





# ELECTRONIC GOVERNMENT PROCUREMENT -ROADMAP-



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### Introduction

The use of electronic means to enhance the management of the procurement process is one of the central components of Public sector reform due to its potential impact on Public Sector efficiency and effectiveness, on the institutional reorganization process, on businesses productivity and competition levels and on the level of trust form the public.

The main difficulty in implementing e-GP lies on **knowing how to start, and the stages to be followed**.

Several countries have already developed their own e-GP processes, under various models, achieving different degrees of success. These experiences have provided several key components to be taken into account in order to develop a successful e-GP process. These are the components used to build this Roadmap.

### **Characteristics of this e-GP Roadmap:**

- It is **indicative**. This Roadmap is as a guide that must be adapted to the strengths, weaknesses, degree of development and any other set of **conditions specific to every single procurement process**.
- It is **general**. It **can be applied in all countries, regions, and municipalities.** This roadmap serves as a baseline for the creation of a more specific one.
- It is **progressive**. It recognizes that the transformation of the Public Sector is a gradual process and as such, it proposes a progressive development from the less complicated stages to more expensive and resource demanding issues. Therefore, this Roadmap does not recommend "big bang" approaches.
- It is **integral**. It is based on the fact that the role played by e-GP in the modernization of Public Sector processes encompasses a combination of institutional changes, political decision-making, legal and regulatory development, selection and implementation of standards, trade promotion, human resources development, computer science and the private sector involvement. It therefore, does not focus only on administrative or technological issues, and does not promote "plug and play" solutions, because of their lack of ability for promoting structural changes and the limited of their effects.

With these characteristics, the Roadmap is built to facilitate a faster, less expensive, more successful and institutionally solid implementation of e-GP.

### Instructions for the use of the Roadmap

This Roadmap has been developed as a part of a group of complementary documents on e-GP. Due to its guiding role, it is important to know the most fundamental documents of this series:

- e-GP: Strategic Overview
- e-GP: Standards Framework.

There are two other documents which should be used that serve as a guide in the Preparation stage.

- e-GP: Readiness Assessment
- e-GP: Strategic Planning Guide

These documents can be found at <a href="http://www.mdb-egp.org">http://www.mdb-egp.org</a>

### **Basic Concepts**

### **Government Procurement (GP)**

All Government Procurement Processes have four main stages:

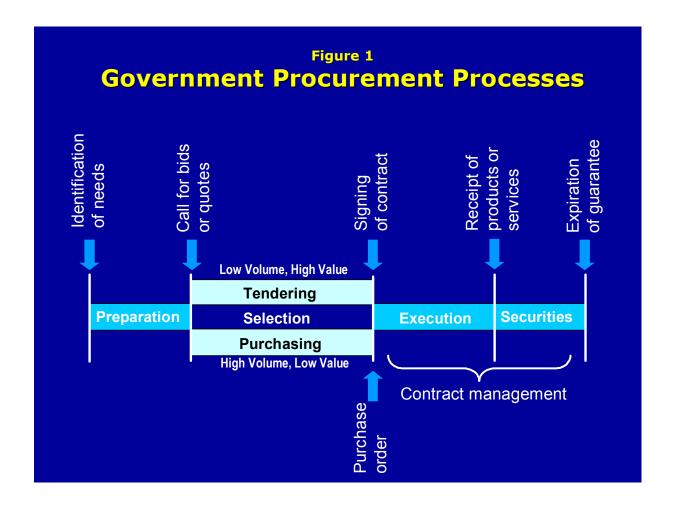
- Preparation: Determination of the need to be met and identification of the works, goods and/or services to be obtained in order to do so. This first stage concludes with a precise specification of the goods or services, budget and the procurement method for bid reception.
- Selection: The search for the best-evaluated bid through the tendering or purchasing methods.
  - **Price quotation**: This method is used for the procurement of standardized common use goods, works and services. It involves high volume and low value contracts.
  - **Tendering**: This method is used for the procurement of specialized common use goods, works and services. This type of procurement has a high economic impact since involves low volume and high value contracts.

This stage concludes with the signing of the contract, in the case of a tendering process, or with the issuance of the purchase order or the delivery of the service, in the case of a price quote.

- Implementation: During this stage, the supplier delivers the goods or services. The executing agency verifies their validity and makes the corresponding payments. It concludes with the final acceptance of the good or service concerned.
- Securities: Provision of after-sale services in respect
  of the good or service acquired over the time period
  stipulated in the contract or purchase order. This
  stage is completed when the guarantee expires.

Contract Management: Includes the implementation and bid securities stages, which follow the signing of the contract or the issuance of the purchase order.

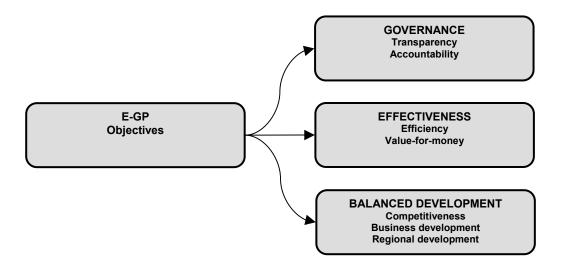
The figure appearing on the following page depicts the stages of the government procurement process, including its two selection options.



### e-GP objectives

Electronic Government Procurement (e-GP) is the use of information technology (especially the Internet) by governments in conducting their procurement relationships with suppliers and contractors for the procurement of works, goods, and services required by the public sector. e-GP breaks down the physical barriers of space and time and allows a more transparent and efficient information flow and wider access to information and services. These information facilities include the Internet, standards, simplified procedures, databases and communications that might support the three broad objectives for an e-GP strategy, illustrated in Figure 2.

Figure 2 **Objectives for e-GP** 



**a. Governance.** With the help of e-procedures, all procurement processes can be monitored by anyone wishing to do so. In other words, processes, decisions and results of government procurement operations can be viewed online (as they take place) by potential suppliers, the general public and the government itself.

The procurement process can be monitored by everybody, from anywhere at anytime.

This provides the ground for creating indicators and making comparisons. These activities promote accountability and efficiency. They also are an incentive for new providers and increase the level of trust, which encourages competition.

**b. Efficiency.** e-GP implies standardization, streamlining and integration of processes. This helps in the reduction of administrative costs and processing times. Furthermore, an increment in competition and the reduction of costs for suppliers promotes important reductions of the prices of goods and services procured.

Less time, less costs, lower prices and more impact.

By increasing the effectiveness of public investment, eprocurement systems maximize this investment (more investment for the same level of expenditure) and can ease the tax burden borne by a country's citizenry (implementation of the necessary investments at a lower level of expenditure). **c. Balanced Development.** An e-GP solution must allow government procurement to be a commercial incentive that therefore encourages productivity and competition, increases anti-trust mechanisms, facilitates the development of SMEs (less entry barriers to government markets), and promotes local and regional economies (better use of economies of scale and location).

These actions set the basis for a public investment, which is more balanced, fair and promotes development. Thus, it helps less developed countries to move towards a successful position in their regional and global integration programs.

A procurement process that promotes competition, productivity, SMEs and economic decentralization.

All three objectives are mutually compatible and can be pursued simultaneously for much the same costs as aiming for just one of these levels alone. The issues are primarily about design, standards and management rather than resources.

However while all of these benefits are mutually compatible it does not follow that the pursuit of just one or two will automatically deliver all three. For example greater transparency and accountability, as well as efficiency of transactions can be generated from an e-GP framework built around closed standards, but such a framework will have restricted interoperability and play less of a catalytic role in technology take-up more broadly through the economy.

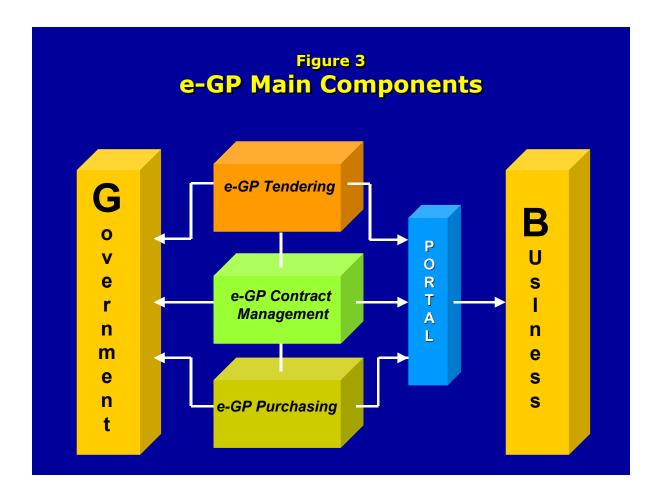
Frequently, developing countries have a stronger focus on the governance issues with others more interested in the effectiveness and efficiency goals. Most jurisdictions also have an interest in the third objective – economic and business development. In some cases, such as Korea, enhanced policy making capacity is also defined as an objective for e-procurement.

e-GP main areas

A full e-GP solution comprises three main areas as shown in Figure 3. These areas will serve as the framework for this Road Map.

- e-Tendering: A solution designed to electronically enhance the processes of public tendering for the procurement of specialized works, goods, and consulting services that are of high value and low volume. It starts when a government agency issues a series of procurement documents containing its specific procurement requirements. The introduction of e-tendering can be phased and provides wide exposure to e-GP at a low incremental cost.
- **e-Purchasing:** A solution designed to electronically facilitate the procurement standard goods and services that are of low value and high volume. Key components of the system tend to be complex and require substantial system development. Catalogues are a basic standard for this type of procurement. The process goes from the publication of items online by the suppliers, to the electronic selection, order, reception and payments by the purchasing side.

 e-Contract Management: is the electronic enhancement of the management of receivables, payments, contract settlements, contract variations, bid securities, and auditing and control activities.



Why e-GP?

Until now, a key investment focus of most governments has been on physical infrastructure. This traditionally has meant very large investments in roads, ports, etc, with long-term rates of return. However, this focus is changing, with interactive and communication technologies playing an increasing role in productive capacity. Just one decade ago information technologies were a minor component of new capital investment worldwide but now represent more than half of such investment in some countries. These technologies are not just another piece of infrastructure or capital, but represent a profound shift in the means of production, the scope for broad community participation in commercial and social activity, as well as the methods and roles of government itself. Online technologies are increasingly providing the means for enhancing intellectual capacity, just as the industrial revolution has enhanced physical capacity.

The consequences of these developments potentially transform the ways in which governments interact with their constituents, manage their affairs and ensure good

governance. Therefore, capacity building is increasingly also meaning the take-up, adaptation and exploitation of online technologies.

Al the same time, the traditional government procurement processes are no longer capable of achieving their stated objectives even when they are properly applied.

For a more detailed analysis, please see annexes 1 and 2.

### **Gradual approach to electronic processes**

In order to understand the basis of the Roadmap, it is necessary to take a look at the public and private sector experiences and realize that institutional, governmental and corporative changes towards electronic means need to follow a gradual approach.

This is also true for e-GP, which needs to start from the less complex process (e-tendering) and leave the more complicated ones to the end (e- Purchasing)

This gradual approach to e-... processes can be divided into four main accumulative stages: Publication, Interaction, Transaction and Transformation.

The efforts and the benefits of e-... processes begin before incorporating technology, because they demand to change traditional parameters for new ones based on transparency, effectiveness and standardization. In e-GP, initial steps (to create an procurement leader agency, to establish standards and to simplify procurement processes and documents) are requisite for e-GP but themselves are generators of structural changes.

In the next step, when information technologies are undertaken (like the creation of a unique procurement Website), there are already enough transformations so that the technology can have positive impact.

For details please see annex 3.

### **Common Errors on e-GP**

Implementing a worthwhile e-GP strategy is not simple. It involves many players, operating systems and regulations, and that is why risk levels are high. International experience shows many errors typical in the e-GP development and implementation process. The Roadmap will help jurisdictions to get past these errors:

### Conceptual errors:

- An assumption that e-GP is primarily about technology and therefore is to be implemented by technologists.
- An assumption that technology alone, through plug and play alternatives, will solve all problems and will avoid going through an institutional change.

- The establishment of control as the main objective, instead of relying on making the procurement process simpler, standardized and more efficient as the prerequisites in order to achieve better control mechanisms.
- Apprehension is often widespread amongst SMEs that sometimes perceive new online technologies as a threat to business. This apprehension is heightened if Government buying agencies begin dealing directly with the online catalogues of major corporations thereby locking out small, offline and regional players.
- Confusion over standards or the emergence of competing closed trading environments and limited interoperability. Weaknesses in technical expertise.
- Government activity, especially procurement, that is subject to intense scrutiny and must be undertaken within a tight policy, accountability and probity framework – a framework that is poorly understood by private sector service providers.
- A view that e-GP is a technology system that should operate in a competitive environment such that multiple systems should prevail within government all competing for government workflow.

### Managerial errors:

- Weak common vision, policy and operational leadership. E-GP involves significant change management and a weak leadership framework will invite fragmentation of objectives, interoperability and methodologies.
- Weaknesses in management, planning and ambiguous or divided ownership of the reform program, rigid processes and regulations, poor contract management, staff apprehension and departmental imperialism.

#### Process management errors:

- Assumptions that the process starts from legal reform forgetting about creating a common vision, agreements and a dynamic institutional change.
- Lack of knowledge about the gradual approach embedded into any structural reform, and selecting those options pushing for fast and radical changes (bigbang approach).
- Start from e-Purchasing, which is the more complex, risky and costly.
- Start the process by implementing partial solutions, driven by the supplier, and dubious sustainability in the long run.
- Lack of planning in the creation of catalogues, which eventually will not be sustainable.
- Lack of emphasis in training for both the suppliers and specially those people responsible for procurement in the Executing Agencies.

### **ROAD MAP**

### Phases

This Roadmap has four consecutive phases as outlined in Figure 4. Each one of them alone is able to create a great impact. However, the optimum will be reached when all of them are operational.

