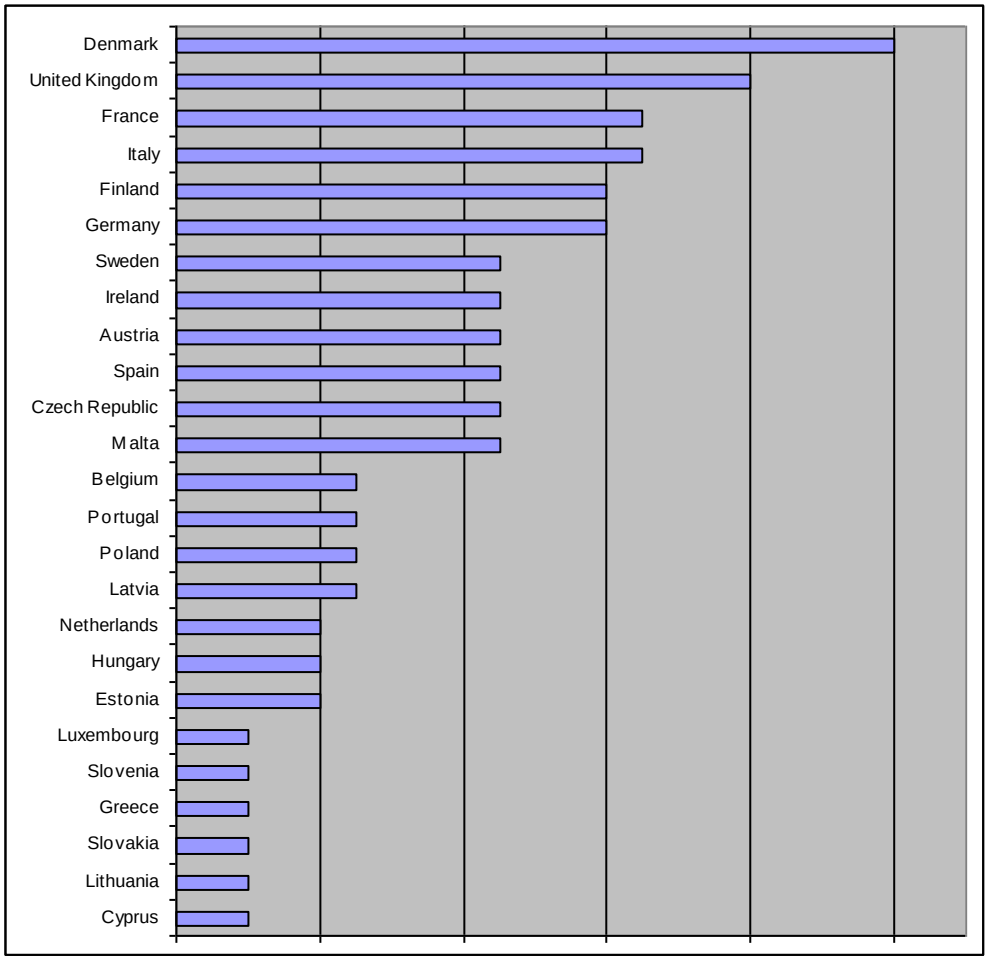
Source: Drawn from data provided by IDABC (Interoperable Delivery of European eGovernment Services to public administrations, Businesses and Citizens) and Impact Assessment: Action Plan on electronic Public Procurement, Ramboll Management.

Denmark and the United Kingdom have reached a high degree of sophistication in implementing e-procurement. In January 2005 Denmark became the first country to implement the general use of e-invoicing.

Some simple weighted criteria allow a quantitative synthesis of the data in the table. The weight assigned to each phase is based on cost, degree of technical difficulty of implementation, usefulness, and degree of impact of implementation. The results are shown in the two figures below.

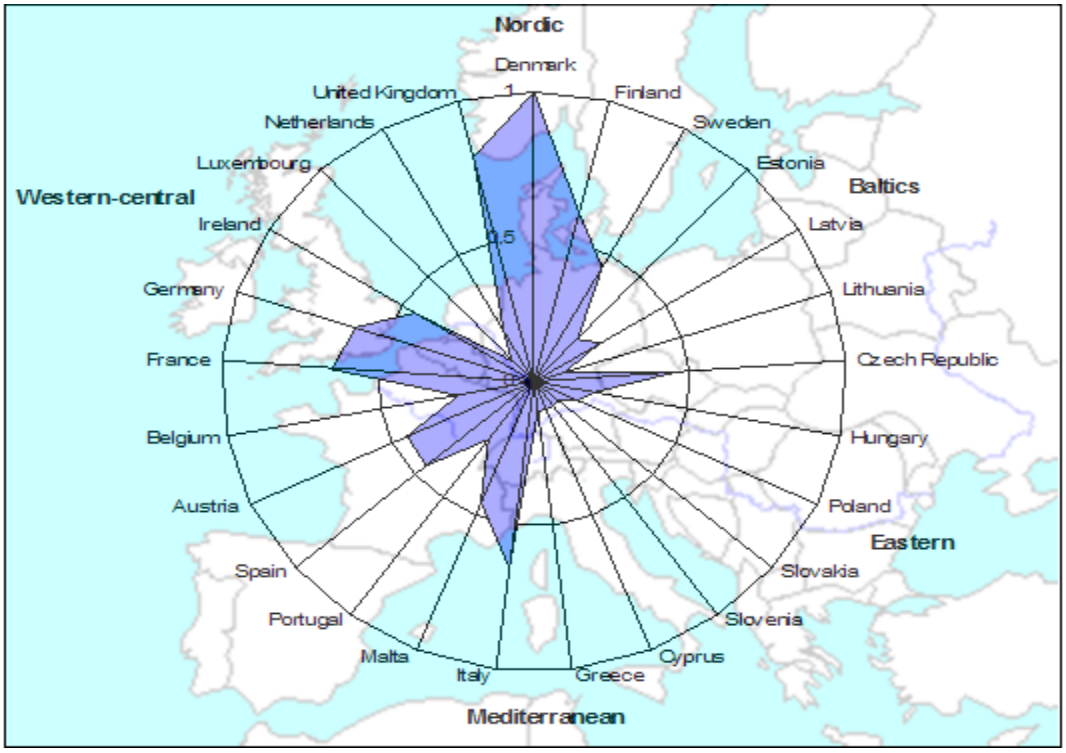
82. IDABC eGovernment factsheets; Impact Assessment: Action Plan on electronic Public Procurement, Ramboll Management, December 2004.

Figure 9. Degree of implementation of e-procurement stages in EU countries



Clearly, countries that are traditionally more developed in terms of governance and technological infrastructure – such as those in Scandinavia and Western Europe – are more advanced in e-procurement, particularly compared to those in Eastern Europe and in the eastern Mediterranean.

Figure 10. Degree of implementation of e-procurement in EU countries, by geographic area



Problems with e-procurement implementation

Although applications are limited, and available data is often incomplete, it is possible to identify some issues that must be taken into account in order to successfully design e-procurement processes. Certain factors can influence the spread of new procedures – both on the part of public administrations and the private sector – with the risks that new barriers may be raised while attempting to eliminate others.

- Human resources

  In any e-government process, changes in procedures and the introduction of new technologies must be accompanied by adequate training of the human resources involved; organisations' natural resistance to change is a significant obstacle to the success of innovation. The particularly sensitive nature of public tenders procedures mandates that management staff should be thoroughly familiar with the tools to be used.

  It is also important, as European Commission surveys have found[83], to keep in mind the ICT competence of the firms that wish to participate in new tender procedures. While e-procurement projects will always include training activities for the public administration staff involved in the reform, this may not always happen for private sector staff. Small and medium-sized firms are particularly susceptible to this problem, since they may be unprepared for reforms. One of the main objectives of the introduction of e-procurement – the incentive to spread new technologies in the private sector and to create well-developed electronic markets – becomes a barrier to market access.

83. Impact Assesment etc.

E-Procurement programmes need adequate promotion, in which economic operators are made aware of the possibilities offered by the new tools and are given time to adjust their technological infrastructures and technical staff before the programme is implemented. E-Procurement must be "publicised, explained, and publicised once again. Otherwise we will have to face an extremely costly digital divide"[84].

- Administrative decentralisation, centralisation of purchases

  E-Procurement can bring about increased efficiency though the centralised management of public tenders. This allows the public administration to work on a larger scale and at more interesting prices, and creates the conditions for the rationalisation of public spending.

  This phenomenon bucks recent trends in allocation of the responsibilities of the public administration. In the last 20 years, there has been a strong trend towards administrative decentralisation, which has greatly increased the responsibilities of peripheral administrations.

  The question is whether economically independent local administrations are willing to adopt a system that centralises procedures for public tenders and facilitates their control by the central administration. According to analysts, this is one of the reasons why the excellent Danish e-procurement system, in its first year (2002) only handled a total of DKK 0.01 billion, while its estimated potential was DKK 8 billion.

  Some centralised systems are finding success at the sub-national level as well (*i.e.* Intercenter project of the Emila-Romagna region in Italy). In this case as well, however, local administrations are reluctant to give up some of their responsibilities.

  Associated management of procurement – including the use of e-procurement – through multi-year agreements or conventions (voluntary instruments) launched by several local administrations in Italy (*i.e.* Municipality of Turin) could be considered an interesting initial step to reconcile the goal of cutting costs with the needs of local public administrations to maintain high levels of autonomy.

  Planning an e-procurement platform must take great care to differentiate between responsibilities and execution of public tender processes. Decentralised administrations must retain managerial and economic responsibilities while the procurement process is centralised in order to improve efficiency. In this way, the various institutions can maintain their autonomy in terms of what and when to purchase, while taking advantage of a centralised system that dictates where and how to purchase[85].

MENA countries – Brief remarks

Even more than in developed countries, in developing countries e-procurement and e-government in general are seen as tools to reform the public administration and to modernise its structure.

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84. Ion Marcu, Director for e-Government Services of the Romanian government, *International conference on e-gp: lessons learned*, 2004.

85. Henriksen, Mahnke, Hansen, Public procurement adoption: economic and political rationality, 37th International Cenference on System Sciences, 2004.

Taking for granted the existence of a political willingness to reform, the lack of a modern technological infrastructure is clearly the main obstacle to the diffusion of ICT in the public administration. This disadvantage is partly compensated by the fact that – unlike in industrialised countries – computerisation is starting almost from scratch, so that there are few (if any) issues regarding the compatibility of new platforms with pre-existing ICT systems. This is true both for public administrations and for firms, assuming that the latter have the necessary resources to invest in new technologies. This is another reason why the modernisation of public tender system can find its ideal place in a wider reform programme that aims to create a favourable environment for economic activities to attract capital in the shape of long-term productive investments.

