



# **E-Procurement**

***Its relation with "e-Government"  
and a road map for its implementation***

Version 1  
May 2002



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## **INTRODUCTION: NEW TECHNOLOGIES AND THE GOVERNMENT ADMINISTRATION**

The use of electronic means to carry out the procurement process is one of the central components of Public sector reform.

New information and communications technologies have paved the way for revolutionary changes in production and commerce, financial management, and mass media. Their integration into the civil service has been slower than in other environments, but these technologies will soon radically transform traditional public administrative practices.

In the public sector, the strengths and relevance of these new technologies come from the fact that they meet a long-standing need by providing an avenue for *direct interaction between government and its citizens the private sector*. This becomes possible because they facilitate immediate access at a negligible cost to:

- *Information* (rights, regulations and standards, procedures, public administrative processes and outcomes, etc.);
- *Most government services* on an immediate, personalized, and democratic basis;
- *Business opportunities* opened up by the government, which can thus cease to be restricted to a privileged few; and
- *An online channel for communicating political will*.

The new technologies are helping to bring the government administration into line with the collective aspiration for a consolidation of democracy. They are doing so by:

- Helping to maximize *transparency and public oversight* by allowing all citizens to monitor what decisions are taken and what their outcomes are;
- Boosting efficiency by helping to improve outputs while substantially reducing paperwork and helping to enforce deadlines; and
- Providing the government with new tools for stimulating and monitoring *balanced economic growth* and for managing *equitable social development*.

New procurement technologies are therefore providing governments with an unprecedented opportunity to stimulate development and to provide their citizens with better services at a lower cost.

Obviously, *this change is not generated by technology itself; rather it arises out of the institutional changes made possible by the use of that technology*. In other words, these types of changes do not come about simply because new hardware and software are put into use for the administration of government agencies. Instead, their influence is transmitted through thoughtfully designed policies and activities that make use of these new technologies to help modernize and democratize the State.



This report provides a comprehensive overview of the role of electronic procedures in the administration of government affairs and plots out a road map for their incorporation and development.

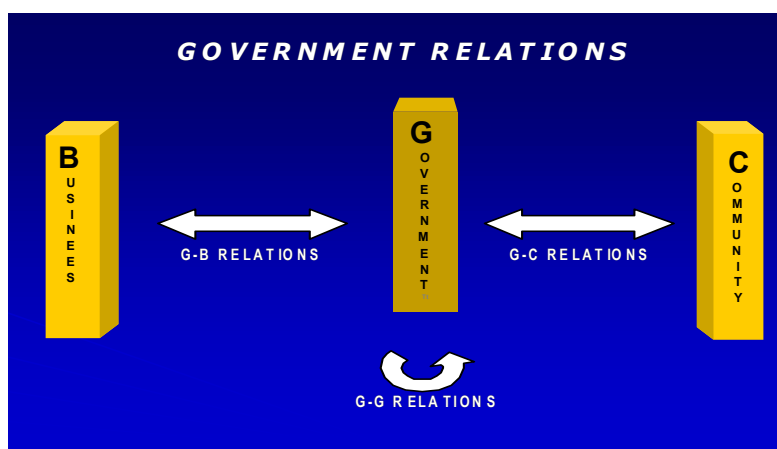
The potential impact of electronic procedures is addressed in a straightforward manner from a multidisciplinary perspective. The characteristics and scope of the proposed road map are as follows:

- It is based on the fact that the transformation of the Public sector is a challenge that each nation must deal with in its own way. Therefore, rather than proposing any single formula, a general road map is presented which each country can then adapt to suit its own circumstances.
- It recognizes that each country is unique. Thus it does not seek to provide any specific formula, it instead identifies key elements based on accumulated experience.
- It recognizes that the transformation of the Public sector is a gradual process and as such, it proposes a progressive development path rather than a “big bang” or “plug and play” approach.
- It is based on an understanding of the fact that the modernization of the Public sector is an integral process which encompasses not only administrative issues but also a combination of institutional changes, regulatory development, human resources development, computer science, and political decision making.



## PART ONE: CHARACTERISTICS AND COMPONENTS OF E-GOVERNMENT

The main forms of interaction involved in Public Sector administration can be classified into three groups: community interactions (citizens and organizations), business interactions (suppliers of goods and services), and internal interactions within the governmental apparatus itself.<sup>1</sup> These interactions can be viewed as follows:



E-Government has to do with all three of these types of relationships. It is based upon institutional changes and the use of information technologies to overcome the barriers of space and time. It thus provides an avenue for a direct, democratic form of interaction between a government and its citizens; online, non-discriminatory access to public information and to most government services; equitable participation in business opportunities opened up through public procurement transactions; and public oversight of the administration of government affairs as a whole.