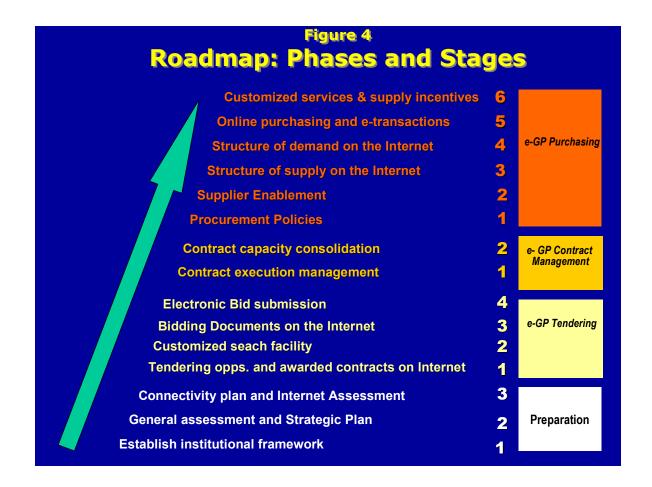
The phases are, in sequential order, as follows:

- 0. Preparation,
- 1. Tendering,
- 2. Contract Management
- 3. Purchasing

These phases advance from the simplest to the more complex issues, and are fully compatible with the gradual approach necessary to develop a successful e-GP solution. These phases are explained in detail later on in the document.

Each one of these phases has several stages. The journey towards the implementation of e-GP implies traveling by stages, just like in long trips.

This road map provides no more than an indication of the route to follow. It is a basic tool that **will have to be adapted to fit the specific conditions, strengths and weaknesses,** and prior level of development of e-GP in each individual case in order to be applied in all countries, regions, and municipalities.



### Strategic Foundations

The successful development of e-GP has six strategic foundations:

- Institutional Capacity
- Governance
- New functionalities
- Infrastructure & Web services
- Third Party Integration
- Evaluation

The six strategic foundations are indispensable and complementary. Either to neglect or to overemphasize one of them generates unbalances that affect severely the development of e-GP.

The graph of the following page shows the strategic foundations of the process of development of e-GP. It shows some starting situations and the achievements that must be obtained.

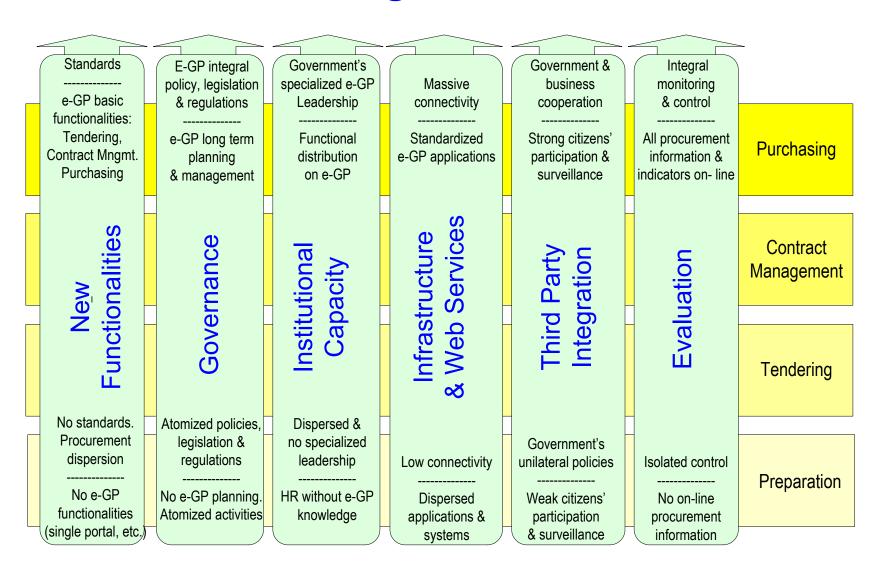
The starting situations usually are the following ones:

- Institutional Capacity: leadership dispersed and not specialized in e-GP.
- Governance: dispersion of policies, norms and regulations.
- Functionalities: lack of standards and to many ways to contract.
- Infrastructure and Web Services: low connectivity and atomization of systems.
- Third party integration: increasing conflicts between the public and private sectors, community distrust in the procurement systems of the government.
- Evaluation: controlling and monitoring difficulties.

The strategic foundations are built in order to reach the following conditions:

- Institutional Capacity: integral leadership of the government with human resources specialized in e-GP.
- Governance: Integral policy of e-GP, norms and regulations integrated, consistent and adapted to the new procedures.
- New functionalities: standardization and simplification of tools and procedures.
   Specialized functionalities and organizations for tendering, contract management and purchasing.
- Infrastructure and Web Services: massive connectivity and computer science applications standardized and accessible to all.
- Third party integration: cooperation between central government, local governments and private sector; participation and active monitoring of the citizens, training.
- Evaluation: on line monitoring and integral control.

## **E-GP Strategic Foundations**



### Alternative Approaches

There are different ways to advance through the strategic foundations, depending on each country's culture, the starting point characteristics, the available experience and the e-GP leadership characteristics.

Some countries decide to powerfully develop their strategic foundations since the beginning of the process, by the adoption of a strongly structured policy, a new legal and regulatory framework, the adoption of basic standards, etc.

Some other countries, however, gradually develop their strategic foundations through slow advances in the definition of the e-GP policies, successive legal reforms and, in general, cumulative processes.

Both approaches are equally valid. Each one of them has advantages and disadvantages, strengths and weaknesses. The first approach allows the governments to stagnate in setting up the policy, legislation, regulation and management frameworks and do not arrive at the effective establishment of the new functionalities and services. The second approach has the risk of not dealing with key governance and institutional issues until the system implementation is already well advanced.

Actually, countries combine both approaches depending on their own circumstances. Developed countries have greater capacity and preference for an initial foundation approach and later execution; developing countries find easier to apply a gradualist approach, where experience validates and stimulates the future steps and the skepticism is broken by means of demonstrative partial profits.

This Road Map has been elaborated primarily under a gradualist approach. In it can be identified the maximum possible time for policy defining and planned actions execution without affecting the basic sequence of e-GP development. However, many countries may be able to advance early many activities and products. Therefore the Road Map sequences are not compulsive, but each main product requires previous elements identified in the sequence.

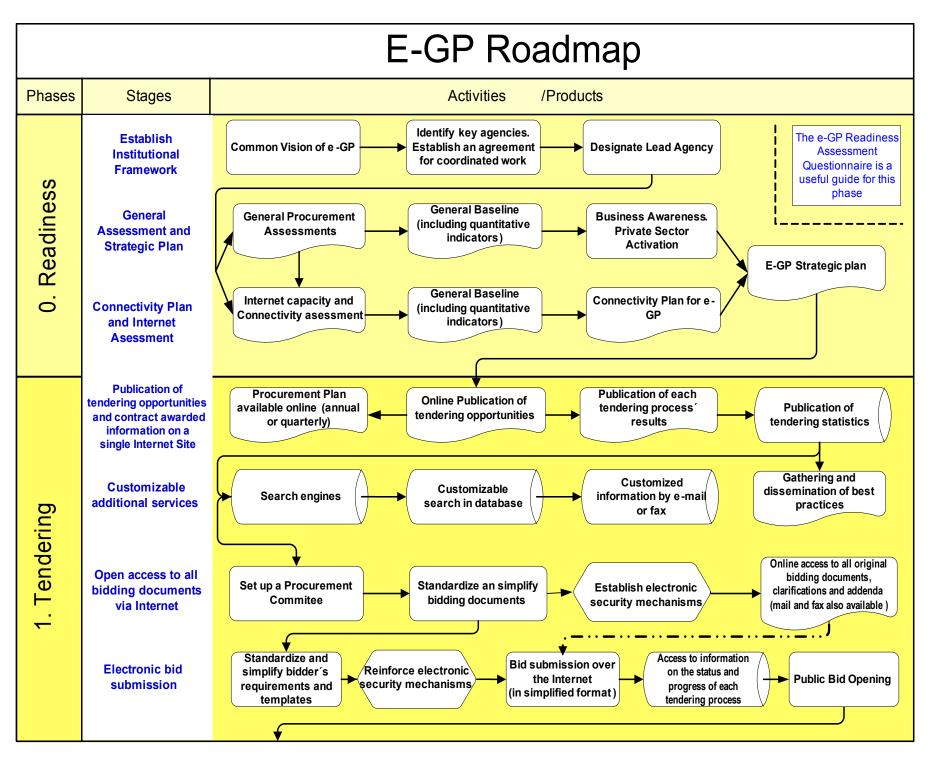
In order to avoid the potential risks on both approaches, it is necessary to have a vision of the objective from the very beginning, a strategic plan, a leader agency and a direction council that understand e-GP as an integral transformation process, not just as a simple modernization of procurement leaded by technology. For that reason, the preparation stage is crucial, conceived precisely to create the integral bases of the whole process.

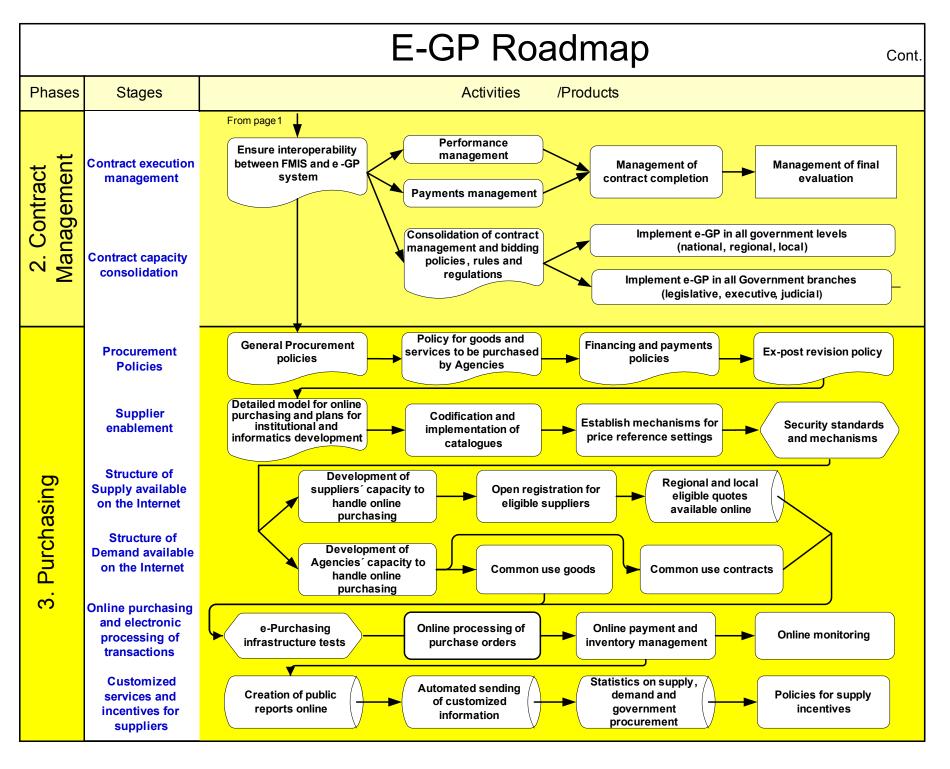
The Self Assessment Questionnaire of this series allows to establish the base line from which the governments can decide which of both approaches to adopt or how to mix them.

### General Road Map Scheme

A general road map for the development of e-GP is depicted below. The following sections will explain the scope of the various stages involved.

Please notice that the arrows in e-GP Road Map Scheme show the succession of the stages and activities. Some stages and activities are independent and others can be made parallelly.



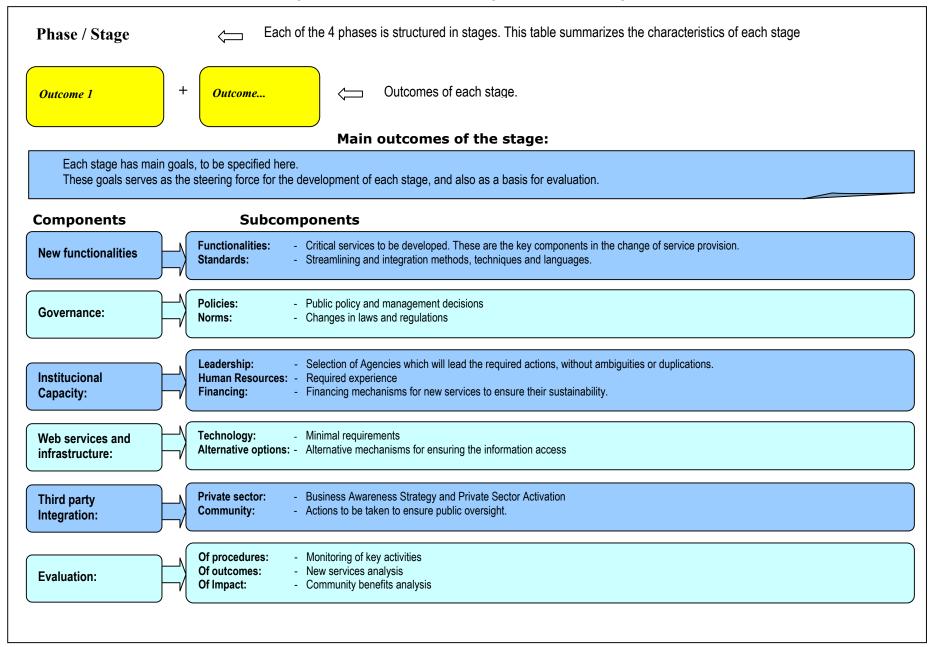


The Roadmap is presented below through an explanation of its four phases and their stages.

Each phase comprises a short explanation about the objectives and main outcomes of each stage. Furthermore, there is a table for each stage, which summarizes the more relevant components and sub-components needed in order to achieve such outcomes.