International agreements provide a further impetus for reform, in normative rather than in technological terms. In particular, the World Trade Organization has promoted the multilateral Agreement on Government Procurement (GPA), which aims to offer a guarantee of non-discrimination for external suppliers in the management of public tenders. The agreement creates a framework of obligations and rights that member countries must take into account in their legislation, and which prohibit discriminatory measures such as requiring the presence of a local representative to participate in public tenders, or posting different prices for local participants. In the MENA region, Oman and Jordan are negotiating their adhesion to the Agreement.

Some existing applications and ongoing projects

The **United Arab Emirates** has obtained excellent results in developing its e-government portal: http://www.government.ae, which has achieved recognition as a regional best practice[86]. E-Procurement has been introduced both at the federal level, with the e-Tender portal, and in the emirate of Dubai, which is aiming to become an economic area of primary importance in the region, with a high likelihood of success. E-Tender is an electronic management system for federal ministries' procurement activities offering online registration for suppliers, access to ministries' calls for tenders and the bidding process; approved bids are visible to all members. Payments can be made online[87].

Lebanon's government plans to connect five ministries to a system that will optimise the procurement process by making it accessible to offers made electronically. The programme receives technical assistance from the Development Gateway Foundation and is financed through the Development Gateway Foundation's e-Government Grants Program, founded in partnership with the Italian government. The Office of the State Ministry for Administrative reform (OMSAR) will be responsible for implementing the project.

In **Jordan**, the United Nations Development Programme and the Ministry of Finance are collaborating to create an e-procurement platform for rollout in August 2006.

A project involving **Algeria**, **Morocco**, **Mauritania** and **Tunisia** aims to create a shared e-procurement system in the countries of the Maghreb. It is being financed by the Development Gateway Foundation and the World Bank.

86. United Nations Global e-Government Readiness Report 2005.

87. Ministry of Finance and Industry, UAE: see http://www.uae.gov.ae/mofi

Formez's Skills Centre for the Promotion of Quality and Benchmarking in the PA: Supporting technological skills in the PA and the development of procurement functions

Valeria de Magistris, Head, Administrative Innovation Unit, Formez

The Formez Centre for the Promotion of Quality and Benchmarking in the PA aims to facilitate:

- The implementation of innovative tools for the PA, particularly policies on: quality, welfare, quality of regulations, simplification, and e-procurement.
- The promotion of benchmarking PAs' achievements through the selection and systematic valorisation of best practices.
- The implementation of innovative tools in the PA, especially cross-cutting policies in support of governance activities.

The 2000-2005 programme concentrated on valorising best practices, promoting experiences through information exchanges and online, meeting the demand for innovation in the PA, and supporting improvement processes launched by PAs.

The Centre used diverse and integrated tools, including:

- Web sites on specific issues (http://www.buoniesempi.it; http://www.patrimonioacquisti.formez.it for e-procurement; http://www.welfare.formez.it).
- Experimental and study workshops on specific issues.
- Seminars and workshops to inform, raise awareness of, and diffuse the results obtained through the other instruments.
- Paper and multi-media publications.
- The launching of a process to create communities of practice.
- On-the-job assistance and training, and project experimentation.

In order to facilitate the diffusion of public procurement innovation, particularly for public e-procurement, the Centre has undertaken numerous initiatives in convention with the Department of Public Function, starting with the e-procurement section of the CIPA (Cohesion and Innovation in the PA) project of 2002 and successive targeted projects, including projects to support specific geographic areas (the Change Management for procurement processes in Objective 1 Regions co-financed by the European Structural Fund, and the ongoing programme, aimed at all national administrations, which includes a section on e-procurement).

The Centre's working group on "Patrimony and procurement" has produced the following activities in support of electronic purchasing procedures:

- Five issue-based experimental and study workshops.
- Six publications (including one currently in review) on issues related to new purchasing modalities and e-procurement tools (online auctions, marketplace, open conventions, inter-administrative joint management of procurement).
- One CD that gathers all the material produced so far.
- Nine workshops for the local diffusion of best practices.

- A comprehensive Web site, http://www.patrimonioacquisti.formez.it, (active since 2003) broken down into various sections (legislation, focus on electronic procurement systems, disseminating workshop results, discussion forums, PA experiences).
- A national database of public procurement referents.
- A newsletter sent to all registered Web site users, participants in activities, and firms and individuals registered in the database.

The Formez workshop on "New skills and professional profiles for procurement" [88]

One workshop focused the skills needed to handle new procurement methodologies, including but not limited to electronic means. The workshop was planned and implemented to pursue the following goals:

- Analysing innovative experiences ongoing in some Italian administrations, and identifying the effects of these experiences on the professional skills required for their development.
- Identifying and describing the main professional profiles involved in public procurement – and especially in public e-procurement – as well as the required knowledge and skills to deal with the changes that are affecting procurement processes, through an initial analysis of case studies and comparisons with a broad sample of public administrations.

Participants who shared their personal experiences and described the policies of the administrations they work for include:

- Officials responsible for procurement for an entire administration.
- Professionals involved in the re-organisation of the procurement process.
- Officials in charge of overseeing or re-organising procurement processes within their administration.
- Officials responsible for organisation and training.

The workshop was attended by representatives of 18 institutions, including local administrations (such as the municipalities of Verona and Florence, and the province of Pisa), regional administrations (including Campania, Umbria, and Emilia Romagna), universities, and other institutions; each meeting was attended by a working group of about 30 people.

The final report was published in the Materiali Formez series. This publication, like all other final workshop publications, provides operational guidelines for administrations interested in launching or continuing innovative processes. It includes a summary of the activities that have been undertaken, the tools and methodologies used, and the results that have been achieved. These results encourage Formez to continue promoting innovation in public procurement. The publication is distributed free of charge, within the framework of future project activities, to administrations that request copies, and is available through the project Web site: http://www.patrimonioacquisti.formez.it.

The main results of the workshop, which are described in this publication, can be summarised as follows:

88. In collaboration with Lattanzio e Associati and, in some phases, with the support of Consip representatives.

1. Description of the experiences that have been analysed and identification of emerging shared trends in terms of new skills

Some of these shared trends include:

- Problems linked to the lengthy and complex procurement re-organisation processes: centralisation/decentralisation of tasks and responsibilities.
- Problems connected to the heterogeneity of purchases in terms of typology and timing: many/few purchases, purchases that must meet specific criteria in terms of typology or market, shared purchases, periodical purchases, etc.; these require careful attention to the categorisation and description of needs and products/services, to the relationship with suppliers, and to choosing the correct procedures to meet pressing needs. A particularly varied array of purchases requires a more in-depth analysis of products and markets, the central function and online structure, with a further need for integration and collaboration.
- Issues connected to the standardisation and rationalisation of procedures through the drafting of regulations and operational handbooks for the computerisation of processes and procedures, with regard to both ordering goods and managing inventories; and the adoption of e-procurement modalities such as online auctions and marketplace; advanced ICT and organisational skills are required in order to manage new procedures.
- Introduction of new skills, especially at the managerial level, including overall process governance skills such as organisation, planning, and management control; experimentation with new solutions; interpersonal skills in dealing with both internal and external collaborators; awareness-raising, communication, and training skills; knowledge of reference markets and goods and services; experience with procurement technologies and methodologies.
- Highlighting the link between the planning and management of purchases; and between the management of inventory and purchases and overall planning, budgeting, and control processes. A computerised inventory (sometimes decentralised, sometimes eliminated) and the computerisation of orders through online structures lead to lower costs and new opportunities for monitoring and needs assessment on the part of purchasers; however, the new emphasis on planning and control processes, supported by new integrated ICT solutions (ordering, inventory, consumption, accounting) change the role of those responsible for purchasing, giving them increased responsibility for overall governance (rules, procedures, ad hoc solutions, integration), while giving line structures full responsibility over their own purchases.
- The new purchasing function – which has been redefined in terms of structure, processes, tasks, required skills, professional and technological aspects, internal relations with line structures and strategic management, and external relations with suppliers and public administrations – is now able to diversify management solutions, with opportunities for new service management forms that can reduce costs and transform costs into opportunities for profits by introducing market instruments and internal and external service mechanisms.

2. Identification and description of the main professional profiles involved in the planning and management of the “new purchasing function”

- Procurement managers.
- Procurement professionals.

These managers and professionals operate at the level of the public administration as a whole.

Following are some of the key processes of the purchasing function that emerge from case studies:

- Identifying purchasing needs.
- Overseeing purchasing procedures.
- Studying and analysing products, services, and markets.
- Managing costs.
- Regulating and standardising purchases.
- Creating continuous process innovation.
- Maintaining relations with suppliers and the market.
- Maintaining relations with PA professionals and structures.

For each professional profile and for each process, key results that need to be achieved and the necessary skills to achieve them are defined; these may be developed through *ad hoc* interventions, both within and outside the administration, including workshops, Web sites, on-the-job training, assistance, and information, systemic actions, and the creation of communities of practice.

In order to best perform one of the most important processes – the strategic and operational management of purchases (overseeing of purchasing procedures) – procurement managers must pursue the goals summarised in the following and increase their skills and knowledge as follows:

Procurement managers

Results that need to be achieved	Necessary knowledge, skills, and capabilities
Managing and directing choices among all possible compatible modalities and procedures (including e-procurement), after a careful analysis of the needs to be met.	• Basic information about laws and regulations on auctions, calls for tenders, and bids. • Advanced knowledge about laws and regulations on procurement. • Basic information about civil and penal responsibilities. • Basic information about procurement procedures. • Advanced knowledge of specific needs that must be met. • Basic information about specific goods and services that must be purchased. • Advanced knowledge of e-procurement models and solutions. • Identification and analysis of problems. • Communication.
Co-ordinating the different phases of procurement, with particular emphasis on the work of internal and external professionals responsible for preparing administrative and technical documents.	• Advanced knowledge about internal procedures. • Advanced knowledge about internal organisation. • Advanced knowledge about civil and penal responsibilities. • Basic information on legislation on auctions, birds, and calls for tenders. • Advanced knowledge about procurement legislation. • Basic information on procurement procedures. • Advanced knowledge about e-procurement models and solutions. • Advanced knowledge about communications systems and tools. • Communication, leadership, negotiation.