### 1. *E-Government in government–community interactions*

Traditionally, government interacts with the community (citizens and organizations) through many gateways. Each sector, each level of government, and each public service generally has its own communication channel, and the number of such gateways multiplies as society advances and as the government increases in complexity. As a result, the channels for communication between citizens and their government tend to become tangled and increasingly disperse.

Thanks to today's information technologies, **government interactions with the community can be routed through a single electronic portal** which serves as the cornerstone for e-Government public services. This portal provides citizens and their organizations with access to the four basic modes of communication with government:

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<sup>1</sup> Internal governmental interactions include intra-governmental forms of interaction (between national and regional levels and between agencies at the same level of government) and functional processes (budget management, government payroll processes, and the management of public goods). These in-house channels are not covered in this report.



- Direct communication (receive and supply information);
- Access to government services that can be provided through electronic means;
- Make or receive payments; and
- Express political will.

## 2. **E-Government in government–business (supplier) interactions**

In order to fulfill their mission to serve the public, Governments become the largest purchaser of goods and services of their respective economies. This is why governments take special care in establishing a procurement system whose rules will govern their dealings with suppliers. Even if a single, standardized procedure is used (in some countries, a number of different procedures exist), the areas in which purchases need to be made are so varied that it becomes increasingly difficult for suppliers to apprise themselves of all the items being sought by hundreds of different government agencies at any given time. By the same token, these agencies are not aware of all the possible suppliers of the goods and services they seek. This kind of situation limits competition, triggers exclusionary practices, and heightens the cost, complexity, and vulnerability of oversight mechanisms.

The use of electronic procedures for government procurement (e-GP) makes it possible for:

- All government procurement opportunities to be **seen online at a single site**;
- All potential suppliers to have **equal opportunities for participating** and access to information; and
- The community and specialized bodies to perform **oversight** functions effectively.

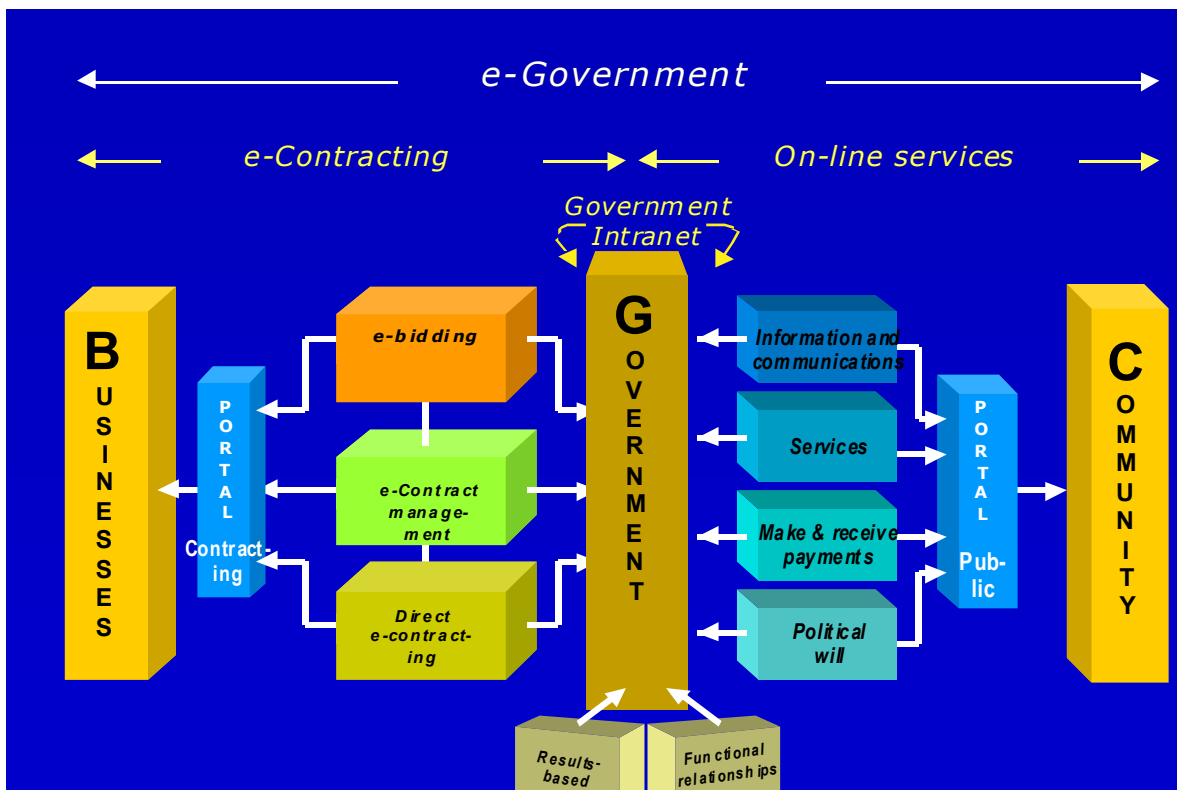
E-Procurement systems have a unified conceptual structure based on three principles: transparency, efficiency, and the promotion of economic growth.

