e-Procurement

JUNE 2015

e-Procurement. Agenda

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❖ Financial sustainability and projection

e-Procurement. What is it?

e-Procurement (i.e. Electronic Procurement), is a web-based, collaborative technology to facilitate the full lifecycle of a tendering process, for both buyers and suppliers, offering a secure interactive, dynamic environment for procurements of any nature, size, complexity or value, enforcing (where appropriate) and encouraging recognized best practices (i.e. gateway reviews, standardized templates, e-Auctions, etc.). e-Procurement includes collaborative technology in support of tendering and contract management activities by enabling geographically dispersed groups of internal stakeholders to share best practices.

The main objective of this project is the implementation of a solution which enables all the stakeholders involved in the public procurement process, namely Ministry of Finance, PSC, Contracting Authorities, and Economic Operators to electronically perform their roles in an efficient and effective manner.

Expected benefits

- Compliance with the Procurement Legal Framework
- Easier and faster tenders evaluation
- Secure submission of tender documentation
- Reduced cost for the provision of the procurement services.
  - *Savings in transactional costs for public procurement procedures of 50%-70% resulting:*
    - *From elimination of duplication of work*
    - *By automation of non-value added activities*
    - *Due to reduction of mistakes*
  - *Savings in actual monetary costs resulting :*
    - *From reduced prices due to accumulation of demand in Framework Agreements benefiting smaller purchasers via e-catalogue purchasing (estimated saving ranges from 5% to 40%)*
    - *From better quality products as a result of increased competition*
- Time-efficiency gains / reduced cycle time
- Operational Efficiencies - Improved service provision to Economic Operators and Contracting Authorities, while ensuring timely, immediate, rigorous and consistent processing
- Economic Operators have access to procurement opportunities via a single purchasing portal
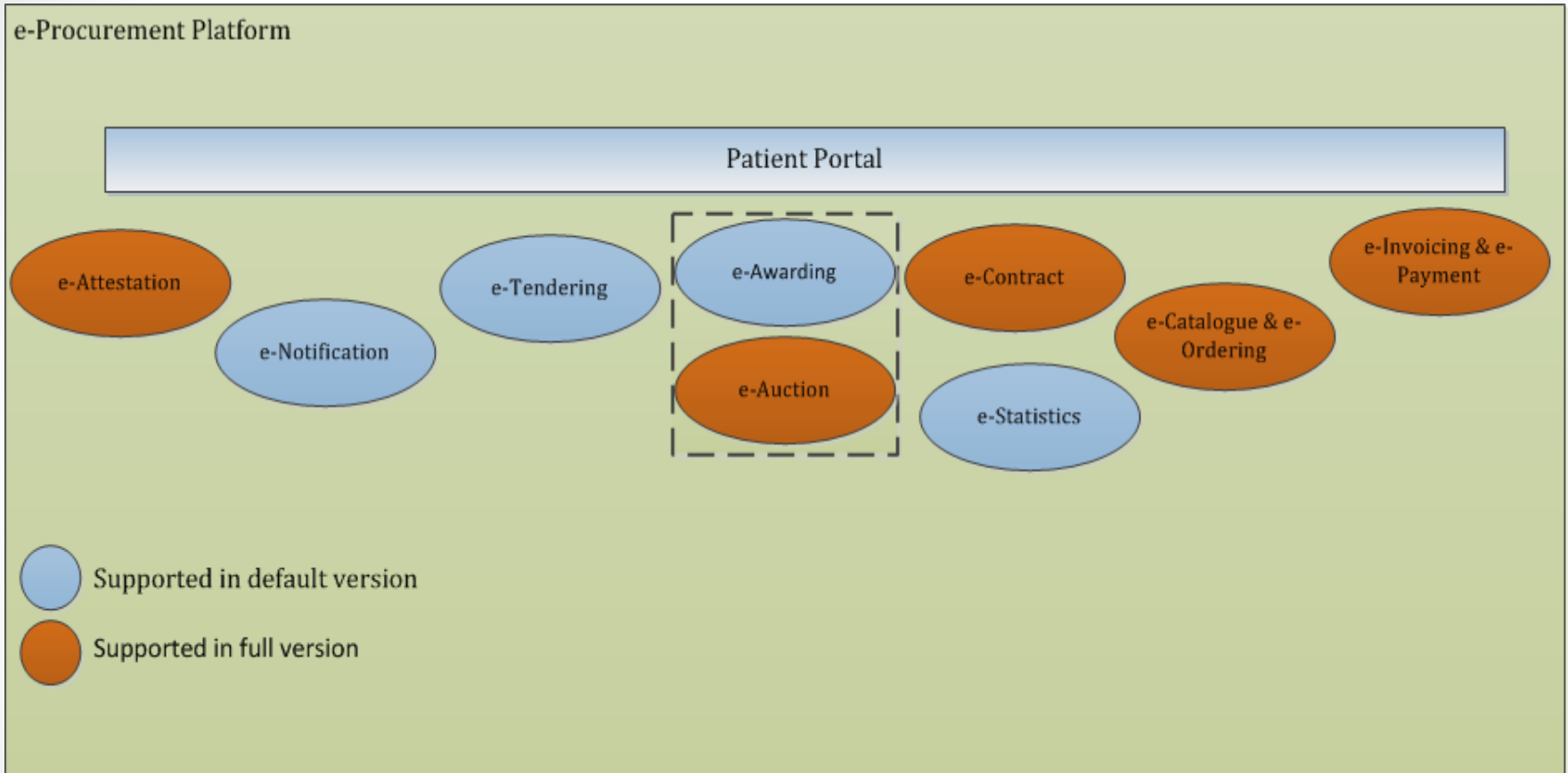
Basic Principals on Public Procurement