Procurement professionals require the following skills:

Results that need to be achieved	Necessary knowledge, skills, and capabilities
Assisting management in choosing the best option among the various possible modalities and procedures, after a careful analysis of the needs to be met and of the goods and/or services to be purchased.	• Basic knowledge of laws and regulations on auctions, calls for tenders, and bids. • Advanced knowledge of laws and regulations on procurement procedures. • Advanced knowledge of e-procurement models and solutions. • Basic knowledge of civil and penal responsibilities. • Advanced knowledge of specific needs that must be met. • Advanced knowledge of specific goods/services that must be purchased. • Advanced knowledge of internal procedures. • Basic knowledge of ICT. • Problem-solving. • Communications.
Completing the various phases of the procurement process, and integrating the activities of the various professionals involved in preparing technical and administrative support documentation, as well as preparing any additional necessary technical documentation.	• Basic knowledge of laws and regulations on auctions, calls for tenders, and bids. • Advanced knowledge of laws and regulations on procurement. • Advanced knowledge of procurement procedures. • Advanced knowledge of e-procurement models and solutions. • Basic knowledge of civil and penal responsibilities. • Advanced knowledge of internal procedures. • Advanced knowledge of internal organisation. • Basic knowledge of ICT. • Leadership. • Teamwork.
Identifying problems with current procedures, and identifying potential improvements; proposing specific solutions to management.	• Advanced knowledge of e-procurement models and solutions. • Basic knowledge of business process re-engineering systems and instruments. • Basic knowledge of service computerisation processes. • Advanced knowledge of drafting techniques for regulations and bills. • Leadership.

The following roles/profiles are of secondary importance, and are therefore not described in the tables above:

- Administrative roles/profiles.
- ICT and technical roles/profiles.
- Accountants with experience in planning, management control, and reporting.

3. Description of some of the consequences of emerging trends: new responsibilities and innovations in the role of line managers managing operational costs.

Ongoing innovations widen the role of line managers without significantly changing its basic characteristics. Nevertheless, innovation has some important consequences for the role and responsibilities of such managers:

- A need for a renewed focus on the operational costs of the relevant structure, with a particular emphasis on setting, pursuing, and achieving efficiency standards.
- An increased focus on linking and integrating line structures with headquarters.
- Encouraging the development of an organisational culture focusing on analysis, interpretation, and representation of needs, and increasing the accountability of professionals.

Morocco: The overall scenario

Saad Sebbata, Ministry of Finance, Morocco

Ongoing experiences in Morocco highlight ICT implementation strategies, as well as the country Action Plan and the governance of ICT strategies.

The government is aware of the social and economic importance of ICT, and has created a committee including representatives from the public and private sectors to promote its development. This committee drafted an Action Plan that was extensively discussed in 2005, when the Internet became more widely established in the country. The plan – which is aimed at citizens, firms, and the public sector – includes a series of specific programmes and projects. The first programme, called "The on-line administration", includes sub-projects such as the creation of a national portal, a governmental Intranet, a Web site for public calls for tenders, a portal for the public sector as a whole, and a civic portal aimed primarily at local administrations. The programme is scheduled to conclude in 2007.

The main training objective is to improve professional profiles in order to reduce the digital divide and encourage the development of ICT. In order to reach these goals, Morocco drafted an Action Plan that includes the following activities:

1. Creation of specialised productive structures.
2. Training programmes for the public and private sectors.
3. Awareness-raising programmes on ICT aimed at schools and universities.
4. Long-distance training (FAD).
5. Training for those who provide training.

A law managing e-commerce and a series of performance indicators for the management of ongoing projects are currently under discussion. Finally, the government is increasing funds for ICT development policies.

The Moroccan Ministry of Finance: Computerising procurement functions

Hicham Zakani, Director of the Ministry Portal, Ministry of Finance

The Ministry of Finance is active in procurement both as a buyer of goods and services for itself and other public administrations, and as the institution in charge of paying suppliers. The Ministry was computerised at an early stage, has recently updated its ICT system to make it more compatible with its services. In particular, work has focused on the back office and on offering online services to suppliers and the public.

In 2005, the financial and accounting management system was unveiled. A mixed group of managers and technicians was in charge of re-engineering procedures for public calls for tender. This led to a transfer of competences and then to the creation of a skills centre to support other organisational units of the Ministry interested in launching innovative activities.

At the same time, a project Web site was created to raise awareness and disseminate information. Additionally, an ERP system for human resources management was created to better match available human resources with the appropriate organisational unit.

With regard to the legislative framework, a draft law on e-commerce is currently being discussed, and is expected to be approved by the Parliament in 2006. The next step will be to amend the code for contracts for public works to reflect the new legislation on ICT.

Another interesting statistic is Internet penetration in Morocco. In late 2005, two licenses were awarded – one for fixed telephony and one for the Internet – that broke an existing and long-standing monopoly. These factors will help increase the Internet penetration rate for both the private sector and the citizenry as a whole, and make it easier to access electronic markets for public procurement and government information in general.

Since 2004, the government has sponsored awards for excellence and best practices in ICT innovation. Selection criteria are based not on the number of online services but rather on their nature, their impact on users and firms, and their degree of technological innovation.

Topics for further discussion

- In defining public policies on procurement management in the Arab region, it is important to address all of the extremely sensitive issues connected to the adoption of centralised or decentralised policies.

7. E-PROCUREMENT CO-OPERATION INITIATIVES: CHALLENGES AND PROSPECTS

The Italian Government Commitment to Administrative Simplification

Federico Basilica, Head, Department of Public Administration

The Presidency of the Council of Ministers and the DFP strongly believe in this initiative, which addresses issues whose development benefits greatly from the exchange of experiences. Indeed, the Italian government is a long-time supporter of the work of the OECD's Public Governance Committee, headed by Pia Marconi. Italy has been one of the main promoters of OECD activities, especially those targeted to Arab countries; within this framework, in order to help develop the activities of Working Group 2 on E-government and Administrative Simplification, Italy organised this meeting for the exchange of experiences and best practices on e-government and administrative simplification issues connected to the introduction e-procurement models.

Italy's cutting-edge experience in e-procurement features policies that improve the quality of regulations and simplify administrative procedures; they now play a key role in overall administrative modernisation policies, because only a streamlined administration can achieve the best results in bringing state services closer to the citizenry. This debate is currently quite lively at the international level, and the OECD has made important contributions in bringing some important issues – such as improved quality of regulations and simplification – to the forefront through guidelines, principles, and recommendations.

The link between improved regulations and competitiveness is now at the heart of every debate; both the European Commission and the European Council have made it one of the central issues in their work. Within this framework, the Italian government and the DFP, in co-ordination with other institutions (in particular the DIT), are working on improving regulations and promoting simplification at both the legislative and administrative levels. Many important results have been achieved, such as the adoption of a one-stop-shop for firms, a procedural simplification initiative that has been underway since 2001, which has subsequently been accompanied by legislative codification policies for groups of issues and which had updated the previous model (so-called mixed consolidation acts) as early as 2003. Its simplifying function was derivative rather than innovative, while the 2003 law's reforms moved towards the codification model, which focuses on creating sectoral codes that make it possible to achieve true administrative simplification; one such example is the Code for the Information Society, the only one in Europe.

The E-Government Grants Program

Giorgio Mariani, Manager, e-Government Grants Program, Gateway for Development Foundation

The Gateway Foundation is an American-based, non-profit NGO, an independent institute within the World Bank. Its mission is to supply ICT and Internet solutions to improve the efficacy of e-government. This goal is pursued through a grants programme, including the e-government initiative financed by the Italian government. It works closely with the DIT's technical centre, which actively participates in Gateway Foundation projects. There is a Steering Committee that defines the strategies for programmes in which Italian government representatives participate.

The Gateway Foundation looks at e-procurement from a different perspective, namely improving the efficacy of aid: once partner countries define a strategy, donor countries expect efficient management and control systems to be put into place in terms of finances, procurement, monitoring, and evaluation. The programme addresses systems, rather than ICT specifically, because a system is more complex than the mere implementation of new software. It is a complex mix of three elements: people, processes, and technology – in which technological tools are merely a facilitator for the chosen solution.

In beneficiary countries, e-procurement must be built in order to bring benefits in terms of optimising spending. If funds are spent in the most effective, efficient manner, then the beneficiary country can easily obtain further funding.[89]

With regard to international co-operation initiatives, the main goals of e-procurement are linked to improved transparency and efficiency of public procurement systems, and to the simplification of purchasing procedures through the adoption of solutions based for the most part on the Internet or ICT instruments. Another important goal is the promotion of local economies allowing local suppliers in beneficiary countries to enjoy new business opportunities at both the local and international levels.

An EU study estimated a savings of 5% due to efficiencies created through e-procurement. This is merely an indicative estimate, as it is quite difficult to define and measure indicators on e-procurement policies; it can nevertheless be considered a reliable minimum threshold, which can be surpassed in countries in which the start-up phase is characterised by procedures lacking transparency.

An indirect effect is the identification of the most efficient firms, which further contributes to improving the efficiency of spending. Greater savings lead to GDP growth, and at the international level GDP growth is associated with improved administrative transparency and reduced corruption.

There are, however, many challenges:

- Adopting an adequate regulatory and legislative system.
- Improving processes and procedures.
- Identifying the firms that need to be involved in the electronic market.

The simplification of procedures is a particularly important result of e-procurement systems; defining standards of behaviour rationalises working modalities in both the private and public sectors, contributing to the reduction of any potential conflicts.

Finally, suppliers might be best served if there is a single source of information on opportunities arising through the national e-procurement system; this could encourage them to present new offers on the new market.

89. Another aspect that impacts the efficiency of international aid is its harmonisation, which is outside the scope of this paper.

World Bank projects for the development of e-procurement

Rachele Gianfranchi, Global Infocomm Technologies Policy Division, World Bank

In 2000, multi-lateral development banks (the Inter-American Development Bank and the African Development Bank) harmonized their procurement procedures – one of the best results of this process was the identification of solutions for loans and grants.

In evaluating requests for aid on the part of developing countries, these banks operate through an electronic model implemented in the countries in question by ministry technical groups. In 2002, the banks identified shared methodologies to evaluate the capabilities for e-procurement in beneficiary countries, on the basis of which they drafted country evaluation reports, which are available on the World Bank's Web site.

The evaluation of a country's capacity to implement an e-procurement system is very important – and was the basic criteria in awarding loans. One of the Web site's forums includes a map (which is being updated) that shows the different levels of development of e-procurement on a global scale.

The site also includes a toolkit that contains operational guidelines for countries that want to build e-procurement systems. These guidelines include:

- Strategies for the development of institutional, regulatory, and legislative bases for e-procurement.
- Methods to self-evaluate a country's position.
- Methodologies for planning, programming, and control.
- Identification of shared standards to improve the compatibility of each national system, as well as opportunities for competition.
- Advice on management.