In most cases, an e-procurement system involves two types of complementary procedures:

- **Government procurement via electronic tendering processes** (e-GP tendering) the acquisition of high value, low volume goods, works and services by seeking bids (proposals) via a public process followed by the evaluation of bids and award of contracts, and
- **Government procurement based on the use of online price quotes** (e-GP purchasing) the acquisition of low value, high volume goods works and consulting services by direct quote in the open market or from prequalified suppliers and payment for the purchase.

Both procurement procedures require **electronic management of government contracting** (e-GP contract management) in order to facilitate contract performance and the technical and financial monitoring of processes and results.

These flows can be represented schematically as follows:



The following sections will focus on the characteristics of e-GP systems and their components.



## **PART TWO: CHARACTERISTICS AND IMPACT OF E-GOVERNMENT PROCUREMENT (E-GP)**

As noted earlier, governments are invariably major purchasers of goods and services. Therefore, their relations with suppliers –and, hence, their procurement systems– are an essential aspect of government policy and administration.

This section presents an assessment of traditional procurement systems and provides an overview of what electronic systems involve.

### **1. General assessment**

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. Public sector managers consider this to be a critical problem, and much of the population sees such systems as a source of privileged treatment and corruption.

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

The fundamental reason for this is that these traditional processes **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 oversee 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, their domestic markets expand, the communications capabilities involved in the movement of merchandise and services improve, and as the globalization process proceeds, the more potential national or local suppliers there are. At the same time, as government grows and becomes increasingly decentralized, more and more government agencies are undertaking procurement operations at different points in time and in different locations. The chances that supply and demand will converge 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 number. This situation gives rise to



increasing suspicions about the fairness of procurement processes; confidence wanes, and more oversight measures and requirements are put in place. These problems are a factor in the procurement of generic goods and services, but they are even more of an issue for the procurement of non generic goods and consulting services.

A limited scope for competition and the introduction of stricter oversight procedures make the procurement process **less efficient**. When this occurs, delivery times are longer and processing costs are higher, both for the government and for suppliers. The prices of the goods and services being acquired also rise, of course. 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. Estimates for some countries indicate that most purchases involve sums of less than US\$500, but the associated administrative costs range from US\$200 to US\$600. The situation becomes even more complex when exceptional procurement channels are used in an attempt to get around the excessive controls applying to regular procurement procedures in order to expedite the transaction.

Under these circumstances, **even if everything is aboveboard, transparency is lost<sup>2</sup>** 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. Existing procedures concentrate government procurement in the suppliers and regions that have the most bargaining power, to the detriment of regional development and of small and medium sized enterprises.

## 2. **E-GP objectives**

The use of e-procedures to facilitate appropriate political and institutional decision making processes makes it possible to achieve four main objectives for both procurement processes and development policies: transparency, efficiency, promotion of balanced development, and international integration.

### a. **Transparency**

With the help of e-procedures, **all procurement processes can be monitored by anyone wishing to do so**. In other words, every stage, decision, and result of

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<sup>2</sup> The reader is reminded that the expression "lack of transparency" does not refer to the possibility of corruption but rather to the existence of procedures that are not open to the on-going scrutiny of the populace or that are so complicated that they preclude societal oversight. In contrast, the term "corruption" refers to the use of power for personal gain. These terms are often confused because corruption is free to flourish when there is a lack of transparency.



government procurement operations can be viewed online (as they take place) by potential suppliers, the general public, and the government itself.

Doing everything openly means, *in the case of tendering*, that all citizens have access to government agencies' procurement plans, calls for tenders, bidding documents and their clarifications, the criteria to be used in evaluating bids, and the final award decisions. *In the case of purchasing*, it involves making it possible for citizens to examine each and every procurement process and to compare it with other similar transactions and with past operations.