These tables are as follows:

### Road Map Tables: Phases, Main Objectives and Components



### 0. Planning Phase

**Objective.** This is a definitive phase for the success of e-GP. It is directed to the achievement of three basic start-up prerequisites: what (vision), who (institutional framework and leadership), and how (action plan). Therefore, it seeks to achieve:

- A common vision of expected results. This vision is essential because e-GP is unknown to many and every country hosts several different perceptions about e-GP's meaning and scope.
- A definition of the leadership of the process and the institutional responsibilities. Usually, many governmental entities deal with procurement, which makes difficult their coordination among themselves, and even more so the establishment of a leadership for change management.
- A strategic plan to guide the development of e-GP. The Plan must define the partial results, the responsibility for their achievement, and the criteria for the evaluation of those results.

A common vision

A coordinated group of key entities

A lead agency accepted by all

A strategic plan

The failure or slow implementation of e-GP processes in many countries is due to the weak planning phase and the subsequent lack of a shared vision, a legitimate leadership, or a guiding plan.

The three essential stages are examined below.

### 0.1. Establishment of the Institutional Framework and the Coordination System

This stage's goal is to coordinate the active participation of the public agencies that are the most relevant in government procurement operations, public-sector budget management, and modernization of the State. This involves:

### • A common vision of e-GP in the heads of the government

It aims to get the political decision-makers and the group promoting the e-GP process to share a vision of the system that can be achieved, the main institutional transformations involved, and the benefits to be generated.

Building this common vision requires research, coordination and communication. This is a highly complex task because, in the beginning of the process, existing visions of the concept, scope and objectives are very different. The origins of this initial heterogeneity are to be found in dispersed traditional procurement procedures, in the specialization of participating entities, in differences between political and technical approaches, and the subjectivity of public servants.

### Identify the key entities and arrive at a coordinated working agreement

The agreement must include those entities responsible for political orientation, modernization of the State, general budget management, planning, control of government expenditure, and civil oversight of government affairs. In some countries or municipalities, the participation of the legislative branch of government will also be essential.

The integrity of the process depends on the agreement reached, and on the participant's level of compromise. Usually, several public entities have the intention of modernizing public procurement, but they do it disconnectedly, promoting contradictory orientations from unilateral perspectives. In the absence of a true multi-institutional agreement, if a single agency unilaterally assumes a leadership position, there is a risk that the system will be biased towards legal aspects, technological investments, certain novel administrative processes or enhanced control and sanctions, depending on institutional characteristics of this agency.

### Designate and activate a Lead Agency

This agency bears executive responsibility for the general orientation and coordination of the process. The agency's main duties may include:

- Establish the basic procurement policies.
- Coordinate the processes of institutional change in accordance with those policies.
- Coordinate the management of key entities.
- o Promote agreements.
- Facilitate civil oversight of public affairs.
- Guide the standardization of instruments and contractual processes; define codifications and promote their use.
- Promote legal amendments and ensure a single interpretation of laws and regulations for public procurement.
- o Promote the integration of e-GP with public budget management.
- o Provide technical support to procuring entities.
- Undertake procurement for common use contracts.

- o Prepare an integral assessment of procurement processes and monitor the improvements achieved through e-GP.
- Identify and disseminate best practices.
- Training of civil servants and suppliers.
- o Undertake marketing activities.
- o Guide investments and structure the financial sustainability of the new procurement system.
- o Provision of guidelines to the Technical Support Center.

The agency's success depends on its public legitimacy, its hierarchical level and its technical capacity.

Depending on the governmental structure in each country, the Lead Agency may be the unit responsible for economic development, modernization of the State, or public investment planning; in some countries it could also be the Office of the President, the Office of the Vice President, or the Ministry for Presidential Affairs. The corresponding capabilities and mandate would apply at the level of provinces, municipal districts or cities.

Many governments have great difficulty in establishing the Lead Agency because they don't find it necessary or because several entities claim that leadership role. Getting over this obstacle has a huge impact in the speed and depth of the e-GP process. Experience shows that the allocation of leadership to a Committee of several entities is not a good choice, because it would lack the capacity to carry out all the functions described above.

The Lead Agency **must not undertake other agencies' procurement activities**, they remain responsible for their own procurement processes.

The Lead Agency **should not be specialized in computer technology**, its function is considerably wider and is closely related to the integral modernization of the State.

Once the Lead Agency is in operation, it is suitable to setup the **Technical Support Center.** It is responsible for the support activities in the fields of computerization, database management, Web Site management, and technical support to all participants. This Center may be hosted by a public or private entity. Either way, it must be considered a public service, which administers public information and is controlled by the Coordinating Agency.

### **0■1** ■ Readiness: Establish institutional framework and coordination system



### Main outcomes of the stage:

- A basic and common vision on e-GP
- To establish the institutional capacity neccesary for the coordination and guiding of the process.

#### Components: Functionality: - None **New Functionalities** Standards: - To establish a single direction for the whole Government = Sole responsibility for standards definition. Policies: - Common vision on the system, responsibilities and benefits. Governance - (In some countries) Formal appointment of the Lead Agency (usually through executive decree) Norms: - To identify to the organisms public of the executive and the legislative one required to trigger and to lead the process. Leadership: To establish a joint work agreement. - To define the Lead Agency, with hierarchic capacity to orient the assembly of EGP, its spreading and its pursuit (it does not replace the Government Agencies' procurement functions). Institutional - To define the technical center for the Website (always under control of the Leading Agency). Capacity - To create the grounds for cooperation with other Government Agencies. **Human Resources:** - Public management and procurement experts. e-GP experts Financing: - None Infrastructure and Technology: - None **Web Services Third Party** - None. At this time, the coordinating group is being created. **Private Sector:** Society: Integration Of Procedures: Are there agreement mechanisms for the development of e-GP? **Evaluation** Does the Government have a common vision? Are all the leading agencies established? Does the Lead Agency exist? Does it have all its roles and atribituins Of Outcomes: already established? Has teh Technical Center been identified? Is the Technical Center under Government control?

### 0.2. Preparation of the General Assessment and Strategic e-GP Plan

Once the initial institutional aspects of the initiative have been defined, the Planning Phase continues with an analysis of the baseline situation and a plan to reach the desired outcome. This is the reasoning for preparing a general assessment and a strategic plan.

The components of this stage are:

### Preparing a General Assessment of the procurement system

This assessment should provide a comprehensive picture of procurement with two main purposes: the adaptation of e-GP to suit conditions in the country, and the achievement of a baseline against which the impact of advances can be measured.

Please see the specific guide for the preparation of the general assessment also available in this series.

The main elements to be covered by the assessment are:

- Overall description of the procurement system;
  - o Procurement methods.
  - Current systems.
  - o Diversity in procedures, due to regulations or interpretations.
- Governance and institutional aspects:
  - Characteristics of the legal framework.
  - Legislative and Regulatory power (single management direction, free from biased interpretations).
  - Auditing and control.
  - o Community trusts in public procurement.
  - Private sector and civil society participation in official decisions related to the procurement system.
  - o Human resources: careers.
- Industry, supplier, guild, and union participation:
  - Ready access to policies and regulations.
  - o Access to government procurement policy-making.
  - Access to information on procurement processes.
  - Equal access for small medium and big enterprises.
  - Reliability of procurement procedures.
- Tenderina:
  - Modalities.
  - Stages of the process. Average length.
  - o Integral process management.
  - Standards: dispersion vs. standardization of processes and bidding documents.
  - Readiness of public access to information.
  - o Quantitative data: number of bidding processes and number of bidders.
  - o Financial data: process costs, competitiveness of prices.
  - o Indexes for efficiency, efficacy, and compliance.
  - Disputes: rate of protests.

- Adjustment: rate of contract variations.
- Specialization, training and support to procurement staff.
- Purchasing (assessment analogous to tendering).
- E-GP:
  - o Visions and objectives of Procurement modernization.
  - Coordination of the process.
  - Advances in e-GP
  - o Opportunities and obstacles for e-GP development.
  - e-GP in current legislation and initiatives for its adaptation.

### Constructing a baseline with key indicators

The assessment can then be used to construct a baseline with quantitative indicators that shows the status of the system at the start of the project and improvements achieved through e-GP. The results provided by this baseline, will serve as a reference for the whole e-GP implementation process.

Following the assessment, the main indicators in the baseline are:

- Standardization levels.
- Average length of a tendering process.
- Average number of bidders in each operation (and size of the enterprises).
- Average cost of tendering processes for the purchaser and for the supplier.
- Average prices of the goods and services purchased.
- Indexes for efficiency, efficacy, and compliance.
- Rate of protests.
- Readiness of public access to information.
- Rate of specialization of civil servants responsible for procurement.

### Business Awareness Strategy and Private Sector Activation

E-GP, like any market, is comprised of a "buyer" side and a "seller" side. From the beginning of the e-GP process it is necessary to establish a business awareness strategy.

The business activation strategy would be addressed to all potential suppliers: currently contracted suppliers and never contracted suppliers, big companies and SMEs.

This strategy can be initiated opening a site that provides basic information about tendering processes and running public seminars for key industry players to raise awareness.

A complete business activation strategy has al least five components: consultation, research, training, connectivity and dissemination.

- Consultation and dialogue in order to know the policy needs and the opinions of currently and potential suppliers, industry associations, commerce, etc. Mechanisms could be settlement meetings and a consultation center.
- Research about needs to done to raise the private sector's current level of readiness for and awareness of e-GP (standards to be apply, training, connectivity, business integration, banking and other transactions on line, catalogues to be developed, interoperability, etc.). Research would be made for different company kinds and scales.

- Training in main topics identified for different kinds of business. It is very recommendable a industry associations strong participation in programming, manage and monitoring the training. Training is decisive for encourage SMEs to participate in e-GP.
- o **Internet connectivity** and complimentary services (kiosks, call centers, etc.).
- Dissemination. Business is initially uncertain about the benefits of e-GP. It is convenient to show the extent of the process and its benefits, and the costs involved for everyone in each phase. The first phase is e-tendering. This phase is easily picked up by business often at little or no cost and represents an effective means of activation of the private sector, forming a foundation on which higher value services can be built.

### Formulating a Strategic e-GP Plan

Such a Plan is the center of the e-GP process, serving as the basic reference on results and responsibilities. Essentially, it is an instrument agreed upon, fully accepted by the heads of the government, all the lead entities and the executing agencies.

Please, see the specific guide for the preparation of the strategic plan, also available in this series.

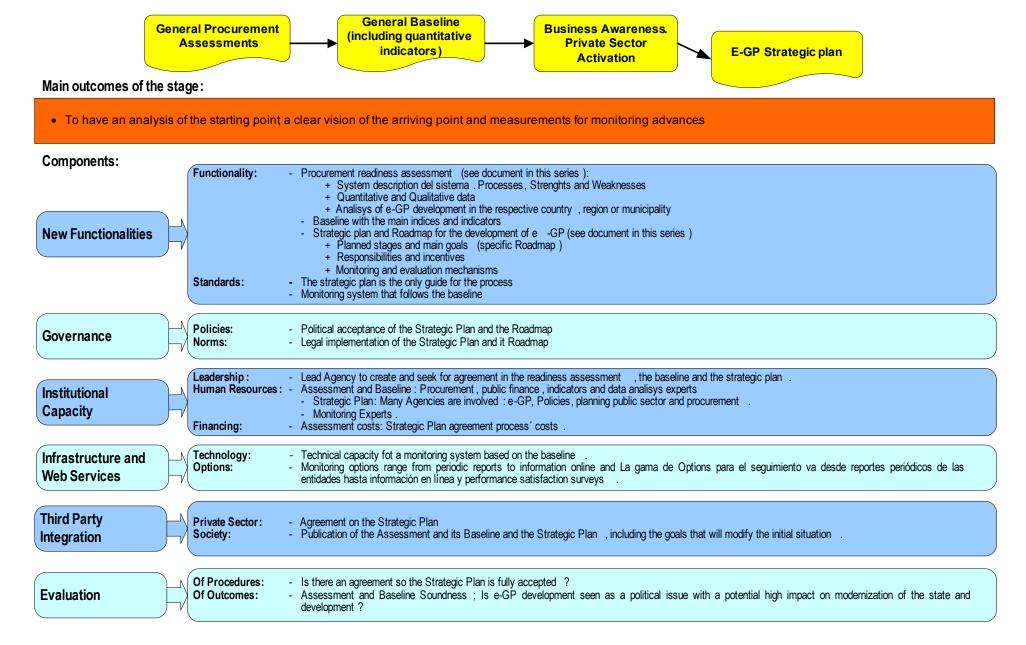
The Strategic Plan contains basically:

- a description of the desired final outcome and partial goals;
- a road map for arriving at that destination which takes the country's conditions in into account;
- the specification of participants, their responsibilities and the incentives to ensure their commitment;
- timeframes;
- a mechanism for monitoring the progress made on an ongoing basis and for making corrections where necessary; and
- a methodology for the periodic review of the Plan in order to incorporate adjustments.

When the project is being conducted by a national government, the strategic plan should include incentives that will encourage the use of e-GP in provinces and municipalities that may not be legally obligated to do so. E-GP will be more effective in promoting the country's development if it provides a point of convergence for all suppliers and all government purchasers at the various levels.

No e-GP development process has been successful in absence of a strong and legitimate strategic plan.

### **0.2.** Readiness: Preparation of the General Assessment and Strategic e-GP Plan



### 0.3. Preparation of an assessment of Internet infrastructure and an IT Development Plan for e-GP

The Strategic Plan made in the previous stage should be enriched with some IT components. Therefore, an assessment focusing specifically on Internet capacity in the country and its dynamics needs to be prepared, either in tandem with the General Assessment and Strategic Plan or following their preparation, so that the Strategic Plan can be tailored to accommodate the circumstances.

The main components of this stage are:

### • Prepare an assessment of Internet capacity and connectivity in the country.

Such assessment shows Internet penetration in the various segments of society and their specific dynamics, with a triple purpose: preparing a plan to increase connectivity; adapting the Strategic Plan to the Internet capacity in the country; and, establish a baseline that will allow monitoring of improvements.

Please, see the guidelines for the assessment of Internet capacity and e-GP connectivity found in the e-GP assessment questionnaire.