Generally, before the World Bank grants a loan, it evaluates the capacity of individual administrations to spend the funds. It then carries out a feasibility study of the project to be funded by the loan. Usually, project financing is preceded by analysis of the legislation on procurement and public contracts in the beneficiary country, including relevant proposals for simplification.

E-Procurement models that can be implemented by the World Bank range from completely public to completely private. The latter are a distinct minority, and at the moment the best solutions seem to be mixed models, in which some services (usually technological ones) are outsourced, while others are managed by a public agency.

Once a country obtains a loan, it must abide by World Bank procurement rules, including a certain degree of transparency, competitive contracts, and standards based on international best practices.

Staff from national government agencies can find interesting training opportunities and further information on the World Bank's evaluation criteria on the Bank's Web site. All countries that received loans from the World Bank can access this portal, where they can see all the contracts signed relating to each loan, and all the procedures that were followed.

The above applies to e-procurement initiatives, initiatives to improve the procurement process as a whole, and national e-government policies. For example, IGF grants are institutional funds that finance preparatory activities for the development of e-procurement. The World Bank, the Italian government, and the Gateway Foundation are collaborating on a project to create an e-procurement platform for several North African countries, which could be expanded to other Arab countries in the future. It aims to carry out a series of studies and evaluations, which should lead to the creation of a regional portal. The World Bank will be in charge of training, while the Gateway Foundation will be in charge of operational aspects.

E-Procurement can serve as a catalyst for economic development. It is very important to measure the extent of such an effect, in order to have an idea of the degree of economic development that can be achieved. Furthermore, the implementation of technological systems for e-procurement contributes to the overall improvement of national technological infrastructures, and can serve as a catalyst for these national systems.

Historical data series are also very important. In fact, the study of procurement systems and their achievements over time makes it possible to evaluate the levels of efficiency that have been reached and the problems that remain.

From an efficiency point of view, the most important results have to do with time savings arising from electronic procedures.

A UNDP-sponsored project

Najat Rochdi, Regional Coordinator, Information & Communication Technologies for Development in the Arab Region "ICTDAR"

Creation is underway of UNDP institute – which will be headquartered in Jordan but will involve all Arab countries – for governance-related issues. It will provide technical assistance and training, and will host an archive of best practices on e-governance and e-government both in the region and elsewhere. This institute will also provide a shared platform to develop synergies and partnerships between donor countries and partner countries.

The institute is intended to serve as a catalyst for relations between various actors, and create a network of centres for excellence. It will be run by a board of directors that will represent the region's governments and private sectors.

In addition to the leading role being played by the Jordanian government, other countries such as Morocco, Tunisia, and Bahrain, will also actively participate in the project.

At this time UNDP is working on partnerships with various actors, not limited to the Arab region. Another ongoing initiative calls for the institute's participation in a portal on e-government, currently the only such portal available in Arabic, which brings together several communities and practices.

Topics for further discussion

- In 2002 the Italian government and the Gateway Foundation put forward a proposal to gather ideas for e-government projects. Of the 70 proposals received, 42 have to do with e-procurement. This is an indicator of the level of interest in this issue.
- Additional information provided by project manager Hussein Hiyassat on the project launched in Jordan by the Italian government: the initial phase of the project saw the creation

of a project support unit as well as a steering committee, and a general secretariat that serves the ministries. In addition, several technical committees have been established; they represent the various divisions that are in charge of e-procurement and procurement overall. Finally, an evaluation committee was established. The state of the art, the reference context, and future perspectives are being analysed, along with traditional procurement procedures and drafting recommendations for the rationalisation of the entire procurement process, in order to understand whether other processes can be integrated. The added value of the project will make it possible to rationalise the procurement process as a whole, and, if necessary, will orient it towards electronic procurement modalities.

8. CONSTRUCTION OF INITIAL GUIDELINES AND PROPOSALS FOR EXPLORING THE WAY AHEAD

This section sums up the initial results that were achieved and shared during the seminar; more importantly, it identified useful ways forward for pursuing further opportunities and implementing valid national e-procurement models that can be integrated within the overall framework of the Arab region.

The Head of the Italian Department of Public Function, Federico Basilica, thanked the event's organisers and drew some brief conclusions on the work that was carried out. In particular, he reiterated the Italian government's interest in this initiative, and its commitment to see it through; a follow-up meeting is already scheduled for March 2006 in Dubai.

A participant summed up the goals of the two days of work as follows:

- Creation of operational relations between governments and international organisations active in the ICT, e-government, and e-procurement sectors.
- Contribution to administrative simplification in Arab countries, through the sharing of best practices.
- Invitation to create network and communities of practice.

The results of the seminar's various sessions are as follows:

- E-Procurement is a tool to promote transparency and efficiency, and not an end in and of itself of administrative reform. Citizens and entrepreneurs must be convinced that it will really bring about improvements in the work of the public administration.
- Technological innovations are instrumental to the overall innovation of the public procurement process.
- Innovative policies must pay careful attention to needs and costs; political commitment is fundamental in the planning stages of new e-procurement strategies.
- The experiences of other countries, including their failures, must be heeded during the implementation phase. It is important to create networks to share problems and skills.
- Each individual system must be based on the analysis of specific needs, but it is always possible to draw useful advice from the experience of others, since problems are often similar.
- The improvement of a country's overall governance – including organisational governance, inter-institutional governance, and external governance (public/private partnerships) – which arises out of the implementation of e-procurement processes leads to increased transparency and accountability, as well as reduced corruption.

Conclusions of the Italian co-presidency: Proposals for future work to further advance the initiative

Vincenzo Schioppa, Minister Plenipotentiary, Ministry of Foreign Affairs

In order to encourage activities that support innovative processes, it is important to ensure collaboration among the various Italian ministries involved in such activities, including the Ministry of Foreign Affairs, the Department of Public Function, and the Department of Innovation and Technology. In addition, the participation of international organisations and of all beneficiary countries is fundamental.

Italy is very interested in this project, both as an OECD member and as a country that is particularly interested in the needs and development of Arab countries. The seminar used OECD methodologies; these methods should be used in the future as well. This method calls for sharing experiences among equal partners, especially those working on government reform programmes to improve the social and economic conditions of their citizens, sitting down together for an open discussion of the issues at hand.

This experience is very important for the OECD as well, and indeed the OECD Council is paying careful attention to the work being carried out during this seminar.

Proposals for follow up include:

- A representative from the Arab world, during the next Dubai meeting, should testify on the achievements of this seminar and the work achieved.
- It is fundamentally important to create an informal network of public procurement experts and operators, who will be able to help each other in problematic situations through the exchange of experiences.
- Both in Italy and in throughout Europe, benchmarking has proven invaluable. The most recent Italian governments have gone to great lengths to encourage the use of this methodology, and the approval of international organisations can further encourage other national governments to adopt it. To this end, it is useful to involve every institution that can support the implementation of new policies (such as Formez in Italy, the OECD, UNDP, the World Bank, the Cairo Institute for Administration, the Dubai School of Government, etc.).
- Formez and the OECD could develop a series of guidelines on how to create an integrated e-procurement system, as well as self-evaluation checklists with suggestions that interested countries can follow once they decide to adopt e-procurement action plans within broader e-government reform goals.
- Finally, a MENA (Middle East and North Africa) country should volunteer to host a seminar that will include the participation of private operators (such as suppliers and their associations) on “E-Procurement and bi-lateral and multilateral aid”.

Conclusions of the OECD

Marco Daglio, Administrator, Public Governance and Territorial Development Directorate, OECD

The conclusions and the opportunities for further work suggested by the Italian co-president show that this initiative is gaining steam and turning into a true partnership with the participating Arab

countries. It is beginning to produce concrete results, and followup will contribute to the achievement of further goals.

The OECD and its leadership (the Secretary General) are directly involved; OECD member countries are very interested in this initiative as well. Nevertheless, the main goal of the initiative is to contribute to the creation of national Action Plans within a regional framework. It is important to develop contacts with participating countries, and to use the information they have supplied in the last two days and otherwise, to improve country reports and develop e-procurement Action Plans.

The next Dubai meeting will focus on some of the goals set by the OECD, and in particular by the steering committee, which is made up of six closely co-ordinated working groups addressing: electronic administration, public function, the fight against corruption, budgeting, reform and regulations, and relations with civil society.

The OECD intends to promote a shared, co-ordinated working methodology; this is quite natural since issues related to electronic administration, as the seminar clearly showed, fall within the broader framework of public administration reform.

LIST OF PARTICIPANTS

- **Rolf Alter**, Deputy Director, Public Governance and Territorial Development Directorate, OECD
- **Julie Basile**, Office of Federal Procurement Policy, United States
- **Federico Basilica**, Head, Department of Public Administration, Italy
- **Carlo Batini**, University of Milan-Bicocca, Italy
- **Marcella Corsi**, "La Sapienza"University of Rome, Italy
- **Davide Colaccino**, Consultant, Presidency of the Council of Ministers, Italy
- **Marco Daglio,** Administrator, Public Governance and Territorial Development Directorate, OECD
- **Valeria de Magistris**, Head, Administrative Innovation Unit, Formez, Italy
- **Khaled Elarbi**, National Observatory of Public Contracts, Tunisia
- **Nevine Gamal**, Ministry of State for Administrative Development, Egypt
- **Rachele Gianfranchi**, Global Infocomm Technologies Policy Division, World Bank
- **Giuseppe Fiore**, Director General, Consip S.p.A., Italy
- **Elio Gullo**, Director, Pilot Development Initiatives Unit, Department of Public Administration, Italy
- **Abdel Razak Henni**, Ministry of Justice, Algeria
- **Hussein Hiyassat**, Ministry of Finance, Jordan
- **Francesco Licci**, Head, Special Project Unit and Studies Office, Consip S.p.A., Italy
- **Rehab Lotaah**, Acting Director of e-Services, Dubai
- **Paola Magrini**, Department of Innovation and Technology, Italy
- **Giorgio Mariani**, Manager, e-Government Grants Program, Gateway for Development Foundation
- **Claudia Oglialoro**, Director, e-Government for Development Program, Italy
- **Giuseppe Pennella**, Head of Research and Development, Formez; Director, C.A.I.MED, Italy
- **Stefano Pizzicannella**, Director, Office for International Affairs, Department of Public Administration, Italy
- **Najat Rochdi**, Information Society for Arab States, UNDP
- **Hala Makarem Saab**, Office of the State for Administrative Reform, Lebanon
- **Elham Saleh**, Electronic ID Card Project, Bahrain