➢ Transparency

➢ Equal treatment

➢ Non Discrimination

➢ Proportionality

➢ Mutual Recognition

➢ Law on Procurement

➢ Regulation development

e-Procurement functionality

➢ User Registration

➢ Implemented open procedures and framework agreements (*open and planned procedures, negotiated and accelerated procedures, specific orders*)

➢ All public tenders are handled by this platform

➢ Procurement planning

➢ Contract Drafting

➢ Contract Management and monitoring

➢ Post-award eOrdering, eInvoicing and ePayments

➢ eCatalogues

e-Procurement Architecture

e-Procurement Platform

Patient Portal

e-Attestation · e-Notification · e-Tendering · e-Awarding · e-Auction · e-Contract · e-Statistics · e-Catalogue & e-Ordering · e-Invoicing & e-Payment

Supported in default version

Supported in full version

e-Procurement Modules. e-Tendering

The e-Tendering module facilitates the electronic preparation and on-line submission of tenders, either through the internet using special tools. The system provides the capability of automatic validation of electronic tenders, in order for the suppliers to receive immediate feedback to their bids.

Contracting Authorities may	Suppliers may
Create and manage tender workspaces	Search for open business opportunities
Use a step-by-step tool for creating ITTs, PQQs, RFIs	Express interest in opportunity and automatically receive updates
Re-use previous templates	Manage organization users
Receive and log expressions of interest from suppliers	Re-use response data from previous tenders
Receive and log expressions of interest from suppliers	Alternatively download, complete and upload PQQs or ITTs.
Communicate with potential suppliers either individual or by broadcast.	Complete PQQs or ITTs on line, entering information directly into the system
Selectively invite suppliers to submit tenders in restricted procedures and framework contracts	Contact Contracting Authorities for clarifications
Collaborate with cooperating contracting authorities, if any, for gathering requirements.	
Utilize a 'locked box' facility where tenders cannot be accessed until the deadline has passed.	
Process the logs to create auditing reports	
Manage contracting authorities and users	

e-Procurement Modules. e-Awarding

The e-Awarding module facilitates the opening and evaluation of tenders, in line with the related applicable legal regulations. The evaluation of tenders is achieved with the use of the established methods (Most Economically Advantageous Tender - MEAT or Lowest Price criterion), while the evaluation procedure can include e-Auctions.

Contracting Authorities may	Suppliers may
Develop evaluation criteria, model and strategy either locally or by importing from the e-Notification or e-Tendering module	This module is only available for Contracting Authorities
Assign evaluation weightings	
Assign and manage evaluators based on the four-eye principle and the expertise of each officer	
Re-use previous evaluation templates	
Utilize electronic collaboration between evaluators	
Automatically notify the supplier of the winning bid of contract award and inform those that have been unsuccessful	

e-Procurement Modules. e-Notification

The e-Notification module has been accredited as an e-Sender by the Office for Official Publications and provides an automated procedure to publish contract notices in the publication boards. Furthermore, it supports easy electronic access to tender documents and clarifications.

Contracting Authorities may	Suppliers may
Create and manage tender workspaces.	Search for open business opportunities
Use a step-by-step tool for issuing a contract notice	Express interest in opportunity and automatically receive updates
Validate notices according to local regulations	Contact Contracting Authorities for clarifications
Re-use previous templates	Manage organization users
Automatically publish notices on the Authority's portal, national gazette	
Receive feedback by prospect suppliers regarding individual notices	
Manage contracting authorities and users	

e-Procurement Modules. e-Attestation

The e-Attestation module is a supplier profiling and database tool. It allows Contracting Authorities to build sophisticated strategic sourcing databases and Suppliers to upload relevant information on selection and exclusion criteria that apply to a specific category.