The main areas to be studied for the Internet assessment are:

- Characteristics of voice and data transmission networks.
- Internet status and trends in the country.
- Internet speed and fees.
- Internet access and connectivity in public procuring entities and private sector, including small and medium sized enterprises;
- Human resource capacity. Status and trends in regard to the supply of human resources in computer technology.

#### Establishing the Internet access and capacity baseline.

Provide a baseline that includes quantitative indicators to depict the initial situation and monitor required improvements. Essential indicators include:

- Internet access and connectivity of the government, entrepreneurs, and the community at large, by segments and areas.
- Internet speed and fees.

### Designing the IT Development Plan for e-GP, as a part of the Strategic Plan

This is a guide for the development of the technological infrastructure of the system. It must incorporate an explicit strategy to minimize the cost of IT investments and maximize their benefits. It must be consistent with the Strategic Plan.

Please, see the guidelines for the design of the IT Development Plan found in the e-GP strategic planning guide.

The IT Development Plan for e-GP essentially contains a description of Internet coverage and access goals, timelines, responsibilities, platforms and scalability, a guide for the implementation of investments, plus management and training strategies<sup>1</sup>.

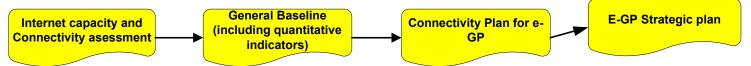
Essentially, the e-GP system should be non-proprietary, on-line and Web-based. This implies an Internet based approach accessible by users through readily available browser software. The main system features are the following:

- Access should be open to all potential bidders. Users should not be required to purchase or implement specialized software or equipment to interact with the system.
- Downloaded documents should use commonly used office software. If specialized software is necessary, this should also be downloadable. Similarly, the requirements for electronic submissions should specify commonly used office software.
- Transmission of information should be secure (suitable encryption so information cannot be accessed or altered), confidential (cannot be read by unauthorized individuals), authenticable (parties involved identified, time of exchange, etc.), and traceable. Browsers and servers should follow the 128-bit security standard as it is a widely accepted standard and is compatible with most browser software.
- Equipment must be housed in a secure, well maintained data center. Data recovery shall be provided for documents handled in electronic format, including secure backup and storage in a separate physical location.
- A comprehensive user support service (on-line, telephone, or email help desk) shall be provided at appropriate and defined service levels related, but not limited to defined service levels and response time.

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There are several valuable national experiences for accelerated expansion of the Internet. Among developing countries, Peru's "Cabinas Populares" (people's booths) stands out for achieving a remarkable coverage rate in record time in low- and middle-income sectors, without State subsidization.

### **0.3.** Readiness: Connectivity Plan and Internet assessment



### Main outcomes of the stage:

#### To adapt the e-GP development to the situation and tendencies of Internet in the country. Analyze the starting point of the Infrastructure and computer science component, with of a clear vision of the destination point and a measurement of the advances. To define the criteria for the development of the technology component of EGP in the public and private sectors, in order to minimize costs. Components: - Single website for all public tenders. **Functionality: New Functionalities** - Single website (All Government Agencies that have tendering activities must use this website) Standards: - All Agencies publish information on this website following the requirements previously defined. Policies: Political acceptance together with its investment plan. Governance Norms: - Legal implementation Adopción of the Technology Development Plan (as part of the Strategic Plan) - Lead Agency to create and seek for agreement in the readiness assessment, the baseline and the strategic plan. Leadership: Institutional Human Resources: - Multidisciplinary Group with knowledge on e-GP, technology trends and their application in the Public Sector. Interaction with the experts from the Strategic Plan group. Capacity Financing: - Costs associated to the Assessment and the agreement process on the Plan. Infrastructure and Technology: - Technical capacity fot a monitoring system based on the baseline. - As in the Strategic Plan, there are many options for the monitoring activities. **Web Services** Options: **Third Party Private Sector:** Agreement on the Plan. - Publication of the Assessment and its Baseline and the Technology Development Plan, including the goals that will modify the initial situation. Society: Integration Of Procedures: - Is there an agreement so the Technology Development Plan is fully accepted? **Evaluation** - Assessment and Baseline Soundness; Are connectivity and Internet development seen as a political issue with a potential high impact on modernization of Of Outcomes: the state and development?

### 1. e-Tendering (low volume, high value)

**Objective.** The objective of this phase is to carry out tendering processes in a much shorter period, at a lower cost for both suppliers and the government, with total transparency, and with a high impact on development.

**Characteristics.** The goal of the e-GP strategy for tendering is for all tenders by public entities to be programmed and posted onto a single Internet site, for potential bidders to be able to download legal bidding documents from this site, for actual bidders to be able to upload their proposals to that same site, for awards to be published there, and for all citizens to be able to follow all procedures. Apart from the single meeting place for demand and supply, transparency and efficiency are also enhanced by the standardization and simplification of bidding documents, formats and participation requisites.

All tendering information on a single Internet site

Standardization and simplification

Taking days for what used to take months

Minimum cost for governments and suppliers

The whole community oversees the process

**Why starting e-GP with tendering?** For simplification purposes, low cost of implementation, and high potential impact. Indeed, tendering:

- accounts for just a few transactions in any given country (usually around 2% of the whole procurement process);
- represents a sizable share of the total amount procured (between 20 and 30%);
- involves just a few actors in the public and private sectors, which facilitates coordination and consensus building;
- concentrates gradually in publishing and interactive actions, but it does not involve transactions; and
- requires relatively small investments and accessible solutions.

These conditions are decisive to attain a high impact and great savings at low cost and in a short period of time, learn from the experience for the more complex phases, strengthen the vision of the final outcome, build trust, and establish the fundamentals for the rest of the process.

Most of the countries that started the process with e-purchasing (procurement via online quotations) instead of e-tendering, have failed in the medium run or cover only a small share of total procurement.

**Stages.** E-tendering develops through 4 stages that go gradually from publication to interaction:

- A single site: publishing in a single Internet site all tendering opportunities and contract awards:
- Customization: facilitate access to information tailored to anyone's demands;
- Download: allow the download of legally binding bidding documents;
- Upload: allow the upload of proposals through the Internet

### 1.1. Posting of tendering opportunities and contract-awarded information on <u>a</u> <u>single</u> Internet site

The first stage is to provide on a single Website, information on the forthcoming tendering opportunities and its results. This starts a dynamic for the use of the Website by public entities and suppliers.

There are three relevant recommendations:

- From the very beginning, the procuring entities themselves must publish their information directly, without third-party intervention on the single Website, abiding by its rules.
- A single Website implies that all the information on procurement must disappear from the websites of the procuring entities. There is no reason why suppliers should visit many different physical or electronic sites in order to reach public sector procurement opportunities, or to establish an interoperability mechanism to substitute for the lack of basic standards. The disappearance of procurement information from individual sites may be gradual, inversely proportional to the development of the single Website, but respecting the primacy of the single Website, which must contain the original, legally binding information, as well as define the standards and general rules.
- Given that e-tendering procedures are similar to traditional tenders, these laws and standards already in effect are usually applicable, although, in many cases, a more modern interpretation of their scope and implementation will be required –e.g. allow an electronic security box for safekeeping of the proposals instead of a physical one. Experience has shown that it is better to first maintain the existing legal framework and then make adjustments in it as the process proceeds and once some advancement have taken place. This makes the creation of legislation easier to create by identifying legal voids. This will also help legislators in the development of a common vision of e-GP.

The outputs of this stage are:

### Bid advertising

Each detailed tender is posted on the single Website. These postings set out the basic tender information (purchasing agency, goods or services to be obtained, amounts, deadline for submission of bids, location from which documents are to be distributed and to which bids are to be delivered, etc.). This makes it possible for any supplier who wishes to do so to ascertain what goods and services are in demand, without having to visit –physical or electronically- hundred of different government agencies.

In some countries this stage may be implemented in coordination with the government's official daily financial report in order to take advantage of this mandatory publication to disseminate invitations to tender.

### Posting the procurement plan

Government entities publish their annual and quarterly procurement plans (object, date and amount) on the single Website, allowing queries by different criteria (by organization, sector, type of good or service). This enables suppliers to plan their bids and promotes discipline in procurement and cost planning.

It may seem that procurement plans should be published before the release of actual requests for proposals are, but experiences shows that requests are certain, while procurement plans are not reliable or simply non existent in many countries. The publication of procurement plans represents a major planning effort for many of these countries.

The submission of plans by all government agencies detailing scheduled tenders should be made mandatory within a fairly short period.

### Posting the results of each tendering process

The number of qualified bidders, the name(s) of those who are awarded the contract, the amount awarded to each one, and the expected duration of the contract is posted for each tender. Later on, the date the contract is signed and the start-up date should also be posted.

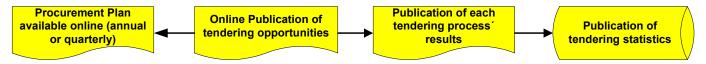
This paves the way for oversight by the general public and for the gradual formation of a historical price database.

Some countries publish comparative tables showing the bids that have been entered, together with the identification of successful and unsuccessful bidders. In other countries, information is provided only on the number of participants and on the winning bidder because it is felt that information about the unsuccessful bidders is confidential, since no contractual relationship with them has been created.

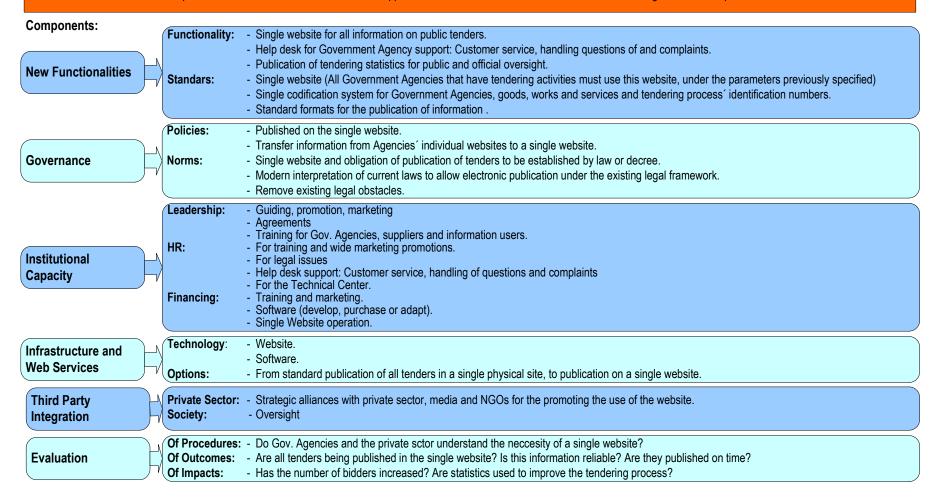
### Statistics on tendering processes

The above mentioned activities will result in a large pool of information on the number of tenders that have been conducted and their outcomes, as well as their classification by agency, sector, and region. Information will also be available on the winning bidders, the amounts awarded, and on related contracts. This information should then be used to build and post behavioral indicators, which may be used as a reference for future tendering processes and as an additional tool for civil oversight.

# 1 1 Tendering: Publication of tendering opps. and contract awarded information on a single Internet website



- Governance: Transparency through easy access to information and elimination of exclusions. Facilities for easy public oversight.
- Efectiveness: Increased competition. Lower costs for access to business opportunities. Lower costs for the Government to reach a higher number of providers.



## 1.2 Customized Information

Once all the basic information on tendering processes is found on a single Website, it is convenient to allow for a tailored examination of it, other than the official standard reports, according to the specific interests of each person or entity. This is the customization of the information.

This stage is not a prerequisite for the next, and could be developed simultaneously. Nevertheless, it contributes greatly to the efficiency and transparency of the following stages.

Customization is achieved through these services that are easy to develop:

### Search Engine

This is a tool for examining the database on tenders by using keywords or expressions freely chosen by the interested party.

#### Customized Searches in the Database

Gives the possibility to extract information already organized to the interest of the examining party. The information is looked up on the Internet on the party's sole decision.

#### Delivery of Customized Information

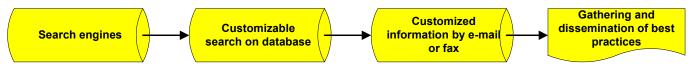
Gives any party the option to register an e-mail address or fax number and receive the information requested, classified with respect to his own demand (news, series, comparisons, etc.).

Thus, suppliers are easily and timely informed about their areas of interest, and oversight by the media, regional and local authorities, civil society organizations, and common citizens is facilitated.

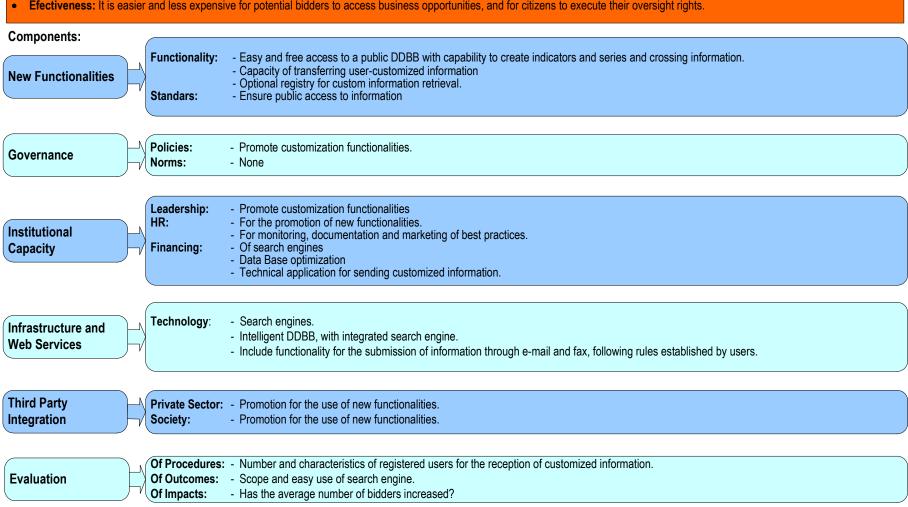
#### Documentation and dissemination of best tendering practices

At this stage of development of the Website it is recommended that independent studies be conducted about best tendering practices, because they help improve the processes at the purchasing entities.