- **Saad Sebbata**, Mnistry of Finance, Morocco
- **Vincenzo Schioppa**, Minister Plenipotentiary, Ministry of Foreign Affairs and Co-Chair, Working Group 2, Italy
- **Luca Varrone**, Department for Public Administration, Italy
- **Christian Vergez,** Head, Innovation and Integrity Division, Public Governance and Territorial Development Directorate, OECD
- **Hicham Zakani**, Director of the Ministry Portal, Ministry of Finance, Morocco

MEETING AGENDA

30 January 2006

9.00 – 9.30	**Registration**
	OPENING AND INTRODUCTION **The objectives of the good governance for development (GfD) initiative in Arab countries and of the High Level Seminar**
9.30 – 10.00 (approx.) (max 5 minutes per intervention)	*Mr Federico Basilica, Head of Department for Public Administration Administration* - Introductory remarks *Mrs Claudia Oglialoro, Representative from the Department for Innovation and Technologies*- Introductory remarks *Mr Giuseppe Pennella, Head of Research and Development, Formez* *Opening remarks by the Arab and OECD chairs and co-chairs* *Short presentation by Mr. Rolf Alter, Deputy Director, Public Governance and Territorial Development, OECD on the seminar agenda and objectives.*

10.00 – 11.30	**SESSION 1: A FRAMEWORK FOR E-PROCUREMENT – THE REGULATORY FRAMEWORK** *CHAIR: VINCENZO SCHIOPPA, MINISTER – PLENIPOTENTIARY, CO-chair of WG2*
Presentation of cases* by selected countries (max 10 min per country) followed by question and answer session.	The aim of this session is to provide an introductory working framework on e-procurement, and to share and discuss know-how and experiences on establishing a proper regulatory framework for e-procurement. **The session will be opened by Marcella Corsi, University of Roma - La Sapienza who will present the Italian experience in establishing a nation wide e-procurement solution.** Following this presentation, Arab countries will be able to make short presentations of cases based on their country experiences in setting up legislative framework for e-procurement. Experts from across OECD countries will be given the opportunity to provide comments and insight based on their own national approach, with a particular attention given to the identification of good practices and lessons learned that can be shared among participants. *Establishing of a good regulatory framework for e-procurement: The Italian experience on reviewing existing laws on public procurement to allow electronic processes* **Davide Colaccino**, Italian Presidency of the Council of Ministers *Building up a sound regulatory framework for e-procurement: The Egyptian Experience* **Nevine Gamal**, E-Procurement Project Manager, Ministry of State for Administrative Development, Egypt Comment from Arab and OECD countries Discussion **Proposed questions for discussion and data collection:** o Have you introduced the necessary laws and regulations to support e-procurement solutions at the national level (e.g. rules allowing e-auctions or e-bidding processes; legal requirements for identification of bidders and suppliers)? o Which administrative tools and mechanisms (e.g. revision of existing laws and procedures) have you identified and used to build up a sound regulatory environment for e-procurement? o What are the major barriers to building such a framework and how have you overcome them?
11.30 – 11.45	Coffee break

11.45 – 13.15	**SESSION 2: A FRAMEWORK FOR E-PROCUREMENT – ORGANISATIONAL STRUCTURES AND RESPONSABILITIES** *CHAIR: STEFANO PIZZICANNELLA, DIRECTOR INTERNATIONAL AFFAIRS OFFICE,, DEPARTMENT FOR PUBLIC ADMINISTRATION*
Presentation of cases* by selected countries (max 10 min per country) followed by question and answer session	The aim of this session is to allow participating countries to discuss the approach and organisational structure which support the implementation of e-procurement. **The session will be opened by Giuseppe Fiore, General Manager, Consip S.p.A. (the Italian Public Procurement Body) who will present the institutional aspects of the Italian organisational framework for e-procurement.** Following this presentation, Arab countries will make short presentations on their own organisational structures and systems of responsibilities for e-procurement. Experts from OECD countries will be given the opportunity to provide comments and insights based on their own national approach, with a particular attention given to the identification of good practices and lessons learned that can be shared among participants. *The Program of rationalization of public spending in goods and services*, **Francesco Licci**, Head of Research and Special Project Unit, Consip *Lebanon's approach and experience in support of the implementation of e-procurement* **Hala Makarem-Saab**, ICT Project Manager, Office of the State for Administrative Reform, Lebanon Discussion on approaches and challenges in Arab countries **Proposed questions for discussion and data collection:** What are the main features of your country organisational approach to e-procurement? Do you have a central e-procurement authority or e-procurement is decentralised across agencies and levels of government? What was the reason behind your decision to either centralise or decentralise e-procurement in your country?
13.15 – 15.00	**Lunch**

15.00 – 17.30 *(coffee break from 16.15 – 16.30)*	**SESSION 3: A FRAMEWORK FOR E-PROCUREMENT – PROCESS REENGINEERING SIMPLIFICATION AND TRANSPARENCY** *CHAIR: MS. JULIE BASILE, OFFICE OF FEDERAL PROCUREMENT POLICY, OFFICE OF MANAGEMENT AND BUDGET, UNITED STATES*

Presentation of cases* by selected countries (max 10 min per country) followed by question and answer session	The aim of this session is to allow participating countries to discuss key aspects related to the simplification and reengineering of administrative procedures, and the enhancement of their transparency, connected to the implement of e-procurement.
	
	The session will be opened by Luca Varrone, Department for Public Administration, who will present (discussion of a particular case of process reengineering – Italy). Following this presentation, Arab countries will also make short presentations on their efforts to achieve greater transparency and simplification of procurement functions and offices through enabling electronic procurement. Experts from OECD countries will be given the opportunity to provide comments and insights, with a particular attention given to the identification of good practices and lessons learned that can be shared among participants.
	
	The Transparency in Public e-Procurement: The Italian Perspective
	Paola Magrini , Department for Innovation and Technologies
	
	Proposed questions for discussion and data collection:
	
	• To what extent the introduction of electronic processes for public procurement has been accompanied by efforts to automate, simplify and re-engineer existing processes? Please briefly make a concrete example.
	
	• Has the introduction of electronic processes in public procurement led to any benefit to your organisation (as listed below)? What criteria have you used to measure them?
	  o Greater simplification and transparency of procedures
	  o Reduced duplication of procurement functions and offices
	  o Greater transparency and accountability of decision making
	  o Benefits of scale due to consolidated purchasing

31 January 2006

9.30 – 10.30	**SESSION 4: TECHNICAL AND TECHNOLOGICAL CHALLENGES IN IMPLEMENTING EFFECTIVE E-PROCUREMENT SYSTEMS** *CHAIR: VINCENZO SCHIOPPA, MINISTER – PLENIPOTENTIARY, CO-chair of WG2*
Presentation of cases* by selected countries (max 10 min per country) followed by question and answer session	The aim of this session is to provide participating countries with the opportunity to discuss and identify key technological challenges related to the implementation of e-procurement systems. **The session Technological development and implementation of e-procurement system will be opened by Carlo Batini** (University of Milan – Bicocca – Italy) **and Elio Gullo (**Department for Public Administration) Following this presentation, Arab countries will also make short presentations on the technical challenges they face in implementing e-procurement systems. Experts from OECD countries will be given the opportunity to provide comments and insights, with a particular attention given to the identification of good practices and lessons learned that can be shared among participants. *Technical and technological challenges on implementing effective e-procurement systems: the experience of UAE* Lootah Rehab, Director of e-Services, Dubai E-government **Proposed questions for discussion and data collection:** • Do you have a shared IT platform for e-procurement or have agencies developed their own solutions? Does your system integrate with buyer agency systems (i.e. ERP) and supplier systems? What are the main technical challenges in maintaining and developing IT systems which support procurement solutions? Have you developed technical standards (e.g. for data exchange) and requirements to allow systems interoperability?
10.30 – 11.00	Coffee break

11.00 – 12.30	**SESSION 5: BUILDING UP EFFECTIVE SKILLS AND HUMAN CAPACITIES** *CHAIR: MR. HUSSEIN HIYASSAT, PROJECT MANAGER, E-GOVERNMENT FOR DEVELOPMENT INITIATIVE, MINISTRY OF FINANCE, JORDAN*
Presentation of cases* by selected countries (max 10 min per country) followed by question and answer session	The aim of this session is to allow participating countries to discuss the technical and managerial skills required to implement e-procurement systems. **The session will be opened by Giuseppe Pennella, Head of Research and Development Formez, and Valeria de Magistris, Head of Administrative Innovation Unit Formez, who will present (discussion of a particular case of skills development for e-procurement in Europe and Italy).** Following this presentation, Arab countries will make short presentations on their own approach to developing the human, technical and managerial skills required to implement e-procurement. Experts from OECD countries will be given the opportunity to provide comments and insights, with a particular attention given to the identification of good practices and lessons learned that can be shared among participants. *Building up effective skills and human capacities: the case of Morocco* **Hicham Zakani**, Ministry of Finance **Proposed questions for discussion and data collection:** • How have you developed staff capabilities to handle the development, implementation, and maintenance of e-procurement systems? Please refer to the list below: 1. understand public e-procurement policies and practices 2. understand technical requirements (e.g. technical/programming/help desk skills) 3. develop managerial skills and process knowledge related to new systems 4. build and maintain relationship with suppliers and other stakeholders

12.30 – 13.30	**SESSION 6: COOPERATION INITIATIVES ON E-PROCUREMENT: CHALLENGES AND PERSPECTIVES** *CHAIR: CLAUDIA OGLIALORO DIRECTOR FOR E-GOVERNMENT FOR DEVELOPMENT DEPARTMENT FOR INNOVATION AND TECHNOLOGIES*
	The aim of this session is to identify and discuss challenges and lessons learned on international cooperation in the field of e-procurement. **The session will be opened by Mr Giorgio Mariani, Manager e-Government Grants program, Development Gateway Foundation, who will present the major factors of challenges and success in cooperation projects on e-procurement.** Following these presentations, Arab countries will make short presentations on their experience in cooperating on e-Government, as well as their expectations. Experts from OECD countries will be given the opportunity to provide comments and insights, with a particular attention given to the identification of good practices and lessons learned that can be shared among participants. <u>Successful experiences in e-procurement: World Bank initiatives</u> Rachele Gianfranchi, World Bank expert on e-procurement **Proposed questions for discussion and data collection:** • Which aspects of e-procurement have so far received cooperation assistance? In which form, and from which Agency? • Which are the components of e-procurement where cooperation from donors might generate higher value added? • Which are the main challenges and criticalities that might be encountered in designing, developing and implementing cooperation projects in e-procurement?
13.30 – 15.00	**LUNCH**
15.00 – 16.30	**CLOSING SESSION - BUILDING GUIDELINES AND PROPOSALS FOR NEXT STEPS** *CHAIR: MR. MOHAMMED EMIR MAVANI ABDULLAH, ADVISER, PUBLIC SECTOR REFORMS, MINISTRY OF FINANCE AND INDUSTRY, UAE*
	Following meeting discussion, participants will have the opportunity to identify and discuss **good practices and guidelines** for establishing the framework conditions and effectively implementing e-procurement solutions. The guidelines will constitute an input in view of the elaboration of country action plans. Closing remarks by the Arab and OECD chairs and co-chairs and Mr. Federico Basilica, Head of Department for Public Administration.