This also involves providing public access to various indicators used to ensure government accountability, including unit prices, purchase volumes, historical trends, and inter-agency comparisons. These indicators make it possible to examine such elements as the procurement behavior of a given government agency, to compare the unit costs of procurement operations conducted by different organizations, regions or countries, or to determine a specified supplier's degree of compliance.

Transparency helps to promote competition because it provides an opportunity for suppliers that previously lacked full access to government procurement information to participate in these exercises and because it fosters confidence in the fairness of the rules of the game.

Achieving transparency calls for institutional and political decision making that can be backed up with electronic procedures. These decisions focus on five basic prerequisites for government procurement:

- **Common ground rules**, which will reduce the likelihood of privileged or discriminatory treatment;
- **Confidence from the suppliers' and the community's side** because they know that the procedures are impartial.
- **Collective oversight**, made possible by the fact that all government procurement operations are open to inspection by the general public.
- **Monitoring by specialized agencies** based on the same information to which the general public has access.
- **Reduction of corruption**, thanks to transparency and oversight by the general public.

## **(b) Efficiency**

The combination of e-procedures and institutional decision making can increase the efficiency of procurement systems, thereby maximizing the benefits available at the lowest possible cost for taxpayers. In the case of tendering process, this simplifies the planning process, the calls for tenders, and the preparation of bidding documents and offers. For ordinary procurement procedures, this makes possible to carry out an unlimited number of transactions at the lowest possible cost with a maximum of



supervision. This approach thus provides an easy way to make small, short-term purchases quickly and inexpensively from firms of any size.

Thanks to its increased efficiency, e-GP makes it possible to achieve the following:

- **Reductions in the *cost*** of procurement processes for purchasers, bidders and supervisory agencies.
- **Reductions in the amount of *time*** taken up by procurement operations, thanks to their simplification.
- **Reductions in the *prices*** of the goods and services being procured.

By increasing the effectiveness of public investment, e-procurement 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).

In western Australia, price reductions of nearly 10% were obtained for the goods and services purchased during the e-GP start-up phase and of almost 20% for the consolidation phase. The transaction costs for minor online purchases of merchandise have been reduced by up to 50%. Sao Paulo reports reductions of 23% on average. The scale of these potential savings is remarkable in view of the fact that a reduction of just 20% in the prices of the goods purchased by the public sector in Latin America and the Caribbean would be equivalent to one third of the region's total expenditure on education or health care.

Thanks to the standardization of procedures, the ease of online applications, and the reduction of costs and delivery times, this approach permits an optimum spatial and temporal distribution of procurement processes. It makes it possible to undertake high-frequency online tenders and purchases without having to extend the terms of contracts beyond reasonable limits or to wait so that contracts can be bunched together in order to reach a certain volume. This procedure also allows any government agency to undertake online tendering or purchasing operations, regardless of its geographic location, and thus helps to promote decentralization and prevent the concentration of purchase transactions among a limited number of suppliers or in capital cities.

### **(c) Promotion of balanced development**

Because e-GP procedures are more flexible and more efficient, they can be used as tools for turning government procurement processes into balanced development incentives. This signals a renewed appreciation for one of the main targets of government expenditure.

The contributions that e-GP can make to the promotion of balanced development revolve around three main aspects:



- **Anti-trust protection.** As noted earlier, government procurement processes stimulate competition. This capacity can be used as a basis for introducing measures and systems for combating monopolies with a view to increasing employment and productivity.
- **Development of the regional and local economies and of small and medium sized enterprises.** As noted earlier, e-GP systems permit transactions to be conducted on a highly decentralized basis; in addition, they offer a way of overcoming geographical and volume constraints. These systems therefore open the way for small scale local purchases. It thus becomes possible for local, small scale procurement to be used to stimulate the development of small and medium sized enterprises and to promote the growth of regional and local economies. A procurement policy focusing on small and medium sized local producers in western Australia succeeded in trebling the number of the government's small and medium sized suppliers in just three years.
- **More balanced and equitable public investment.** Electronic processing can also facilitate the selection of suppliers for public investments in less developed areas and can improve contract management for such projects and thus help make public expenditure more equitable.

#### **(d) Support for regional and international integration**

National e-GP systems facilitate regional, subregional, and international integration because they contribute to **market supervision and transparency** via the mechanisms just described.

They also facilitate the adoption of a common classification system for goods and services for use in regional and in subregional common markets.