## 1.2. Tendering: Customizable information - Additional services



- Governance: Higher transparency and oversight levels fostered by easier access to information and the ability of looking at it from different perspectives
- Efectiveness: It is easier and less expensive for potential bidders to access business opportunities, and for citizens to execute their oversight rights.



### 1.3. Open access via Internet to all bidding documents (Download)

This stage consists of posting on the single Website all bidding documents (technical specifications, graphs, blueprints, amendments and clarifications) and allowing any person or company to download them.

For this stage, technological requirements are simple, while institutional requirements are quite complex for two reasons:

- Bidding documents must be simplified and standardized, since their current complexity and heterogeneity are a main cause of corruption, complex oversight, and high transaction costs.
- Documents posted on the single Website, must be officially recognized to provide them with judicial legal validity to increase competition and transparency, it is recommended that participation in tendering processes be free of charge.

Documents may be offered to prospective bidders electronically for downloading. Print copies of all documents required for bidding must also be made available to those who ask for them. There can be no material difference between electronic and print versions of the bidding documents. The original documents legally valid will be the versions published in the Web. Splitting documents into combinations of electronic and printed portions should be avoided.

This stage involves the following steps:

## • Setting up of a Procurement Committee or an analogous mechanism/entity.

This unit is responsible for the settlement in the first instance of disputes regarding e-procurement procedures, so that recourse to the courts can be dispensed with. In addition to expediting the settlement of disputes, this body would also establish basic legal precedents that would provide guidance for judges called upon to issue findings relating to this mechanism. One expert described the situation in the following terms: "The procurement committee is the referee and calls the plays. If serious disputes arise, then the judicial system is the FIFA (International Federation of Football Associations)".

## • Simplification and standardization of bidding documents

The contribution made by computer technologies to modernization initiatives is directly related to the possibility of streamlining and expediting procedures in order to boost transparency and productivity

Bidding documents must be simplified. Forms should be as straightforward as possible and should be standardized, including the possibility for those items that are **common** to all tenders or for a given category of bidding processes to be always present on the Website, placed in hypertext. This is especially true for the relevant **legal provisions** and, in many cases, the bidder **qualification criteria**. It is best if the models for bidding conditions can be drawn up by consensus among suppliers and purchasing agencies.

The optimization and standardization of **bidder qualification criteria** and, of course, their publication, has a particularly strong impact in terms of the enhancement of transparency. This optimization means that: (i) the criteria will in all cases be clear, unequivocal, and known by everybody; and (ii) there will be a gradual transition from a selection method based on the "best price" to a method based on the "best value", which takes into account additional characteristics.

It will also be important to facilitate the formation of **lots** and to establish rules for the award of bids for those lots; this method should be preferred to the inefficient "all or nothing" approach. A bidder may then bid for the supply of part of the tender, instead of being forced to form artificial or unnecessary associations. At the same time, the administration is given the possibility to award part of the tender instead of declaring the whole tender null and void because of an isolated event.

The simplification and standardization of bidding documents can be undertaken in tandem with the simplification and standardization of bidding forms to be undertaken as part of stage 1.4.

### • Establishment of electronic security mechanisms

Before Internet access to the bidding documents may be granted, it is recommended that the necessary security mechanisms be established to ensure full trust and confidence of all participants.

 Access through the Internet to all bidding documents, its amendments and clarifications, and through traditional mail or fax for those who lack Internet access.

In order to provide open access to bidding documents and permit them to be downloaded on demand, it must first be verified that the final and **legally valid** versions of those documents are the ones posted, that they include **all the relevant information** (including graphs and blueprints), and that the clarifications issued during the process are attached..

Access should be open to all potential bidders. **Restricted supplier lists should be eliminated** and replaced with an open-ended list that includes the trade name and basic data of each potential bidder. Those who want to download or submit information should register and be assigned a password. Users must be notified of successful registration and also must be able to update their profile at any time. Many countries have decided to use the single national business registration list register: registration enables to do business with the public sector and –in case of judicial sanctions– these are registered as well. This information can be used to monitor each supplier's record (participation in bidding processes, contracts, prices, compliance), to check for companies that may be acting as a cover, and to facilitate the provision of customizable information.

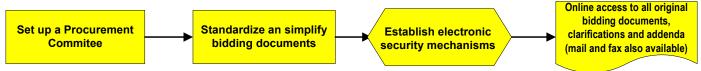
Users should not be required to purchase, develop, or implement specialized software or equipment to interact with the system. Downloaded documents should use commonly used office software. If specialized software is necessary, this should also be downloadable (e.g. software to read pdf documents)

It is best to **eliminate any fees for participating** in a bidding process, in order to facilitate increased competition. In fact, the administrative savings made possible by the streamlining of the process may often be greater than the revenues lost by not charging for registration or for bidding documents. If the decision is made to retain the fee, however, it is best to: (i) allow potential bidders to consult the documents before they are charged for them; (ii) set up an e-payment system; and (iii) offer, as an incentive, a discount on bidding documents purchased electronically.

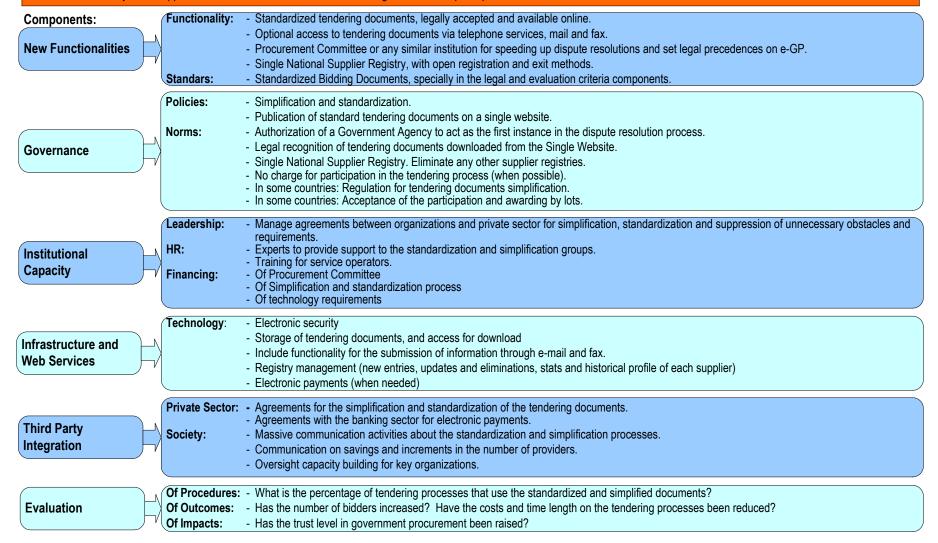
Some suppliers may have difficulty obtaining bidding documents and their clarifications over the Internet. Suppliers should therefore also have the option of requesting them by phone and having them sent by mail or by fax if practical. Care should be taken to ensure that the documents sent out by this means are identical to their electronic versions obtained from the Website database in the interests of fairness.

**Correspondence with bidders** during tendering preparation may be done electronically so long as print correspondence is used for bidders who request it. In both cases must be open. Copies of all correspondence should be kept for the tendering evaluation report. Amendments to the bidding documents can be communicated electronically and can also be posted electronically along with the bidding documents, so long as proper procedures of notification are followed, and print versions of amendments and notification are provided to those who request them. Correspondence during bid evaluation for the purpose of clarification may also be done electronically with the normal restrictions against modification of the substance and price of the bid. Any correspondence of this type should be directed through the Chairperson of the evaluation panel. Print correspondence must be used where requested.

# 1.3 Tendering: Open access to all bidding documents via Internet



- Governance: Transparency through easy access to information and elimination of exclusions. Facilities for easy public oversight.
- Effectiveness: Higher Efficiency through savings by procuring agencies and their suppliers, due to standardization, simplification and transparency. First improvements in quality and price.
- Balanced Development: Opportinities for local businessess and SMEs. Higher number of participants.



## 1.4. Electronic bid submission over the Internet (Upload)

The next step is to facilitate the submission of bid proposals over the Internet. Bid proposals may be submitted electronically or in print. The e-GP system must provide suitable encryption, passwords, and personal identification on electronically submitted documents to insure the contents cannot be determined prior to official opening. Bidders shall be allowed to modify or withdraw previously submitted bids electronically up to the time of the bid submission deadline. Receipt of modification or withdrawal must be acknowledged, and may also be done electronically.

There are five basic facilities: (i) simplification of requirements; (ii) availability of electronic security mechanisms; (iii) avoidance of certifications or other screening mechanisms for participants; (iv) equal treatment for bids submitted electronically and bids submitted by conventional means; and (v) encouragement and advisory assistance for the submission of bids electronically.

The main steps involved in this stage are:

## • Simplification and standardization of forms and other requirements asked from the bidders

The simplification and standardization of such forms and requirements is equivalent to the process to be conducted for the bidding documents. This process is closely related to the standardization of qualification requirements. The objective is to reduce costs for the supplier and also for the purchasing organization by streamlining qualification procedures

#### • Reinforcement of electronic security mechanisms

Adoption of high-level security mechanisms to ensure the confidentiality of bid proposals during their submission and during safekeeping.

Transmission of information should be secure (suitable encryption so information cannot be accessed or altered), confidential (cannot be read by unauthorized individuals), authenticable (parties involved identified, time of exchange, etc.), and traceable. Browsers and servers should follow the 128-bit security standard as it is a widely accepted standard and is compatible with most browser software.

The system should perform reliably in a time-sensitive, commercial application. Industry standard virus scanning software should be used and virus identification files regularly updated.

## • Submission of bid proposals via the Internet using the simplified forms

Once the two preceding steps have been carried out, the submission of bid proposals over the Internet can begin. In many cases, legal obstacles can be overcome through a more modern interpretation of existing regulations.

Some countries have had success with a system in which bidders are not required to prequalify. An accreditation application must be filled out only by the winning bidder, who is given a reasonable time period (stipulated beforehand in the bidding documents) to do so. In the event of noncompliance, a sanctioning procedure is initiated, and the contract is awarded to the second bidder on the list.

The requirements for electronic submissions should specify commonly used office software.

## Monitoring and information mechanisms for the progress of each bidding process and its results

This step complements the preceding ones and is designed to provide: (i) information to bidders on the receipt of their proposals; (ii) information to the general public on the progress of each tendering process (schedule, current stage, number of bids received, etc.); and (iii) information to the general public on contract awards (goods or services covered by contract awards, winning bidders, prices, and timeframes).

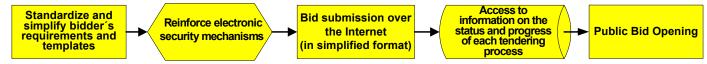
### Public Bid Opening

Electronic (and print bids if submitted) must be opened in a public opening at a location and time (deadline) designated in the bidding documents. Bid proposals submitted late (either electronically or in print) should be rejected. Bidders who chose to do so may attend the bid opening, and should sign a record of attendance. Information read out at the bid opening (prices, offered discounts, and pertinent information) may be simultaneously posted on a web site for bidders who chose not to attend the public opening. A record of the bid opening must be kept in print copy and signed by members of the bid evaluation committee present at the opening.

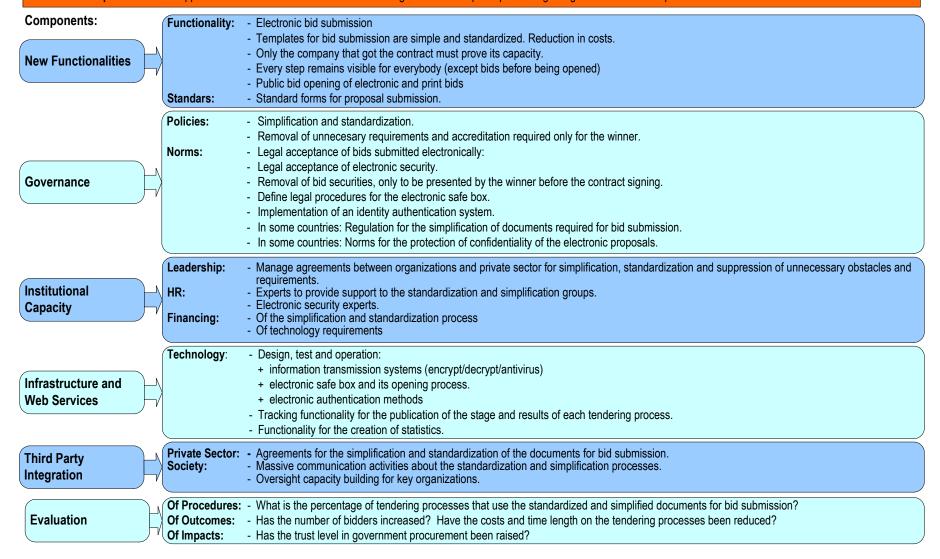
Obviously, the process calls for an **effective, transparent mechanism for bidder qualification, bid evaluation, and contract awards**. Computer systems may be used to support these activities, but their implementation requires experts in the field who can use their judgment to ensure they choose the bid that actually offers the best value.

This stage concludes with the signing of the contract.

## **1.4** *Tendering:* Electronic bid submission



- Governance: Equal opportunities. Maximize participation opportunities and oversight. Reduce opportunities for mistakes and corruption.
- Efectiveness: New saving sources for Government Agencies and suppliers, because of estandarization, simplification and transparency. New improvements in quality and price.
   Desarrollo equilibrado: New opportinities for local businessess and SMEs. Higher number of participants. Beginning of an e-commerce platform.



## 2. e-Comprehensive Contract Management

During the preceding stage, e-GP procedures have been introduced for the selection of suppliers through a tendering process. This process is completed when the contract is awarded. The challenge in this phase is to set up a contract management system.

This phase also includes the consolidation of policies, rules regulations, and manuals for the award and management of contracts, in order to make them consistent with e-GP, as well as the extension of electronic Tendering and Contract Management to all government branches and levels, which yield the necessary conditions for the following phase (e-Purchasing).