Good Governance for Development in Arab Countries Initiative
Working Group II on E-Government and Administrative Simplification

1st HIGH LEVEL SEMINAR on E-Procurement

Naples, 30-31 January

PRESENTATION OF COUNTRY INFORMATION

As part of the stocktaking of Arab countries' experiences on e-government and administrative simplification, the OECD Secretariat asked countries to submit short country fact sheets to provide relevant background information for the meeting and in view of the preparation of country Action Plans. The country fact sheets followed the guidelines and structure below, and were compiled and distributed in advance of the High Level Seminar on E-Procurement. The following countries provided responses: Algeria, Egypt, Lebanon, Morocco, the United Arab Emirates.

TOPIC

Country paper focused on some aspects related to the implementation of e-procurement systems: 1) the regulatory framework and 2) the organisational framework for implementing e-procurement; 3) simplification and re-engineering of administrative procedures connected to the implementation of e-procurement; 4) technical challenges in implementing e-procurement and 5) skills and human capacities for e-procurement.

STRUCTURE OF COUNTRY PAPERS

In order to ensure comparability among papers, the papers were structured along the following lines:

- Question 1: Have you introduced the necessary laws and regulations to support e-procurement solutions at the national level (e.g. rules allowing e-auctions or e-bidding processes; legal requirements for identification of bidders and suppliers)? Which administrative tools and mechanisms (e.g. revision of existing laws and procedures) have you identified and used to build up a sound regulatory environment for e-procurement? What are the major barriers to building such a framework and how have you overcome them?

- Question 2: What are the main features of your country organisational approach to e-procurement? Do you have a central e-procurement authority or e-procurement is decentralised across agencies and levels of government? What was the reason behind your decision to either centralise or decentralise e-procurement in your country?

- Question 3: What is your definition of e-procurement? What kind of procurement activity is e-enabled and at which stage?
    - Public agencies can electronically a) submit, b) collect, c) and evaluate tenders (e-tendering).

- Public agencies can electronically access catalogues of services/goods from qualified suppliers (e-catalogues).
- Public agencies can make orders electronically, be invoiced and pay electronically (e-ordering).
- Public agencies can meet in an electronic marketplace to directly negotiate goods and services with suppliers (e-auctioning).

– Question 4: To what extent has the introduction of electronic processes for public procurement been accompanied by efforts to automate, simplify and re-engineer existing processes? Please briefly make a concrete example.

– Question 5: Has the introduction of electronic processes in public procurement led to any benefit to your organisation (as listed below)? What criteria have you used to measure them?
  - Greater simplification and transparency of procedures.
  - Reduced duplication of procurement functions and offices.
  - Greater transparency and accountability of decision making.
  - Benefits of scale due to consolidated purchasing.

– Question 6: Do you have a shared IT platform for e-procurement or have agencies developed their own solutions? Does your system integrate with buyer agency systems (i.e. ERP) and supplier systems? What are the main technical challenges in maintaining and developing IT systems which support procurement solutions?

– Question 7: Have you developed technical standards (e.g. for data exchange) and requirements to allow systems interoperability? Which actors have been involved (e.g. governmental agencies, private suppliers, national and international institutions) to develop them? How successful is the application of these standards?

– Question 8: How did you go about ensuring adequate protection of e-procurement systems and networks? What solutions have you implemented to allow users to identify themselves and use the e-procurement system?

– Question 9: How have you developed staff capabilities to handle the development, implementation, and maintenance of e-procurement systems? Please refer to the list below:

  - understand public e-procurement policies and practices.
  - understand technical requirements (e.g. technical/programming/help desk skills).
  - develop managerial skills and process knowledge related to new systems.
  - build and maintain relationship with suppliers and other stakeholders.

OVERVIEW OF RESPONSES BY QUESTION

- **Question 1: Have you introduced the necessary laws and regulations to support e-procurement solutions at the national level (e.g. rules allowing e-auctions or e-bidding processes; legal requirements for identification of bidders and suppliers)? Which administrative tools and mechanisms (e.g. revision of existing laws and procedures) have you identified and used to build up a sound regulatory environment for e-procurement? What are the major barriers to building such a framework and how have you overcome them?**

Algeria is in the phase of preparing regulations to allow use of electronic signatures. In fact, a recent amendment to the civil "civil code" has accepted electronic signatures. But to apply this amendment, Algeria must install authentication and central institutions. A decree is in the process of being formulized. It is expected to:

- First: Create a central authority for authentication, which will be attached to the Presidency of the Republic.
- Second: Put in place the procedures for the certification authorities.

This decree allows both public and private operators to provide certification services.

Egypt is now preparing the process to modify the law organizing tenders and reverse auctions to be aligned with the implementation of E-Procurement. The focus is on studying the current law and defining which articles must be changed to allow the use of E-Procurement, and to allow the re-engineering of different processes. The revision of current law has involved many concerned organizations:

1. Local organizations such as the Ministry of Finance, Ministry of State for Administrative development and some private sector organizations.
2. Foreign organizations such as USAID and World Bank.

The suggestions are as follows:

1. Legalize the use of E-signatures to be able to identify the suppliers and the bidders. (The implementation of the government CA is in progress).
2. Using the Internet as a medium to announce the existence of new tender instead of newspaper advertisements.
3. Legalize the use of encrypted bids over the E-Procurement portal instead of presenting the hard copy bids in a closed envelope.

Major barriers that might face implementation of these changes to the current law can be:

1. Low Internet usage by Egyptian suppliers.
2. Security issues.

The Ministry of State for Administrative Development set a strategy to overcome these barriers by leading an awareness campaign on using the internet, especially the E-Procurement portal, and emphasizing the security levels applied on the E-Procurement portal to secure the data on tenders and offers.

Public Sector Procurement in **Lebanon** is governed by a number of laws and regulations which address state tenders and public accounting. The provisions of these laws apply to all ministries, government administrations, local government units and public authorities, except those for which are covered by particular conditions in laws and decrees governing their establishment and operations, such as the Council for Development and Reconstruction (CDR) or international laws and grants.

In 2000, the Office of the Minister of State for Administrative Reform (OMSAR) received an IDF grant from the World Bank to draft a new public procurement law and related implementation decrees in line with international public procurement best practices. Work on this initiative has resulted in a draft law and two implementation decrees, which have been reviewed by a Ministerial Committee. The major actors agree on the main directions of the proposal, which include the modernization of the procurement process, with a need to further elaborate and refine some elements; this will be addressed in a planned follow-up mission with stakeholder involvement.

Moreover, significant work is taking place around creating a basket of ICT enabling laws, which includes e-signature, security, data privacy, consumer online protection, cyber crimes, anti-spam and unsolicited marketing communication. The complete and timely passage of these laws by the Government of Lebanon will provide the necessary national policies required to move the plans for e-procurement and other e-government applications into more advanced stages.

Morocco: To support electronic trade and to set up the necessary conditions for its introduction into national commercial practices, the Moroccan regulatory framework should be amended in 2006 to include provisions relating to the electronic exchange of legal data.

Based on the recommendations of international organizations and European directives, this project:

- Confers on acts conducted electronically the same legal force as those conducted according to the classical processes, and implements related techniques of certification and cryptography.
- Forecasts the installation of an authority in charge of the implementation of the certification system.
- Envisages the obligations of providers of electronic certification and the holders of electronic certificates.

This legislation was debated by the Moroccan government on 19 January 2006 before being submitted to the Parliament. The promulgation of the legislation relating to the electronic exchange of legal data will certainly promote the development of the commercial electronic domain.

Based on the results of a survey conducted in March 2005 by the observatory of information technologies of the ANRT1, Morocco has 4 million Internet users (12% of the population), and 90% of Moroccan companies have been connected to the Internet. About 14% of those companies have systems in place to make purchases online and another 4% state that they intend to implement online purchasing and selling during the coming 12 months; this total represents 18%. This demonstrates that use of this mode of transactions will increase with the adoption of legislation on electronic trace and the multiplication of e-procurement portals.

For the **United Arab Emirates**, a Federal Law has been drafted by the Ministry of Economy and Planning on e-commerce; it is under review by the Cabinet. The Emirate of Dubai has passed the Electronic Transactions and Commerce Law, (Law No. 2) dated February 12, 2002 covering electronic transactions for the Emirate of Dubai. All government agencies in Dubai are required to use the tejari.com e-procurement system.

"Law No. 2 was created to lead to the attainment of the following objectives:

a. Facilitate Electronic Communications by means of reliable Electronic Records;
b. Facilitate and eliminate any barriers to Electronic Commerce and other Electronic Transactions which may result from uncertainties over writing and signature requirements, and promote the development of the legal and business infrastructure necessary to implement secure Electronic Commerce;
c. Facilitate the transmission of Electronic Documents to Government agencies and corporations, and promote efficient delivery of services by such agencies and corporations by means of reliable Electronic Communications;
d. Minimise incidences of forgery related to Electronic Communications including their subsequent amendment and chances of fraud in Electronic Commerce and other Electronic Transactions;
e. Establish uniform rules, regulations and standards with regard to authentication and integrity of Electronic Communications;
f. Promote public confidence in the integrity and validity of Electronic transactions, Communications and Records;
g. Enhance the development of Electronic Commerce and other transactions on the national and international level through the use of Electronic Signatures."