Contracting Authorities may	Suppliers may
Search for suppliers.	Search for open business opportunities
Create lists of suppliers	Automate import of supplier data
Collect pre-qualification data	Manage multiple supplier profiles
Export data for the procurement phase	Submit pre-qualification data
Manage contracting authorities and users	Manage users of the organisation
Receive feedback by prospect suppliers regarding individual notices	
Manage contracting authorities and users	

e-Procurement Modules. e-Auction

The e-Auctions module facilitates the running of reverse auctions either in conjunction with other modules such as e-Tendering and e-Awarding or as a standalone event. Suppliers submit their improved tenders which are evaluated with the use of the established methods (Most Economically Advantageous Tender - MEAT or Lowest Price criterion)

Contracting Authorities may	Suppliers may
Maximize leverage from procurement negotiations by conducting activities online and in a transparent manner	Submit tenders live and improve their offer during the e-Auction event
Develop evaluation criteria, model and strategy either locally or by importing from the e-Notification or e-Tendering module	Monitor the progress of their bid
Carry out test runs of e-Auctions prior to the live e-Auction to ensure that all participating suppliers are fully prepared and capable of carrying out online bidding	Make preparatory arrangements in advance to participate in the e-Auction and familiarize themselves the system
Monitor supplier connectivity issues during the live event and act accordingly	Communicate transparently with the e-Auction event manager
Broadcast messages to suppliers prior, during and after the auction event	

e-Procurement Modules. e-Contract

The e-Contracts module is a dynamic subsystem of e-Procurement platform that establishes, manages and monitors contracts, collates bid history, monitors performance against agreed service level agreements (SLAs) and key performance indicators (KPIs) and alerts buyers to key events, such as contract renewal dates.

Contracting Authorities may	Suppliers may
Automate the processes associated with establishing contracts with suppliers.	This module is only available for Contracting Authorities
Manage the termination, completion and renegotiation of contracts.	
Monitor supplier performance and compliance with contract terms	
Identify any financial penalties levied on suppliers resulting from non-compliance, and lead to more informed tendering decisions for future contracts	
Receive alerts ahead of expiry dates for auto-renewal of contracts and eliminate such contracts or re-negotiate their terms	

e-Procurement Modules. e-Catalogue and e-Order

The e-Catalogues & e-Ordering module offers a collaborative environment for Contracting Authorities to consult catalogues and place purchase orders and Suppliers to upload their catalogues and manage their dossiers.

Contracting Authorities may	Suppliers may
Manage the various catalogues related activities, such as Authorization, Approval, Translation, etc., following the awarding of a contract to a particular Supplier.	Upload, update and manage catalogues following a contract award.
Search within the uploaded catalogues for a particular product	Create product packages which include several products that can be ordered at a single fixed price
Place order on particular products or services	Assign user defined e-Catalogue product attributes.
Processing and follow up orders made on particular products, until product delivery to the receiver officer.	Download a Catalogue Preparation Tool to for assistance in their e-Catalogue preparation activities

e-Procurement Modules. Others

Procurement Portal

Front End Graphical User Interface layout for all high-level functionalities described below, along with configurable secondary functionalities, such as news, Frequently Asked Questions and an online help service.   The service supports the registration of Contracting Authorities (buyers) and Economic Operators (suppliers).It provides the functionality to manage accounts as well as to authenticate the users to access the system.

e-Invoicing & e-Payment

Supports the electronic issuing and processing of invoices and payments.

e-Statistics

Supports the extraction of statistical data and the processing of information regarding to the contract awards. The service also provides the means to create reports, as required by the law, to inform the appointed authorities of the country.

Security

e-Procurement platform ensures the equal treatment of all financial institutions and the transparency of the competitions by adopting recognized and acceptable models related to the protection of sensitive information.

Time-stamping

In order to record the exact time when a tender is submitted, and to avoid any disputes or even objections, the e-Procurement platform may use the services of an independent time-stamping authority. The exact time of the submission of a tender is stored in the database of the independent authority and also sent to the Economic Operator.

Approach in dealing with challenges

- **Interoperability** –Easy self registration of suppliers –no barriers whatsoever –same day tendering
- **Identification of tenderers** –Embedded identity matching mechanism of supplier approval
- **Integrity of data** –Tendering process and use of secure communication channels (https, SSL) –Time stamping service
- **Non repudiation** –email matching -user agreement, user management
- **Security** –encryption of data and restriction of access to tenders
- **Traceability** –System records who does what, when and from where
- **Enhancement of the principles that govern public procurement:**
  - ✓ Transparency –i.e. via electronic publication of documents, timestamping and electronic opening of tenders (recording all actions)
  - ✓ Equal treatment –i.e. via the automatic and simultaneous notification to all tenderers
  - ✓ Non-discrimination –i.e. via the free access granted to all interested parties for all system facilities
  - ✓ Proportionality –i.e. via the simplification of access to information and tools available for low value purchasing