**Objective.** Contract Management entails the capacity to perform <u>online</u>, and therefore at a low cost with high transparency, the following activities:

- monitoring of partial and final delivery of goods, services and works,
- intermediate and final payment management,
- contract variations or adjustments,
- solving of contract disputes,
- management of contract settlements,
- · monitoring of warranties, and
- result-impact evaluation.

## **Stages.** This phase has two stages:

- Management of contract execution for tendering processes
- Consolidation of contracting capacities

#### Why does the Contract Management phase follow the e-Tendering phase?

There are two main reasons:

- it is the logical continuation: management of the contracts awarded through e-Tendering, in order to close the contractual cycle;
- with a limited number of contracts (tenders), it brings about the preparation of the budget execution, monitoring and control systems, which will be necessary for the next phase (procurement through online quotations, or e-Purchasing) to have a great impact.

#### Is this phase a prerequisite for e-Purchasing?

There is an essential prerequisite for the development of e-Purchasing, which is the integration of e-GP and public budget management, because this allows the integration of the contract and payment in a single operation. The other activities in this phase may be undertaken simultaneously with the next phase (e-Purchasing).

## 2.1. Contract Execution Management

Contract management ensures transparency, economy and effectiveness in procurement. The following procedures are recommended:

## • Online integration of e-GP and public budget management

The public budget management is centered in the expenditure execution, included the contracts. It is necessary to achieve that contract execution processes are integrated in-line with the public budget administration system, avoiding that they are separate moments using different instruments.

This integration aims:

- To check for resource availability at the start of the contract and to set the required funding aside following the proposed execution and payment schedule.
- To the merge of the report on the execution of the contract and the order of payment, so that the payment, the accounting update and the public budget registry operations are all executed in one single operation.

Experience shows that the integration of public budget management and online contract management (including all stages in this phase) is a complex task and must be developed gradually. Its fundamentals are the establishment of a single system for public budget execution, the establishment of a single system for contract management and the integration of both.

#### • Contract Performance Management

This task involves the exact definition of interim and final results and the establishment of a timetable for producing them. Electronic monitoring of results can be used to signal when the deadline for a given output is approaching. If an output is delivered after its deadline or its quality is inferior to contract specifications, the contract management must identify the person or factor responsible (the contractor, the contract issuer, an external actor, force majeure), apply the corresponding penalties or corrective measures, and adjust the performance and payment schedule.

E-GP needs a quick administrative mechanism for conflict resolution, in order to avoid unnecessary delays and having to bring the judicial system into play.

Furthermore, the templates and procedures for performance management must be standardized. It is best if the output monitoring system to be used in each sector and organization is discussed and agreed between suppliers and the purchasing organization.

## • Payment Management

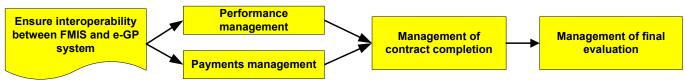
This function, which is closely related to performance management tasks, entails specifying exact payment dates and the requirements for each payment. This system ensures that the funds needed to make scheduled payments are set aside and drawn at the proper times to maintain up-to-date online accounts.

## • Management of contract completion and final evaluations

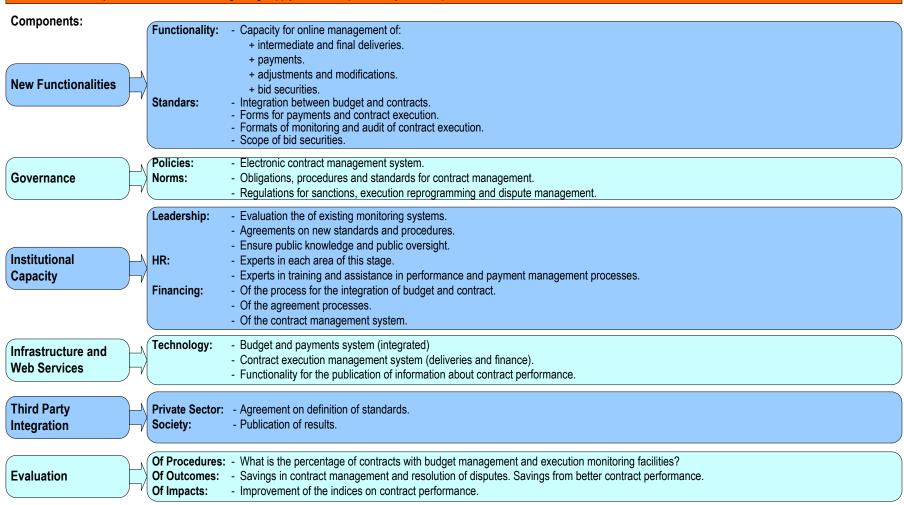
Ordinarily, one of the major shortcomings in contract management systems is the lack of criteria and mechanisms for final acceptance of the work, goods or service. This task entails the design of standardized procedures for these purposes and the maintenance of monitoring processes until the last day covered by the last performance security.

This task also includes the preparation of final evaluations of contract performance based on previously defined parameters. These evaluations can then be used to compile records of each process, identify best practices, and systematize the information on each supplier's performance for use in subsequent operations.

## 2.1. Contract Management: Contract execution management



- Governance: Public tracking of contract executions. Identification of responsibilities for delays or errors. New policies based on experience and agreemnts.
   Efectiveness: Maximize contract performance. Optimize bid security management. Learn from experience.
- Balanced Development: Use information for guiding supply incentives, productivity and competition.



## 2.2. Contract capacity consolidation

By this stage a great deal of experience will have been gained that can be used to generalize the system and to optimize all relevant procedures and standards.

The purpose of this stage is indeed to gather all this experience by reviewing the existing literature, surveys, independent research and evaluation panels and, on that basis, to:

- integrate and consolidate public sector procurement procedures and regulations;
- extend e-GP to the whole public sector.

These are the essential steps:

## Consolidation of policies, procedures and manuals related to tendering, and contract management

This task calls for a critical systematization of the available experiences with a view to defining an optimum procurement framework to be used by all parts of the government. This system should then be consolidated into an integrated set of policy strategies and detailed in a single, comprehensive manual.

Steps should be taken to promote an e-GP law and enabling regulations. The strongest arguments for such legislation will be based on the benefits already obtained from this initiative (which will be backed up by the statistics compiled using the baseline) and on the convictions regarding the merits of this approach held by those suppliers and purchasing organizations that have already seen its advantages for themselves.

#### Extension of e-GP to all levels of government

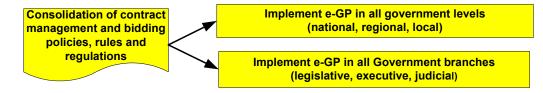
Together with the approval of the new legislation, steps should be taken to extend the use of e-GP to include all (national, provincial, departmental or state, and municipal) levels of government. The larger the volume of procurement operations covered by the new framework, the greater its benefits will be, and the negative effects of increased scale are negligible. Incentives, support mechanisms, and technical assistance will be needed to accomplish this.

Experience shows that the main instrument to generalize e-GP in the whole Government is to make obligatory the use of a unique procurement portal.

#### Extension of e-GP to all branches of government

For the same reasons, it is advisable to promote the use of e-GP by the legislative, judicial, and executive branches.

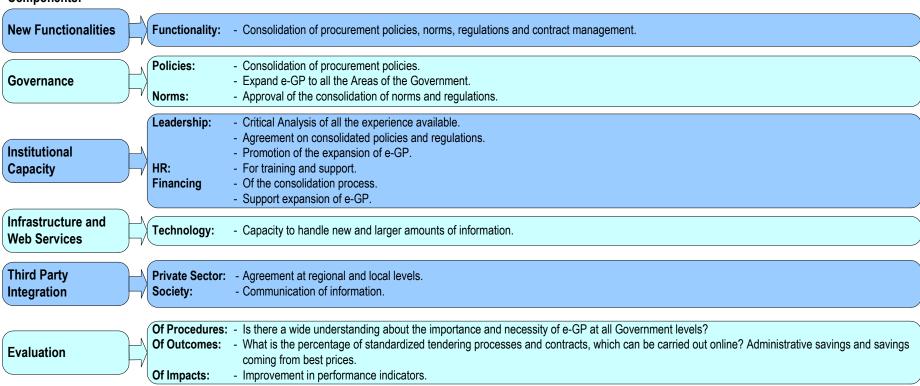
# 2.2. Contract Management: Contract capacity consolidation



## Main outcomes of the stage:

Consolidation and expansion to all Government Agencies. Ensure sustainability.

## Components:



## 3. e-Purchasing (high volume, low value)

## Objective

The objective of this phase is the creation of a directly transactional system in which all suppliers may offer their goods and services, and all public entities may select on line the best option among them, order the supply, receive it, incorporate it to the inventories, and order the payment.

The final objectives bear high impact: reduction in transaction costs, both for the supplier and for the buyer, substantially shorter processing time, cheaper procured goods and services, and increases in productivity, economic disaggregation, and balanced economic growth.

Permanent bids by suppliers; online demand

Taking days for what used to take months, with a lower cost

Suppliers of all sizes, from all regions

Incentives for increased competition and productivity

## **Characteristics**

e-Purchasing needs to address small, urgent purchases as well as big ordinary purchases. Therefore, it simultaneously allows for each public entity to purchase low quantities for immediate delivery and big quantities for periodic delivery, and for several entities to do joint purchases for ordinary/ goods.

An online quotation system for procurement essentially follows the "best offer" principle:

- The public sector defines online those goods and services it demands on a regular basis.
- All suppliers of those goods and services –big, medium and small- maintain their offers permanently online, and modify them whenever they deem it necessary.
- When a specific good or services is to be purchased, the system offers a list of eligible suppliers within a given area or locality.
- An authorized civil servant checks the availability of funds, sets them aside, and orders the required supplies for the selected supplier.
- The order goes directly to the supplier, through the means he selected (e-mail, fax, beeper, telephone).
- Once the order is delivered, with a single operation the system will automatically process the payment order for the supplier, update the accounts, enter the items in the inventory, and record the information in the database for use in governmental and civic oversight.
- When the product is used up, it is automatically removed from the inventory.
- When the supply is consumed, it automatically updates the inventory.

There are two modalities that combine elements from e-Tendering and e-Purchasing: Common Use Contracts and Reverse Auction.

## **Common Use Contracts** or Joint Contracts are those in which:

- A common supply need is identified for a group of public entities.
- One or more suppliers are selected through a competitive process (usually tendering).
- In common use contracts, the supplier engages to provide a particular good or service every time it receives an order from the authorized entities, at the price agreed. The supplier is guaranteed a certain range and pace of the orders.
- Authorized entities may directly order to the awarded suppliers, and pay them out of their own budget.

Common use contracts are very convenient for goods and services used in a recurrent and foreseeable manner, such as air transport and paper.

**Reverse auctioning** is another hybrid modality with the following characteristics:

- The Government Agency publishes its demand for a particular good or service in a particular quantity.
- There is a period for online reception of bids. Only suppliers who have been previously authorized may participate.
- Bids are strictly based on price and are known by all participants. The winning bid is the lowest at a certain closing time, previously established.

Reverse auctioning is permissible only if competition is based on the single criterion of price. All other characteristics of both bids and suppliers must be previously verified.

Reverse auctioning is useful in monopolistic or oligopolistic markets (where there are only a few very powerful suppliers, or even just one). Nevertheless, it entails certain risks that cause some countries not to use it or use it only within a restrictive policy framework. Among these risk two stand out: the possibility of artificial prices, and the bias for concentration in detriment of small suppliers.

## Why is e-Purchasing the last phase?

Because it is the most complex phase of e-GP development. E-Purchasing integrates flows and transactions, involves a wide range of operations and information flows between many suppliers and many public sector purchase officers.

Furthermore, the successful implementation of e-Purchasing requires previous experience with electronic procurement. Political agreements that can only be supported on the achievements obtained, deep institutional changes and sizable investments. Several requirements stand out:

- the need for a general policy to define the common goods usually bought (and not bought) by the public sector,
- a policy on fixed payment deadlines and standard financing of delays, so price competition is transparent,
- online integration of public budget management and contract management,
- a single, national, open, controlled system to register potential suppliers,
- a registry of civil servants authorized to undertake the purchase,
- a policy and mechanisms for ex-post electronic control,
- the adoption by buyers and suppliers of a standard catalogue to facilitate competition,
- the adoption of mechanisms for the elaboration of reference prices,
- a great training effort towards suppliers and procuring entities,
- improvements in connectivity, and
- highly specialized software.

## Open and Internet based Technology

Following the guiding trends in e-commerce and the need to secure the public character of the procurement system, the following will be considered as essential criteria: the system must be Internet-based, so that all information and procedures are always accessible to everyone; and, the use of open technologies (as opposed to proprietary systems) is mandatory for the sake of equity, compatibility and lower costs in the long run.

## **Duality: Online and traditional systems**

At the outset of the e-Purchasing system, and for an open period of time, the coexistence of the electronic and traditional systems will be accepted because of the technological, financial, and personal obstacles to the full massification of the Internet.

However, the traditional system will benefit from the changes and standards brought about by the online system. The online system will define the rules of the game.

## **Stages**

The stages for the implementation of e-Purchasing are six, highly interrelated:

- Basic Policy making
- Development of marketing tools
- Structure of supply
- Structure of government procurement
- Electronic processing of transactions
- Customized services and incentives for supplies

For the analysis of the fundamentals and alternatives in some of the abovementioned areas, please see "e-GP Standards Framework" in this series.

## 3.1. Purchasing Policies

Policy issues are essential in the initial implementation of e-Purchasing. It is necessary that basic policies be defined regarding the scope and orientation of the program. Such policies must define the main rules of the game, create the basic working conditions, promote understanding and participation by all agents involved, and guarantee an integrated, consistent process.

The main policy decisions are as follow.