For additional detailed information on the law, please refer to the following link: http://www.tecom.ae/law/law_2.htm

Barriers to such activity did exist for both government organizations and corporations. Some of these issues involved:

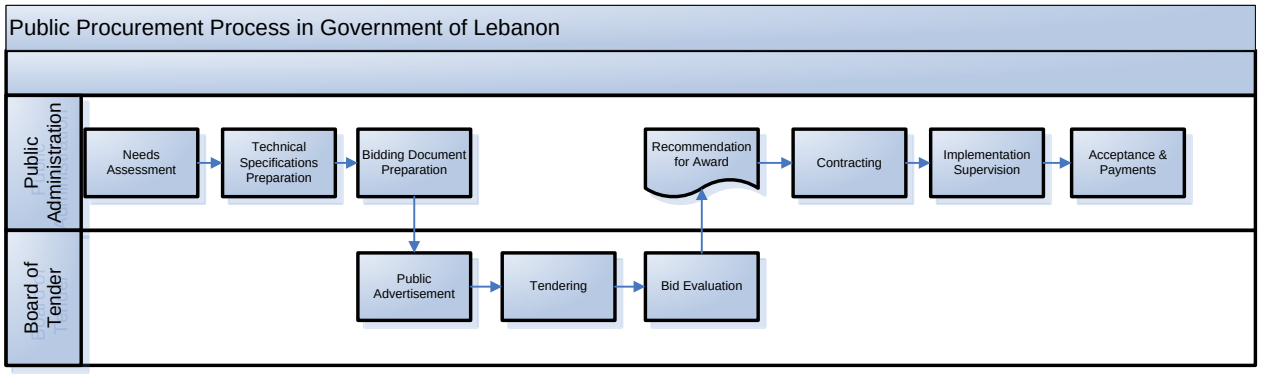
- The top inhibitors are lack of awareness, and lack of suppliers and buyers.
- Other inhibitors include:
  - ROI of new technology/infrastructure/etc. that facilitates e-commerce.
  - Change management of traditional purchasing practices.
  - Willingness of both buyers and suppliers (trading partners) to switch to online processes, in a country where Internet penetration is around 45% and regional rates can be as low as 3% to 5% in some countries.
  - Security of data transfer.

– **Question 2: What are the main features of your country organisational approach to e-procurement? Do you have a central e-procurement authority or e-procurement is decentralised across agencies and levels of government? What was the reason behind your decision to either centralise or decentralise e-procurement in your country?**

In **Egypt**, the Ministry of State for Administrative Development was the organization responsible for supervising the implementation of e-procurement from the technical point of view; however, the process owner is The General Authority of Governmental Services (GAGS), Ministry of Finance. GAGS will be responsible for central procurement in Egypt for general items used by all government organizations. For items that can not be procured centrally, the E-Procurement system will allow for a decentralized operation. So, Egypt will implement both approaches according to business needs. We can summarize the use of centralized or decentralized approaches in Egypt for the following items:

1. General items (items used by all government authorities such as paper, toner, etc.) to be purchased in a centralized way.
2. Special items (items specific to an organization such as medical equipment, machinery, etc.) to be purchased in a decentralized way.
3. Any ministry can purchase some items for all organizations related to it in a centralized way.

Currently, the main actor in the public procurement process in **Lebanon** is the Board of Tenders at the Central Inspection, which is in charge of conducting public procurement tenders for the procurement of works, goods and services; by law, this agency is in charge of performing public tendering on behalf various concerned public administrations. The Board of Tenders has the responsibility for conducting the bidding process, starting with public advertisement through bid submission and finalized at bid evaluation with documented recommendations for award. The concerned public administration has the responsibility for the following phases: needs assessment, technical specifications preparation, bidding document preparation, contracting, implementation supervision, acceptance and payments. After receiving the bidding document from the concerned administration, the Board of Tender checks evidence of funding appropriation, conformity to laws and regulations, special conditions of contract as well as proof of their approval by the competent authority, bidding provisions that may restrict competition or favour certain bidders, and correctness of estimated quantities and prices. Following the public tendering procedures, the Board of Tenders participates in a joint committee with the concerned public administration to evaluate received bids, which results in a recommendation for award. After this stage, the Board of Tenders is no longer involved in any decision regarding contracting and follow-up.



Both the Federal and local government have a decentralized approach to procurement. The authority to purchase, based on the amount, is decentralized for various government entities. However, the e-procurement solution is centralized, due to the reasons below:

- The approach towards an ASP model for e-procurement that can serve all government entities.
- Lower cost of development and implementation by having a single application.
- Lower cost of hosting and data mining.
- Easier to implement unified standards & quality.

Moroccan public procurement is completely decentralized. The adoption of regionalisation as a governance mode will increase this situation.

In August 1997, the Moroccan government created the National Agency of Telecommunication Regulation (ANRT), which has been granted the authority to promulgate regulations on telecommunication, e-commerce, and encryption. Online public procurement should not derogate from this rule, even if the requirements of management and rationalisation of the costs would lead to the installation of regional or sectoral-based systems.

- **Question 3: What is your definition of e-procurement? What kind of procurement activity is e-enabled and at which stage?**
    - **Public agencies can electronically a) submit , b) collect, c) and evaluate tenders (e-tendering)**
    - **Public agencies can electronically access catalogues of services/goods from qualified suppliers (e-catalogues)**
    - **Public agencies can make orders electronically, be invoiced and pay electronically (e-ordering)**
    - **Public agencies can meet in an electronic marketplace to directly negotiate goods and services with suppliers (e-auctioning)**

Egypt is intending to implement E-Procurement for all procurement processes in a phased approach according to the following phases:
Phase 1:
The current project will enable the following functionalities:

1. Central public agency can collect electronic purchasing requisitions from different public agencies and prepare an electronic Request For Proposal (RFP).
2. Public agencies can submit the RFP on the portal and suppliers will be notified electronically of the new RFP.
3. Suppliers can submit their bids (technical and financial) on the portal. These bids will be encrypted until the tender closing date.
4. After the tender closing date, public agencies can unseal (decrypt) the bids and evaluate them electronically by using automatic evaluation (objective scoring); alternatively, public agencies evaluation members can enter the evaluation results on the portal (objective scoring).
5. Tender results and awarding will be done electronically through the portal, and electronic notifications will be sent to bidders with the published results.
6. Public agencies can access catalogues of services and goods provided by all Egyptian suppliers.

Phase 2:
After succeeding in implementing the current project, the next step will be to implement a new project with the following functionalities:

1. Public agencies can send electronic purchasing orders to suppliers and invoice and pay them electronically.
2. Auctions and reverse auctions can be implemented online through the portal.

e-Procurement, a government to business application (G2B) in the Government of **Lebanon**, is a key e-service application under the high-level e-Government strategy and implementation plan prepared by the Office of the Minister of State for Administrative Reform in 2003. It also falls under the Business and Economic Track of a comprehensive National e-Strategy Implementation Plan, formally presented to all national stakeholders (public sector, private sector, NGOs, and academia) in November 2005.

As such, e-Procurement shall build on the Government's commitment to open Lebanon's economy and liberalize its trade program. This will strengthen the partnership between the public and private sectors. Although the private sector is the driver for electronic commerce, an e-procurement initiative undertaken by the government will allow it to serve as the leading example for electronic commerce on the national level and hence foster the growth of this sector.

In this context, the Government of Lebanon identified an e-Procurement project with the purpose of enhancing the current procurement activities through studying, rationalizing, and planning procedures to achieve the following overall objectives:

- Standardizing procurement policy across the government.
- Facilitating the centralization of government procurement activities.
- Better management of budget.
- Minimizing maverick buying and increasing transparency and accountability.
- Realizing volume discounts.
- Reducing purchase order costs to the extent possible.
- Speeding approvals and reducing order-to-delivery cycles.
- Reaching improved and more accurate statistics to identify spending trends and negotiate better contracts.
- Increasing the productivity and capacity of current government procurement officers.
- Strengthening the partnership between the public and private sectors.

Currently, the public tendering process only advertises bids electronically on the Board of Tenders Web site. A pilot implementation was defined with the following benefits:

- Consolidating multiple requests to arrive at better offers from suppliers, as a result of volume discounts.
- Pre-qualifying a great number of vendors or suppliers to fulfill government orders.
- Enforcing purchasing policies (standard specifications) and controlling spending.
- Better tracking and monitoring of all transactions, generating accurate statistics, and monitoring spending on a national scale.
- Providing more organized, transparent and instantly auditable procurement services.

The result of this project proposal was a project document, signed in November 2005, between the Government of Lebanon and the Development Gateway Foundation and the Government of Italy for a pilot e-Procurement implementation grant.

The key components of the proposed pilot e-Procurement project are:

1. Assessing and improving the processes related to the procurement of goods. This will cover the on-site mapping of all the processes relating to the procurement of goods, highlighting the existing critical stages; the design of a workflow for the procurement of goods processes; and the definition of industry standard e-catalogues for goods.
2. Specialized training will cover high-level training of international e-procurement best practices, complemented with the specific processes related to the particularities of the Lebanese public procurement solutions.
3. ICT pilot implementation will cover the customization and implementation of a secure online e-Procurement workflow based on a commonly accessible electronic platform, which may be a web portal, openly accessible via the Internet. This platform will operate as a single access point for users (e.g. procurement officers, private sector suppliers, etc).

Moroccco's purchase online system uses Internet technologies to put customers and suppliers in contact and to operate dematerialised commercial transactions. Taking into consideration the existing legal constraints – particularly on the level of the public purchase framework –online procurement is limited to the use of governmental portals, to inform of services' intended purchases through the publication of invitations to tender and also to download technical specification files.

In addition, the Moroccan Ministry of Finance, in its capacity as a public organization of control and payment, has allowed companies that have contracted a market to track their administrative situation online. Services such as e-ordering and e-auctioning are not currently available.

The **United Arab Emirates** looks at the CIPS definition of E-procurement as an accurate definition:

"E-procurement is using the Internet to operate the transactional aspects of requisitioning, authorising, ordering, receipting and payment processes for the required services or products."

- Tejari is currently used conduct all requisitioning, auctioning, catalogue ordering, authorization and acknowledgement of requirements. Tejari is in the process of developing and integrating an e-payment gateway that will facilitate collection of tender fees and subscription fees if applicable.

- **Question 4: To what extent the introduction of electronic processes for public procurement has been accompanied by efforts to automate, simplify and re-engineer existing processes? Please briefly make a concrete example.**

In **Egypt**, to implement the E-Procurement project all processes related to procurement were analyzed; some processes were simplified, but some will be automated as is because they are defined by law. After changing the law, some remaining processes will be re-engineered and simplified. The following is an example of a process that will be simplified in the new environment: the technical evaluation of the offers presented in any tender usually takes a long time to be accomplished because offers are huge and not structured and formatted in the same way, so the committee has to read them and summarize them in a single sheet to be able to compare offers and determine scores for the different bidders. The E-Procurement will simplify this process in the following manner:

- When preparing the RFP, the government organization prepares the standard sheet for the bidders to fill in their to make offers.
- When evaluating, the system will automatically show a comparison screen with all the offers from all bidders.
- Either evaluation is done automatically (objective scoring) or the evaluation committee can enter its scores on the portal (subjective scoring).