System non-functional goals

➤ System records for every action: What –Who –When and audit reports can be generated for general and specific events

➤ Security against harmful software and malicious users

  ➤ Software / hardware architecture

  ➤ Antivirus software

  ➤ Specialized intrusion prevention systems

  ➤ Specialized intrusion detection systems

  ➤ Specialized hardware for monitoring and analysis of network/system events and automated completion of respective protection actions

➤ High performance

  ➤ Provision of service through several clustered servers

➤ High availability

  ➤ 99.9% uptime of service

Introduction of regulations on use of electronic means of public procurement

❖The Legal framework establishes the principles and regulations governing the use of electronic means in public procurement.

❖The basic principle is that in the absence of any special measures for the contrary, the use of electronic means does not alter any of the steps undertaken within a public procurement procedure (i.e. open, restricted, negotiated, simplified)

❖The reasoning is to enable any Economic Operator that has a basic understanding on IT, with simple equipment to participate in public procurement procedures undertaken either partially or exclusively with the use of electronic means

❖All the user needs is to use eProcurement System is a basic computer and internet connection

Rules applicable in communication

❖ Electronic means of communication
  ➢ Electronic means are defined in the legislation and are leveled to the traditional paper based means
  ➢ Legal framework is technologically neutral and does not discriminate between open source and commercial systems, as long as they are interoperable with the various IT systems and communication technology of generalized use.
  ➢ Electronic means are based on a network that every Economic Operator can be connected to (i.e. Internet and email) and should be carefully selected to be reliable and generally available in order not to restrict access to the award procedure, ensuring the equal treatment of participants and effective competition.

❖ To avoid any ambiguity, the deadline for the submission of tenders should be accurately clarified (i.e. by referring to Coordinated Universal Time(UTC)or to refer to "local time").

❖ Given the 24X7 availability of the Internet, access to the procedures should be in general accessible 24X7. Reasonable restrictions can be foreseen, mainly due to maintenance and system upgrades for the which, office hours should be avoided.

❖ In general, every user is responsible for the quality of the network he or she uses and the level of equipment available.

❖ Responsibility for the submission of virus free tenders again lies to the economic operators.

❖ In case of technical problems hindering access to the system at critical stages of a competition, then:
  ➢ If the problem lies to the electronic system or the network used by the contracting authority, it is obliged to remedy for the damage (i.e. extending tender submission deadlines)
  ➢ If the problem lies with the system or network of an individual participant in the competition, the contracting authority is not obliged to take any corrective measures, even if it is feasible.

Integrity and Security of data

❖ Electronic systems must fulfill certain specifications in order to be eligible to handle communications, exchange and storing of information. Those prerequisites should ensure the integrity and confidentiality of Tenders.

❖ It should be ensured that tenders are kept securely locked, restricting access to everyone before the deadline is reached. Any unauthorized access to the tenders should be recorded and investigated

❖ To serve the transparency principle, information on the electronic submission of tenders as well as the encryption mechanism should be available to the interested parties.

❖ Antivirus information should also be disclosed and the contracting authorities can deny receipt of infected files

❖ Checking for viruses should run upon the receipt of the message

❖ Antivirus checks should be undertaken in such a way to safeguard the confidentiality and integrity of tenders before their official opening. Where this is not possible, antivirus checks can be undertaken during the official opening of tenders.

❖ Contracting authorities take the appropriate measures to record the award procedures undertaken with the use of electronic means.

❖ The electronic system maintains all documents in their initial form and records every action undertaken, how, when and by whom, to be given if necessary for audit or other relevant purposes.

❖ The system should provide the capability of regenerating actions, including any automatic process of data and automated calculations

Electronic transmission of notices and publication documents

❖Critical actions are time stamped to ensure the recording of the exact time an action was undertaken (i.e. submission of tenders). eProcurement System uses the services of an independent time stamping authority.

❖Economic operators should be notified if their tender was not accepted by the system.

❖Opening of tenders is performed by the simultaneous actions of two authorized people of the contracting authority

Financial sustainability and projection

e-Procurement . Example

*Total state budget around **1 500 000 000** $*

Operational fee 1%

Company yearly income calculation:

*(**1 500 000 000** $ * 1%)/ 100% = **15 000 000** $*

Years	Revenue $	Expenses $	Investment $	Total $
1st	+ 15 000 000	- 200 000	- 2 000 000	+ 12 800 000
2nd	+ 15 500 000	- 350 000	- 5 000 000	+ 10 150 000
3rd	+ 16 000 000	- 500 000	- 600 000	+ 14 900 000
Total for 3 years				37 850 000

Thank You!