#### General Policies

Aimed to obtain a general policy framework that works as the basic standard. They come out of a deep revision of the weaknesses of the current system, and from an expert knowledge of e-GP potential. The general policy may define, among other aspects:

- General objectives: Goals regarding governance and transparency, effectiveness, efficiency and economy, and development impact; the timeframe to reach those goals and how to monitor them.
- **Supply:** Who will be the suppliers and under which requisites; how to promote their productivity and competitiveness; how to build an efficient online registry without entry barriers.
- **Demand:** Which civil servants will be authorized to undertake online procurement; which will have to be their qualification and their accountability; and specify the cases where reverse auctioning and common use contracts will take place.
- Rules of the game: Reforms of the traditional procurement system required to develop e-GP; who will hold responsibility for the regulations and which power will be conferred for that purpose.
- **Consumer protection and monopoly oversight**: How to make e-GP yield positive externalities to consumers; how to make it strengthen anti-trust policy.
- **Marketing and social agreement:** How to involve the whole society in understanding e-GP and the required institutional and procedural reforms.
- **Oversight:** how to strengthen civic oversight and the handling of civic protests and complaints.
- **Integration and international competition:** how to ensure that policies and legislations be compatible with international standards and policies regarding e-GP and e-commerce; how to maximize interoperability with other countries' policies and legislations.
- **Legislation:** how make current legislation compatible with the new policies; which are the required legal reforms and how will those be promoted.

## • Policies regarding goods and services to be procured by the government

A relevant policy aspect is the definition of the goods and services which will usually be procured by the State. The core of e-Purchasing is the online publication of such selection,

turned into catalogue codes, for the suppliers to post their bids. The policy defining those goods and services to be procured is thus a basic standard which states, for instance, which are the three types of chairs that the government buys for the civil servants, when will them travel in business class, or which are the general characteristics of cars for high-level officials.

Policies in this area must be defined in general terms, so that the maximum competition is promoted for every item, receiving many bids, from different brands, with diverse specific characteristics.

On the basis of the above, catalogues will be demand-oriented as opposed to supplyoriented, obviating the infinite supply range.

## Financing and payments policy

A common difficulty observed in the procurement systems of many countries is the uncertainty in the schedule of government payments. As a consequence, suppliers raise their prices to incorporate the approximate cost of delays, based on uncertain parameters, which lowers competition and sometimes causes unjustifiable profits or losses.

Henceforth, for the quoted prices of goods and services to be comparable and reliable, a payment schedule and conditions policy is required. That policy will then define, as a standard:

- How many days after delivery the payment will take place.
- What interest rate will be paid to the supplier in the event of a delayed payment.

The policy will also define basic criteria for online payments: methods, timeframes, costs, and responsibility for those costs.

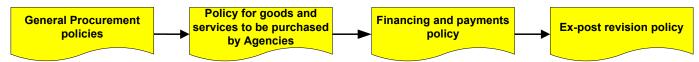
Finally, the policy must define when government payments will be compulsory online, in order to facilitate the operation of the system and promote the use of banking services.

## Ex-post review policy

Control mechanisms set out previous to the contracting and payment activities deteriorate transparency and efficiency of procurement systems. On the other hand, e-GP greatly facilitates ex-post review because it produces an electronic register of all transactions, in a way that all types of controls may be carried out online as well.

The policy must define the new ex-post review rules, and the new corrective and sanctioning mechanisms.

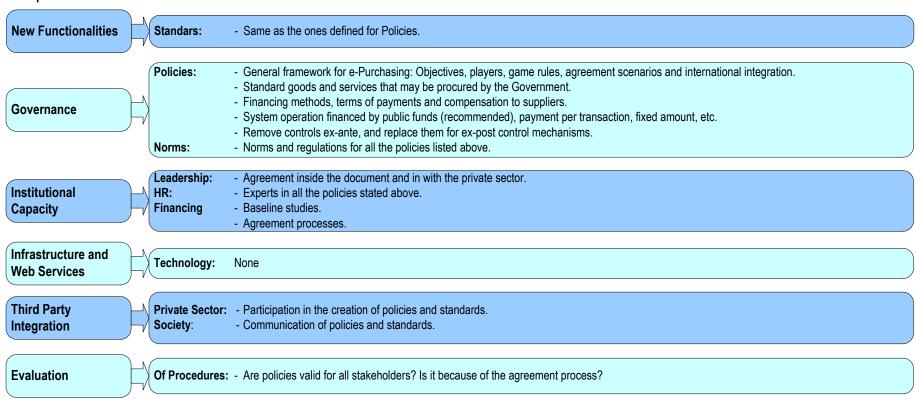
## 3.1. Purchasing: Procurement policies



## Main outcomes of the stage:

Define game rules to ensure a successful process.

## Components:



Based on the policies designed in the previous stage, instruments will be prepared and agreed as basic standards, which will regulate the functioning of e-Purchasing. Those are the main instruments:

## Detailed e-Purchasing model

The model must show in detail the operation of the system, including the role of each participant, the use of the instruments proposed, information flows, financial flows, and the control and monitoring.

Such model is the basis to:

- Analyze the adequacy and interrelation of the instruments proposed.
- Guide the development of the subsequent implementation activities.
- Define interoperability needs.
- Guide pilot projects.
- Serve as the common goal, to facilitate coordination with all the actors involved.
- Serve as a basis to prepare training and dissemination activities.
- Serve as the basis to promote the required legal reforms.

The model accompanies of three basic plans:

- Institutional development plan for on-line purchases that shows the necessary organizational changes. It is advisable that these changes are the necessary minima, to avoid traumatisms in the administration. It includes the definition about the characteristics and responsibilities of the leader agency and the technological platform operator of the transactional system.
- **IT development plan** that contains the definition of the hardware, software, middleware and communications platforms that will be used, and also a program for their development, acquisition and assembly. It is highly advisable that the platforms are open, modular and scalable. It is also advisable that their provision is not in a single technological supplier, but in several different suppliers with different specialties interrelating in an open system.
- **Standards development plan** that contains their basic definition, extent and implementation program.

#### Adoption of Catalogues

Catalogues are an essential standard for online exchanges. The decision on catalogues is probably the most important decision to be taken by the government, given its high impact on the efficiency and transparency of the system, and on its cost.

The national government must define a basic classification standard for e-government procurement and for e-commerce in general. Government suppliers must adapt or build their catalogues in accordance with the national classification standard.

Each supplier owns and maintains their own catalogue, but all catalogues must be readable by public agencies playing as buyers, without ambiguity about what is in them.

The basic classification standard must be broad and general (to facilitate particular catalogues), hierarchical (to facilitate searches, classifications, comparisons, analysis and updates); using ordinary language (to facilitate its use by any and all participants), and constructed in accordance with the international classification standards.

Taking in account the worldwide experience, the Multilateral Development Banks recommend to countries the use of the "Universal Standard Products and Services Classification" (UNSPSC) as basic classification standard. This classification, which has been prepared by the United Nations (<a href="http://www.unspsc.net/">http://www.unspsc.net/</a>) is recommended for several reasons: it is an open classification, has worldwide coverage, a hierarchical structure adequate for financial and administrative analysis, its low cost, and it is backed by a strong support structure. This classification may be complemented with the EAN (European Article Number), which includes the barcode system.

The basic classification standard is a set of products and services descriptors which are used to construct a catalogue, but is not a catalogue on its own because a catalogue may have information about detailed characteristics, price and quantity. A national centralized catalogue is not recommendable because its maintenance costs and its inability to include all new products and services developed every day in the world.

The adoption of catalogues of private companies as basic classification is not convenient because it leads to discrimination. Neither is it convenient to build the basic catalogue through the registration of each item by the suppliers themselves, because they tend to differentiate their products to avoid competition.

Supplier catalogues built in accordance with the basic classification standard may be used for controlling purposes, without the necessity of a national control catalogue.

#### Systems for establishing reference prices

Other instrument essential for e-Purchasing is the minimum reference price. It works like this: for every item in the basic classification standard, there is a minimum reference price. Bids are accepted as valid if their price ranges from the minimum to a percentage over it (say 10%). Procuring entities may chose on supplier catalogues the most convenient good or service within that price range, taking into account other features such as delivery timing, previous experiences, quantity offered, and other particular characteristics. When a bid falls over the acceptable range, it is rejected; when it falls below the minimum price, procurement authorities investigate (in order to avoid improper commercial practices). If it is found adequate, its price becomes the new minimum reference price.

There are several mechanisms to establish reference prices, such as price catalogues consultation, research of historic prices in transaction, tenders, and common use contracts, which usually allow for low prices through economies of scale. Minimum reference prices should be established in real transactions of market, no from declarations of suppliers' intention.

Based on the above, mechanisms for the formation and update of minimum reference prices must be defined for the items in the catalogue with which direct transactions will begin.

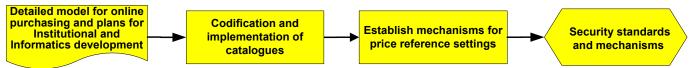
## • Security and Authentication

Certainty on its security is the basis of trust in the e-Purchasing system. Policies, standards, mechanisms, rules and regulations in this area must include a wide range of elements as complex as the following:

- Inalterability of information, which cannot be neither modified nor manipulated during transmission or storage.
- Confidentiality in order to avoid unauthorized access.
- Privacy, understood as not using commercial information for purposes other than those declared.
- Reliability over time.

It is also necessary to define a policy for the authentication of the participants' identities, in order to ensure certainty about the counterparts at all times. For that purpose there are mechanisms as the digital identity, public and private keys, accreditation, and electronic signature. Their definition must be made in the quest for a balance between security and efficiency. For low risk transactions, the adoption of strong, costly measures is not convenient or appropriate.

# 3.2. Purchasing: Preparation of market instruments



- Start the purchasing process with a clear view of the goals, together with a plan for institutional improvement and a cont- effective technological alternative.
- Adoption of standards to make the system work in a competitive, secure and reliable market.



## 3.3. Posting of eligible bids on the Internet

This stage focuses on the preparation of suppliers to carry out direct online transactions with the government. It must be developed in tandem with the following stage.

## • Development of suppliers' capacity to handle purchase orders on line

It is necessary that suppliers know the system and how to use it. For that purpose, it is necessary to undertake mass dissemination, direct training per sectors and company types, and pilot experiences.

Together with training, it is important to promote ways for a fast improvement of SME's connectivity, using a wide range of alternatives, such as widening the service supply (kiosks, Internet cafes, business centers), establishing incentives to access hardware and software, promotional connection fees, and other incentives.

## Supplier registration

During the e-Tendering phase, a supplier registry was established. At this stage, it will be convenient to review it in order to make it as dynamic and efficient as possible. It is desirable that online registration be enabled and that it be free of charge. If a fee is required, online payment must be possible, plus the fee must be progressive and not discriminatory against small companies.

Suppliers should be able to enter and exit the system automatically. Entries will only be valid, however, if suppliers provide all the information requested on the registration form. This information is essential in order to determine suppliers' contract performance record, verify the legality of their business activities, and generate the necessary statistics for the system.

Once registered, suppliers will be able to post their bids for those inputs that the EA is procuring at that moment and which are shown in the catalogue following the procurement policy. Eligible suppliers will be those whose bids comply with all stated requisites and fall within the price range.

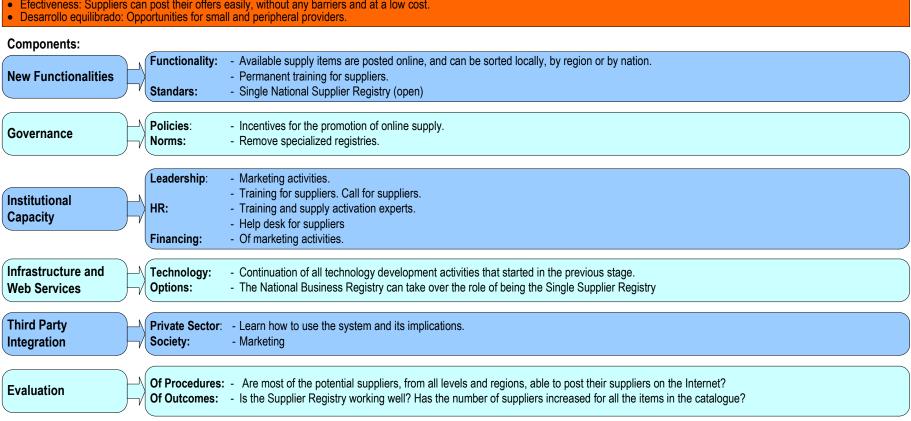
## • Online availability of eligible quotations at the regional and local level

After the previous steps are taken, the system will provide the procuring entities with a list of all eligible suppliers for a particular good or service in their region or municipality.

## 3.3. Purchasing: Structure of supply available on the Internet



- Governance: Equal opportunities. Maximize participation opportunities and oversight. Reduce opportunities for mistakes and corruption.
- Efectiveness: Suppliers can post their offers easily, without any barriers and at a low cost.



## 3.4. Organization of Public Sector Demand on the Internet

This stage focuses on the preparation of public entities for direct online transactions.

## • Developing public entities' capacity to procure on line

International experience shows that the toughest rejection to e-procurement is found among civil servants at all levels of the administration, who put forward arguments based on tradition, reliability, legality/lawfulness, jobs preservation, or political adequacy. A huge effort will be necessary to demonstrate the advantages of e-Purchasing to all levels of public administration, create the necessary infrastructure, and retrain and specialize the civil servants responsible for procurement.

## · Organizing each entity's individual, ordinary demand

Within the general policy and standard frames, each entity must:

- Define its procurement needs for purchasing.
- Define which of those purchases will be undertaken as direct purchasing and which as common use contracts.
- Establish internal procedures and responsibilities for operation and supervision of direct purchasing.
- Adapt infrastructure and connectivity.
- Connect its procurement system with that for budget management.