Introducing electronic processes into public procurement is a general tendency of administrations in **Morocco**. For example, in 2005, the Moroccan Ministry of Finance started the installation of a Budgetary and Countable Management Operating System in order to automate the budgetary system and accounting. At this time, a complete re-engineering process was performed to simplify the existing administrative procedures.

In the **United Arab Emirates**, the introduction of a comprehensive and integrated e-procurement system has greatly reduced the time needed to reach the market place for procuring. All processes are now fully simplified and automated.

For example, for one government department, Tejari experts have conducted an extensive vendor assessment activity to assess their supplier base and create a well-defined supplier performance management solution based on the EFQM model that incorporates the RADAR approach to achieving results.

For another government department, Tejari experts have analyzed and mapped the procurement process highlighting bottlenecks and areas for improvement where technology utilization may be optimized.

Another example is the use of Tejari e-procurement system by the Armed Forces, who were able to

- Achieve 40% savings of their fire fighting equipment and 14% savings for IT Hardware through structured online comparisons and negotiations.

- Achieve more transparency, shorter cycle time and new sources of supplies.

- **Question 5: Has the introduction of electronic processes in public procurement led to any benefit to your organisation (as listed below)? What criteria have you used to measure them?**
    - **Greater simplification and transparency of procedures**
    - **Reduced duplication of procurement functions and offices**
    - **Greater transparency and accountability of decision making**
    - **Benefits of scale due to consolidated purchasing**

E-Procurement in **Egypt** will introduce many benefits to governmental organizations such as:

- Increase transparency.
- Reduce duplication of procurement functions.
- Provide government needs with the best prices.
- Reduce the cost of tendering.
- Reduce the duration of preparing tenders and evaluating them.
- Simplify the tendering process.

The criteria used to measure these benefits are:

- Percentage of tender and award notices published electronically.
- Percentage of expenditure on supplies and services supported by e-tendering.
- Percentage of national expenditure on supplies and services collectively procured.
- User, supplier, and buyer satisfaction levels (using surveys).
- Percentage of electronic bids.

In **Morocco**, the public organizations adopted the possibilities offered by the Internet to diffuse on their institutional portals the previsional programs of purchase for the current year and invitations to tender. Mailing lists were implemented to inform subscribed suppliers of the intentions of purchase.

By adopting this mode of information, the Moroccan administration has contributed to a certain extent to expansion of competition and thus to greater transparency in the process of public procurement.

The **United Arab Emirates** have indeed benefited from all the issues listed. Our measurement criteria include:

- A fully documented procurement system that is known to all. (This provided us a basis for removing all duplicated activities within departments and unwanted steps.)
- Purchasing time compared to the old system. (This measure is also used to measure the cost of purchasing and the simplification of processes).
- Transparency and accountability has gained the most from e-procurement. Information that is readily available by all parties involved ensures any person making a decision is also accountable for any action taken. The reduction of “purchase dispute” is used as a measure for this.
- By having the information on purchases so readily available, we were able to analyse data more accurately. This allowed us to consolidate all our common purchase towards a “central contract” approach. The central contact provided us the bargaining power to reduce the cost of these common products.

- **Question 6: Do you have a shared IT platform for e-procurement or have agencies developed their own solutions? Does your system integrate with buyer agency systems (i.e. ERP) and supplier systems? What are the main technical challenges in maintaining and developing IT systems which support procurement solutions?**

E-Procurement in **Egypt** will be implemented on a single platform throughout government; it will be hosted in one organization and accessible through the Internet to all buyers (government organizations) and suppliers. The Ministry of State for Administrative Development is publishing a single ERP system for all government organizations and the E-Procurement system will integrate with this ERP in all government organizations.

The main technical challenges in maintaining and developing the IT systems are:

- Maintaining the E-Procurement servers up and running 24/7; this will be accomplished by creating a fail over redundant server farm and a strong backup strategy.
- A strong IT support team will be available to help all government organizations experiencing any technical problems; this support team will be available 24/7.
- Developing a modular system aligned with the current law and can be easily modified if needed.

In the **United Arab Emirates**:

- The platform that the Government of Dubai utilizes for e-Procurement is Tejari's Marketplace. It is an Oracle Exchange application based on the Oracle 9i database and Application Server. Tejari Marketplace is hosted in Dubai on SUN Solaris infrastructure; Tejari Marketplace is a High Availability application: 24/7 availability; Business Intelligence is based on an Oracle Data-warehouse.
- Furthermore, several Dubai government departments and private organizations have ERPs that can be and are integrated to the Marketplace, simplifying and streamlining the procurement process. The ERPs used are Oracle eBusiness Suite, Maximo, SAP, etc.

- **Question 7: Have you developed technical standards (e.g. for data exchange) and requirements to allow systems interoperability? Which actors have been involved (e.g. governmental agencies, private suppliers, national and international institutions) to develop them? How successful is the application of these standards?**

Egypt's technical standards and requirements to allow system interoperability were defined when the system was designed. The different actors who were involved in defining them are:

- Ministry of State for Administrative Development.
- Private Companies implementing the E-Procurement system.
- USAID – ICT program in Egypt.

The infrastructural requirements for an e-Procurement solution in **Lebanon** are available, because a large number of public administrations are networked. Moreover, the proposed project covers the installation of internal Local Area Network (LAN) systems and communications setups in the chosen public administrations on which data may be processed, consolidated and then forwarded to the Board of Tenders, in addition to the installation of a LAN in the Board of Tenders (the central system) for the collection and consolidation of data inflows from the other government entities participating in the pilot.

Technical standards, in particular data definition and exchange, were documented in 2002 as part of a comprehensive ICT Standards and Guidelines project, launched by the Office of the Minister of State of Reform, with the specific aim of improving the various ICT processes in the public sector and improving relationships with the Private Sector. The standards were developed by an international consultancy firm, which included national representatives working in the private sector, jointly with the professional staff members of the Office of the Minister of State for Administrative Reform. The implementation of those standards is currently ad-hoc, awaiting the launch of the global e-Government action plan for full generalization.

In **Morocco**, the electronic data exchange was implemented at the level of several sectors in both the public (customs) and private sectors (banks); this has allowed the integration of existing heterogeneous systems. Thus, technical standards (*e.g.* XML) were installed to operate these exchanges, based on new technologies. However, this mode of exchange was not yet implemented on the level of public procurement, particularly between the public and private sector.

For the **United Arab Emirates**, XML is the language standard for data exchange. Successful application of these standards has been realized.

- **Question 8: How did you go about ensuring an adequate protection of e-procurement systems and networks? What solutions have you implemented to allow users to identify themselves and use the e-procurement system?**

For **Egypt**, deploying a Government e-Tenders Portal on the Internet is no doubt a venture that requires strong security measures to reduce the risk of sensitive and critical data being accessed by unauthorized users/entities. Among the best ways to mitigate this risk is to provide multiple layers of security mechanisms, so that failure of a single mechanism does not result in compromising unauthorized access to critical information. We refer to this concept as deep data protection; it will be provided through Virtual Private Database, SSL, Selective data encryption, PKI support and auditing.

In the **United Arab Emirates**, Sensitive Data is encrypted (credit card Numbers and password) while stored in the database. Physical security: 4-Layer Physical security measures are in place including two levels of Biometric Authentication. The whole marketplace is hosted in a lights-off location at a 3rd party. State-of-the-art Network Security measures and tools including Intrusion Detection, Multi-layers of firewalls and 24/7 Security Monitoring. Tejari is a standard Oracle Exchange with an Oracle 9i database backend. Oracle 9i is the most secure Database server to date. Since security in Tejari is managed as an ongoing process, penetration testing is performed by 3rd parties to ensure compliance with the latest standards. Tejari is in the process of implementing Server Side Certificates based on SSL Technology.

All users of the e-Procurement platform must be members of the Marketplace. For membership status, legal trade licenses must be presented, along with yearly membership fees that vary according to privileges sought (no. of auctions allowed, no. of users, etc.)

Both the federal and local government are now reviewing a common Identity Management System that will allow for better data security and privacy.

- **Question 9: How have you developed staff capabilities to handle the development, implementation, and maintenance of e-procurement systems? Please refer to the list below:**

    - **understand public e-procurement policies and practices**
    - **understand technical requirements (e.g. technical/programming/help desk skills)**
    - **develop managerial skills and process knowledge related to new systems**
    - **build and maintain relationship with suppliers and other stakeholders**

To ensure the best implementation of E-Procurement in **Egypt**, some actions will be taken to increase the capabilities of the internal and external staff who are involved in the procurement cycle. These actions are the following:

- The procurement personnel in all government organizations that will be using the E-Procurement system will get training on basic computer skills, as well as all the E-Procurement system functionalities. (Managerial, executive and technical levels).
- A government help desk team will be developed and trained to solve any technical problems that may face any organization.
- A support team will be developed to maintain the servers.
- An awareness campaign will be conducted to train suppliers on using the E-Procurement portal, and a help desk will be developed to answer their enquiries and help them through the system.

In **Lebanon**, Human capacity development has been addressed in the e-Government strategy by a proposal for the establishment of a government-wide central operations and management unit, as well as field operational management units at the various ministries, agencies and international offices (details can be found in the e-Government strategy document at www.omsar.gov.lb). This will ensure sustainability, proper monitoring and evaluation, and the sharing of lessons learned nationally, regionally and internationally. Moreover, the proposed project covers specialized e-procurement policies and practices, specialized process knowledge for senior officials, as well as ICT technical training on the proposed solution.

In the **UAE**, all employees working with the e-procurement system will have to undergo a compulsory training on the use of this application. There is a dedicated help desk centre that deals with all issues pertaining to procurement (technical and non technical). Suppliers are also made aware of the system through various seminars and promotional documents.

As the UAE is currently undergoing a major project to improve its effectiveness and efficiency, its relationship with suppliers is also changing. The government is keen to outsource non-core government services. This has a major effect on how we deal with suppliers and maintain a long-term relationship with them. The government are facing new challenges in building relationships with suppliers, as a new breed of suppliers are investing with it. The government is creating contracts that look at performance and service level rather just products and delivery time. New capabilities are required, and training becomes a very important investment. Currently the government is working with various institutions of higher learning on training our managerial staff on new management techniques that will be brought by the technology. The first program for senior management team was conducted by Harvard University over a seven-week period. Some of the main topics include public-private sector partnerships and international negotiations.