E-GP is, by the intrinsic nature of its design, a means of supporting **transparency** in commercial transactions, of promoting **standardization**, and of **monitoring** trade impacts.

#### **(e) Integrated objectives**

In order to serve as an effective means of backstopping Public sector reforms, a good e-GP system must incorporate these three objectives (transparency, efficiency, and the promotion of development).

A number of the existing systems have difficulty in integrating these objectives:

- Many focus entirely on the objective of transparency. They therefore **concentrate on protecting the system against corruption and thus put the emphasis on supervision rather than on development.** They are oriented toward enforcing the rules in effect under the traditional system, which involves retaining highly



complex systems (lack of transparency) and pre-existing requirements and procedures, even though many of them have become unnecessary in today's electronic world (inefficiency) and are entirely outside the scope of balanced development policies. They are, in general, systems developed by supervisory institutions.

- Some ***emphasize efficiency while tending to lose sight of the importance of balanced development and, at times, of the need for transparency.*** These systems are primarily focused on providing low prices, and they see bid securities as an obstacle to the entry of small and medium sized suppliers. They therefore often tend to have a concentration effect and, in some cases, to open the way for monopolies or oligopolies. This tends to be the approach adopted by privatized systems that have exclusive marketplaces.

In short, ***e-GP systems are intended to maximize the effectiveness of public expenditure aimed at achieving balanced development and the greatest possible benefit for society at the least possible cost by means of efficient, transparent methods subject to societal oversight.***

### **3. A public or private system?**

E-GP procedures are both a component and an engine of Public sector reforms aimed at the reinforcement of democratic governance, restoration of good public administrative practices, and the reconfiguration of institutions.

They are also a vital source of support in orienting a balanced development process on a deliberate, dynamic basis so that emphasis can be placed on the production sectors and regions of each country that are targeted for special development efforts.

To this end, the development of e-GP calls for substantive changes in the relationship between a government and its citizens, in public expenditure, in the rules of the game, and in government institutions.

These changes are not brought about "by" technology but rather "with the support" of technology. In other words, the use of computers does not, in itself, produce significant changes in the way the development process is managed or solve the government procurement problems discussed above. In order to accomplish these things, well thought-out policies and actions for institutional restructuring are needed. New technologies should be used to strengthen these initiatives, but they will not bring them about on their own.

This line of reasoning demonstrates that **e-GP procedures should be overseen and conducted by the government itself**, since they are an integral part of government administrative functions.

Once government oversight has been ensured, private-sector technological inputs of hardware, software, and communications are both viable and desirable, as are the development and support services of innovation and technology firms.



## PART THREE: STAGES AND REQUIREMENTS FOR THE INTRODUCTION OF E-GP

In order to analyze the steps involved in optimizing the e-Procurement implementation process, the various stages of government procurement processes will first be examined.

### 1. Procurement stages

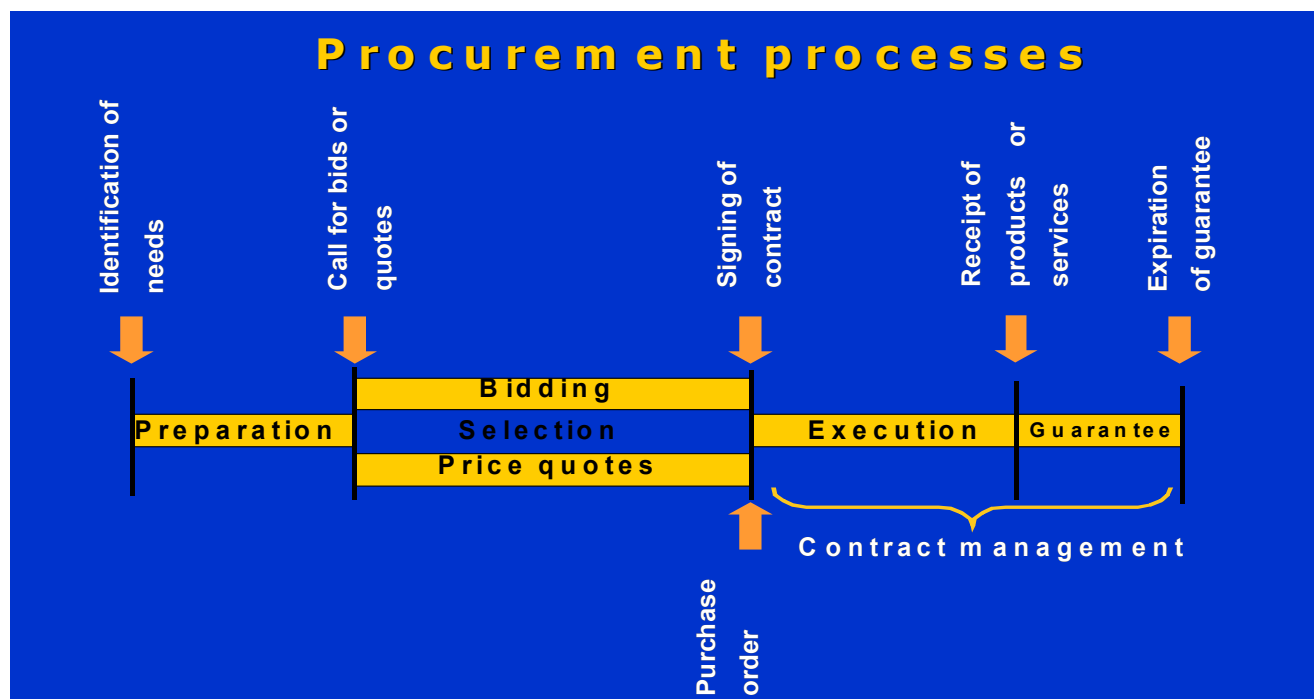
All government procurement processes involve four basic stages:

- **Preparation:** Determination of the need to be met and identification of the works, goods or services that have to be obtained in order to do so. This stage concludes with a precise specification of the goods or services that are required and the issuance of an invitation or call for bids or price quotes.
- **Selection:** The search for the best **bid** or **price quote**, as the case may be. 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 and the executing agency makes the corresponding payments. It concludes with the final acceptance of the good or service concerned.
- **Guarantee:** 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**

The implementation and guarantee stages, which follow the signing of the contract or the issuance of the purchase order and start with the provision of the relevant products or services, are referred to as **contract management**.

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



Thus, once the planning process has been completed, a procurement operation may be one of two types: suppliers may be selected through a bidding process, or on the basis of a price quote. Both forms entail contract management functions.

## 2. **A general road map**

The greatest difficulty involved in implementing e-procurement procedures is to determine **how to get started and what type of staged process should be pursued.**

A team of experts from the Inter-American Development Bank studied the various experiments undertaken in this area around the world and found a number of different approaches and models for setting up such a system. Using this as a foundation, a **road map** has been drawn up for what could prove to be an **optimum process**, based on the available data about experiences worldwide.

This road map covers four stages:

- **Planning stage**, during which institutional responsibilities for the process are defined and a plan for its implementation is formulated.
- Assembly stage for **e-tendering** procedures.
- Development stage for **contract management** functions.
- Assembly stage for **e-purchasing** procedures.



This is an optimum process design for two reasons: (i) it facilitates institutional changes and the modernization of the civil service; and (ii) it starts from the simplest functions and progresses to the most complex along a cumulative development path. This makes for a faster, less expensive, and institutionally more sound introduction of e-GP.

Obviously, 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.**

This road map can, nonetheless, **be applied in all countries, regions, and municipalities**, since they are the ones that will establish its starting point, will determine the level of various prerequisites, as appropriate (e.g., Internet penetration and connectivity), and will plot out the specific route to be followed.

It should be emphasized that the introduction of e-GP is carried out by stages, each of which will produce high impact outputs, but it is essential for the process to be followed through to completion in order to achieve all its outcomes.

During the development of the e-GP system, **traditional procedures should remain in place.** The two systems are fully compatible with one another. Actually, it is the same process carried out through different means. However, e-GP provides substantially different outcomes compared to the traditional system because it permits the provision of information and the use of that information to enhance transparency, efficiency, and the capacity for promoting development.