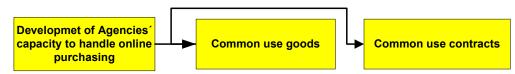
#### Organizing aggregate demand (for common use contracts)

Common use contracts may be performed under diverse institutional frameworks. Such as the following:

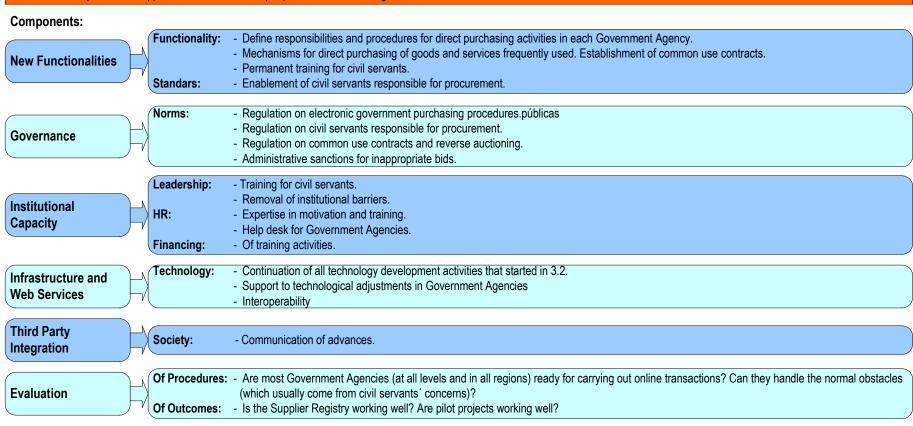
- The procuring entity opens the registration of public entities interested in a particular good of service. Based on that, the procuring entity selects the most adequate suppliers, and then, registered entities order directly to those suppliers on the agreed terms.
- A group of public entities associates and an ad-hoc entity, or one of them on behalf of the group, selects the suppliers. Again, the associated entities order directly from the selected supplier.

All the preparations necessary to perform common use contracts are undertaken in this stage: institutional frameworks are defined, the procedures are specified, responsibilities are accorded, and the civil servants of participant entities are trained.

## 3.4. Purchasing: Structure of the demand available on the Internet



- Governance: Transparency of the game rules in the public sector. Reduce chances for mistakes and corruption.
- Efectividad: Efficient organization of public demand. Efficient organization of public demand. Capacity of making high and low value purchases.
- Desarrollo equilibrado: Opportunities for small and peripheral Government Agencies.



## 3.5. Electronic processing of transactions

E-Purchasing starts at this stage.

## • Testing the technological infrastructure for e-Purchasing

This is the time for testing the hardware, software and communications infrastructure that have been developed and procured during the three previous stages. Tests must prove that the system is reliable, secure and efficient.

## Online processing of purchase orders

In addition to being able to consult lists of eligible suppliers, government agencies select the bid that yields the best value, and order the product or service they select online.

The selection must agree with the general supplier selection criteria that have been previously established, while providing the purchasing organization with some leeway to order at its best convenience, without breaking the general guidelines. This allows an Agency for example to select a furniture proposal which does not have the lower price but fits best with the rest of its furniture, within the price range allowed. It may also select a supply that, while not having the lower price, offers immediate delivery, in order to cover an urgent need.

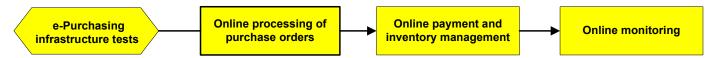
## · Online receipt, payment, and inventory management

The procuring entity registers the delivery of orders on line so that, in a single operation, it authorizes payment, updates the accounts, records the shipment's entry in the inventory, and generates the statistics required for the system's monitoring and oversight.

#### Online Control

The information on the previous step includes requirements of control organisms, which will be able to review on line the transactions performed, according to the control policy previously established.

## 3.5. Purchasing: Electronic transaction processing



#### Main outcomes of the stage:

- Governance: Equal opportunities. Maximize participation opportunities and oversight. Reduce opportunities for mistakes and corruption.
- Efectiveness: Savings for purchasing agencies and suppliers. Value for money.
- Balanced Development: New opportunities for local businesses and SMEs. More number of suppliers. Development af an e-commerce platfrorm.

#### Components: Functionality: - Direct procurement carried out online: evaluation and selection of bids and purchasing order. The supplier receives and processes the order. The **New Functionalities** goods and services are received and the payment order is issued. - Public oversight and legal monitoring are done online. Governance **Norms** - Ongoing changes in orientation and regulations. Leadership: - Monitoring and change capacity. Institutional HR: - Constant training. - Help desk operation. Capacity - Of the system operation, based on the political decision taken in stage 3.1. Financing. Infrastructure and Technology: - Development, test and support of the technical infrastructure. Web Services **Third Party** Private Sector: - Active participation in the management, evaluation, and changes in the system. Integration Society: - Oversight. Suggestions and complains. Of Procedures: - What is the percentage of purchases made online? Of Outcomes: - Has the number of potential suppliers increased? Have costs and purchasing times been reduced? What are the real savings for suppliers and **Evaluation** Government Agencies? Of Impacts: - Has the trust level in government procurement been raised? Has productivity been improved? Is the economy less decentralized?

#### 3.6. Personalized services, and supply-side incentives

As in the case of tendering, the necessary conditions have to be created for the provision of basic and user-specified information to facilitate multiple oversight of this type of procurement and stimulate competition.

This information may also be used to create supply-side incentives in specified regions as a way of promoting balanced development.

The steps involved in this stage are:

## Online elaboration of public information and reports

The e-GP Lead Agency defines the information that is produced and published on line, while purchasing transactions take place. Thus, citizens will be permanently able to gather information about the transactions that take place and know their individual or aggregate features.

As in the case of e-Tendering, the database will allow for customized searches.

## • Automatic transmission of user-specific information on demand

Again as in the case of e-Tendering, any person may register in order to receive the information requested via e-mail, fax or telephone.

#### Compilation of statistics on government procurement

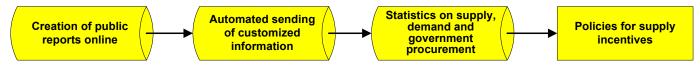
The Coordinating Agency will elaborate statistical reports showing the behavior and the /evolution of public procurement, which allow to track their path towards governance, effectiveness, and development impact. Statistics are also a means for e-GP accountability, and allow agreeing and defining new policies for its consolidation and better impact.

## Supply-side incentives

The analysis of online information show excess or weak demand, productivity levels by region and sector, relative competitiveness of national vs. international supply and, in brief, strengths and weaknesses of national suppliers. On such basis, it is easy to define policies promoting productivity and competitiveness, most of which may be implemented through improvements and democratization of the e-GP system procedures and criteria.

Through these mechanisms, e-GP generates its own dynamic of permanent improvement

## **3.6.** Purchasing: Personalized Services and Supply-side Incentives



## Main outcomes of the stage:

#### Consolidation of all the objectives of the previous stage Components: Functionality: - Permanent availability of information online: Reports, statistics and case estudies on procurement. - Customizable search engines. **New Functionalities** - Customizable services for information retrieval. Standars: - Ensure public access to information - Active research on about e-GP practives and communication of findings. Policies: Governance - Personalization of information. - Promotion of suppliers based on competitiveness, productivity and balanced development. - Constant evaluation and adjustments of the system. Leadership: Institutional - Management of incentives under competitiveness and fairness criteria. - Expertise in e-GP and productivity development. Capacity HR: Financing: - Studies and proposals. Infrastructure and Technology: - Personalized seach facilities. **Web Services** Private Sector: - Participate in the process for policy agreement. **Third Party** Integration Society: - Oversight. Suggestions and complains. Of Procedures: - Number and characteristics of the companies and citizens registered to receive personalized information. **Evaluation** Scope and use of the search facilities. New reductions in prices per region and product type. Of Outcomes: Of Impacts: - Indices for productivity and competition improvements.

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## **Annexes**

#### 1. The end of the traditional procurement processes

During the second half of the twentieth century, most Governments made considerable progress in developing their procurement processes. They had three basic objectives: to stimulate competition among potential suppliers; to ensure transparency based on clearly defined rules of the game; and to achieve optimum efficiency by improving the cost/benefit ratio.

Despite these advances, **traditional procurement processes fell short of these objectives**. As a result, government procurement and contracting practices are now being seriously questioned.

It is often said that the design of traditional systems is optimum but that problems arise because they are not implemented properly. However, the truth is that **traditional** government procurement processes are no longer capable of achieving their stated objectives even when they are properly applied.

The fundamental reason is that these traditional processes are not transparent or efficient and do not promote economic development anymore.

They are **not transparent** because they do not provide potential suppliers with full information concerning total public sector demand, do not provide purchasing units with information on all potential suppliers, and do not provide the general public with overseeing mechanisms. As a result, competition is limited, the impact of economic growth is weakened, and the existence of privileged access and the exclusion of other potential suppliers become inevitable.

As the countries' economies grow and diversify, the number of potential suppliers increases. At the same time, as government grows and becomes more and more decentralized, government agencies are undertaking procurement operations at different points in time and in different locations. The chances that supply and demand will meet under the traditional processes are limited, and in practice each agency calls for bids, purchases goods, and contracts services from among a select group of suppliers (those that are personally known to it). By the same token, the applicants for these opportunities (those that are aware of the agencies' requirements) are also few in numbers. This situation increases suspicions about the fairness of procurement processes; confidence wanes, and more oversight measures and requirements are put in place.

A limited scope for competition and the introduction of stricter oversight procedures make the procurement process **less efficient.** This translates into longer delivery times and higher processing costs, both for the government and for suppliers. As a result, the prices of the goods and services being acquired also rise. In addition, the amount of time allowed for the execution of some types of contracts becomes excessive because it is not feasible to process a series of contracts for more reasonable time periods. There are countries where the administrative costs related to procurement are even higher than the price of the product or service being purchased.

Under these circumstances, **even if everything is aboveboard, transparency is lost** because the complexity and scattered nature of procurement processes make it increasingly difficult for citizens to oversee them. This lack of transparency reduces the credibility of traditional procurement processes, leads the general public to mistrust them, and makes them vulnerable to corruption.

Because of its limited efficiency and transparency, government procurement **is not being used as a tool for promoting development**, since existing procurement operations diminish the effectiveness of government programs and projects and do not contribute to productivity or balanced growth. Furthermore, existing procedures concentrate government procurement in the suppliers and regions with more negotiating power, to the detriment of regional development and of small and medium enterprises.

2. Why e-GP?<sup>2</sup>

Until now, a key investment focus of most governments has been on physical infrastructure. This traditionally has meant very large investments in roads, ports, etc, with long-term rates of return. However, this focus is changing, with interactive and communication technologies playing an increasing role in productive capacity. Just one decade ago information technologies were a minor component of new capital investment worldwide but now represent more than half of such investment in some countries. These technologies are not just another piece of infrastructure or capital, but represent a profound shift in the means of production, the scope for broad community participation in commercial and social activity, as well as the methods and roles of government itself. Online technologies are increasingly providing the means for enhancing intellectual capacity, just as the industrial revolution has enhanced physical capacity.

The consequences of these developments potentially transform the ways in which governments interact with their constituents, manage their affairs and ensure good governance. Therefore, capacity building is increasingly also meaning the take-up, adaptation and exploitation of online technologies. Governments worldwide have recognized the significance of these developments as manifest in initiatives such as the e-Europe strategy and the Florianopolis Declaration.

Realizing the full potential of these technological advances is a challenge in itself. To perceive these developments simply as technological issues is to misunderstand their reach and relevance for policy, training, infrastructure, service governance, design, production and delivery, as well as technical literacy and awareness. Established ways of doing business and managing government have long traditions and significant change will often encounter professional and vested interests, so that the most important ingredient for change will be government leadership, vision and change management capabilities.

The exploitation of these online technologies is not a predetermined phenomenon along a naturally emerging path. There are many possibilities with many potential benefits and many dead ends. Within the mature market economies of developed countries it is often preferred to allow the market to select the successes from the false starts, although even here governments are being expected to develop policies and legislation and build infrastructure to facilitate new processes.

Developing countries are faced with greater urgency to generate positive outcomes while at the same time have less investment capital and infrastructure available. Developing countries, already facing tensions reflecting deep divides in income, geography, education, literacy, and gender and demography issues, can ill afford exacerbation of these tensions being compounded by a digital divide and other problems that they are exposed to through this phenomenon.

<sup>2</sup> From the document "Strategic Electronic Government Procurement – An Introduction for Executives" from this series.

## 3. Gradual approach to electronic processes (e-...)

In order to understand the basis of the Roadmap, it is necessary to take a look at the public and private sector experiences to realize that institutional, governmental corporative changes towards electronic means need to follow a gradual approach.

This is also true for e-GP, which needs to start from the less complex process (e- tendering) and let the more complicated ones to the end (e- Purchasing)

This gradual approach can be divided into three main accumulative stages: Publication, Interaction and Transaction.

- **Publication:** everybody can view all processes. Information can be accessed easily thanks to data simplification, integration and rationalization.

Participants can stay informed and exert oversight.

Transparency and accountability visibly improve.

- **Interaction:** There are intelligent and sequential information exchanges. Information gathering happens during the operations, and not just in reports later on. It increases its validity and reduces its costs. Information search is made easier through data cross-checking and organization. Databases interact, which make information exchanges easier and avoid data duplication.

The participants can exchange basic decision –making information.

Transparency levels raise and consolidate, and efficiency also increases.

- **Transaction:** Besides information, also goods and services can be traded under competition, because there is supply, demand and payments systems interaction. Time and Geographical restrictions are eliminated, and the added value of these transactions is increased.

Participants can carry out all their activities online, and they can trade any type pf goods and services.

Transparency and accountability become actual governance tools for the processes. There are further increases in efficiency levels and high economic impact in competition and development.

**Transformation:** The society changes deeply in all areas. The state and the private sector are reorganized. The economic and social processes are relocated and the job structures are modified.

The services are integrated, the chains of value change and new services appear. Social relationships change and also change relationships between people and any kind of organizations. Accountability is total and permanent. The information is the axis of the daily life and guarantee well-being.