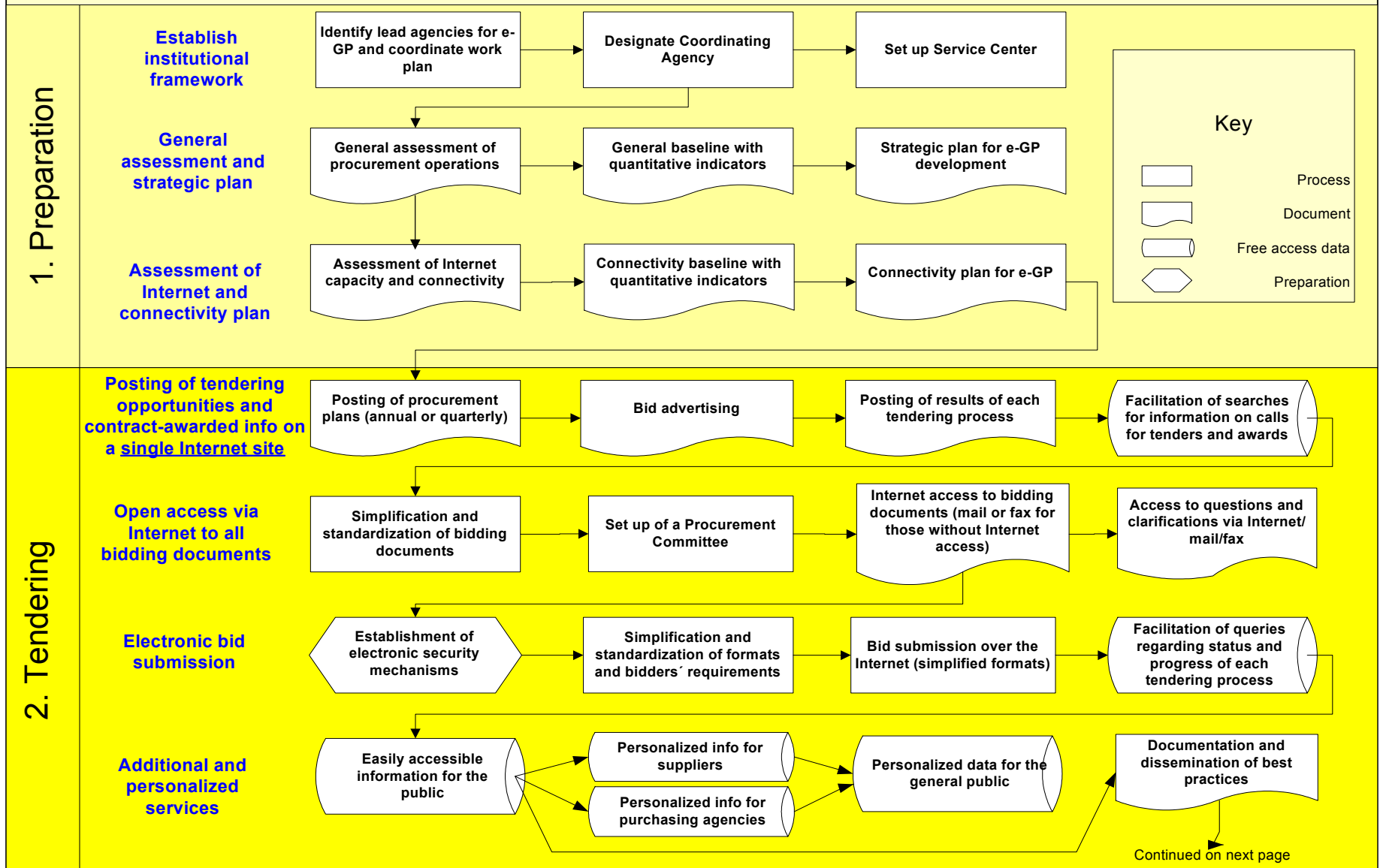
The process of setting up e-GP systems **can be launched at the national, provincial, or local level**, or at all these levels at the same time.

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



# ROAD MAP FOR THE DEVELOPMENT OF e-GP

Part one





# ROAD MAP FOR THE DEVELOPMENT OF e-GP

Part two

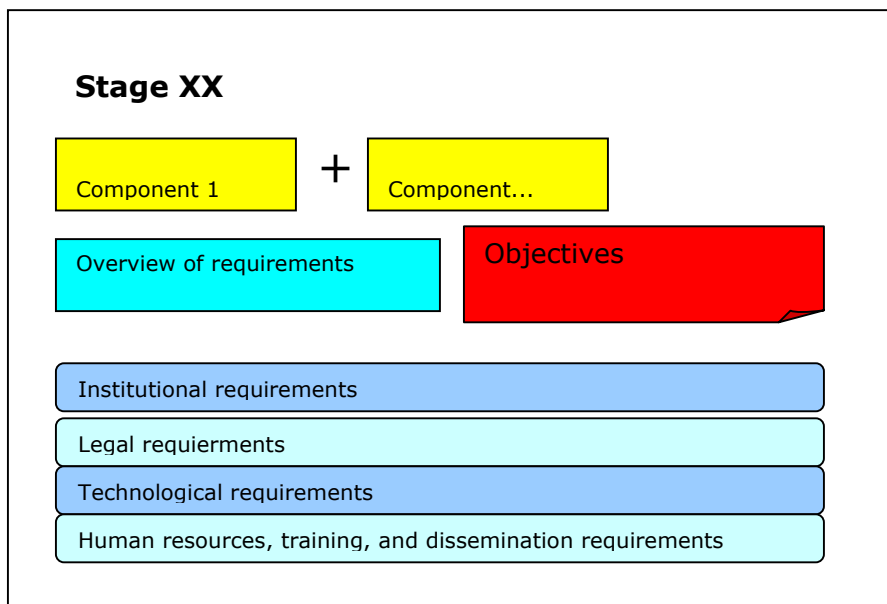




### 3. *The road map's scope and requirements*

The scope and components of each of the stages included in the road map are set out below, together with its institutional, legal, technological, human resource, and public information requirements.

An introductory description and summary table of the basic requirements will be provided for each stage. The table will be structured as follows:





## I. Planning

The planning stage is of decisive importance because it will determine the institutional impact of e-GP. If the planning stage is not conducted properly, the administrative and financial costs of developing e-GP will be extremely high, and the system that is eventually developed may have very little impact, even if it is quite advanced in a technological sense.

There are basically two initial conditions for setting up a successful e-GP system: creating a suitable institutional framework, and building a consensus regarding the objectives and scope of the process.

The key stages in the process are as follows:

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

The first step is to coordinate the active participation of the **public agencies that are the most relevant in government procurement operations, the management of the public-sector budget, and the modernization of the Public sector.** This involves:

- **Identify the lead agencies, working with them to build a shared vision, and arriving at a coordinated working agreement.**

The most important agencies in setting the process in motion include those responsible for general budget management, planning, the modernization of the Public sector, monitoring government expenditure, and public oversight of government affairs. In some countries or municipalities, the participation of the legislature will also be essential. In the absence of this kind of multi institutional agreement, if a single agency unilaterally assumes a leadership position, there is a risk that the system will have biases that will limit its impact (for example, a bias toward control or oversight, to the detriment of efficiency and the promotion of development, or a bias toward the advancement of some sectors, to the detriment of balanced growth).

- **Designate and set up a Coordinating Agency**

One of the lead agencies should be assigned executive responsibility for the coordination and orientation of the process and for its dissemination and monitoring.

This agency's main duties will be to:

- Promote the use of e-procurement systems;
- Promote the coordination of government purchasing agencies;



- Promote consensus-building among suppliers and purchasers;
- Certify secure e-identification methods;
- Run the Service Center;
- Promote the formulation, approval, and enforcement of rules, regulations, and standards;
- Report on and disseminate the advances and use of e-GP among the general public;
- Receive and make an initial determination regarding protests.

Such an agency can only be successful if it has the technical capabilities and mandate to perform these duties. Depending on the governmental structure in each country, the Coordinating Agency may be the unit responsible for economic development, modernization of the Public sector, 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.

It is important to remember that it is not the Coordinating Agency's job to take over other government agencies' procurement functions; its role is to orient the modernization process, but in no case should it take responsibility for conducting procurement operations.

The coordinating agency **should not** be an agency that specializes in the use of computer technology (it will rely on the Service Center for expertise in that area, as will be discussed below). Its duties refer instead to the modernization of the procurement system and of the Public sector itself.

- **Set up the Service Center**

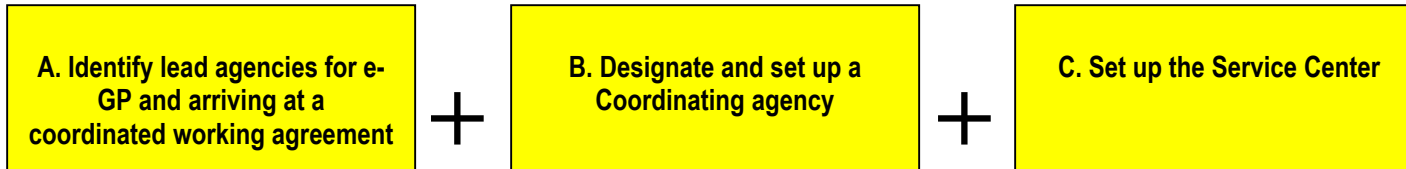
The development of e-GP will require an array of support activities in the areas of computer services, connectivity, database management, and operation of the Internet site. A service center will therefore need to be established. This center may be located within a government agency or can be run by a private organization, but in either case it should be a public service under the control of the coordinating agency, which will also be handling public information.





# 1. Preparation: Establishment of the Institutional Framework and its Coordination System

Components:

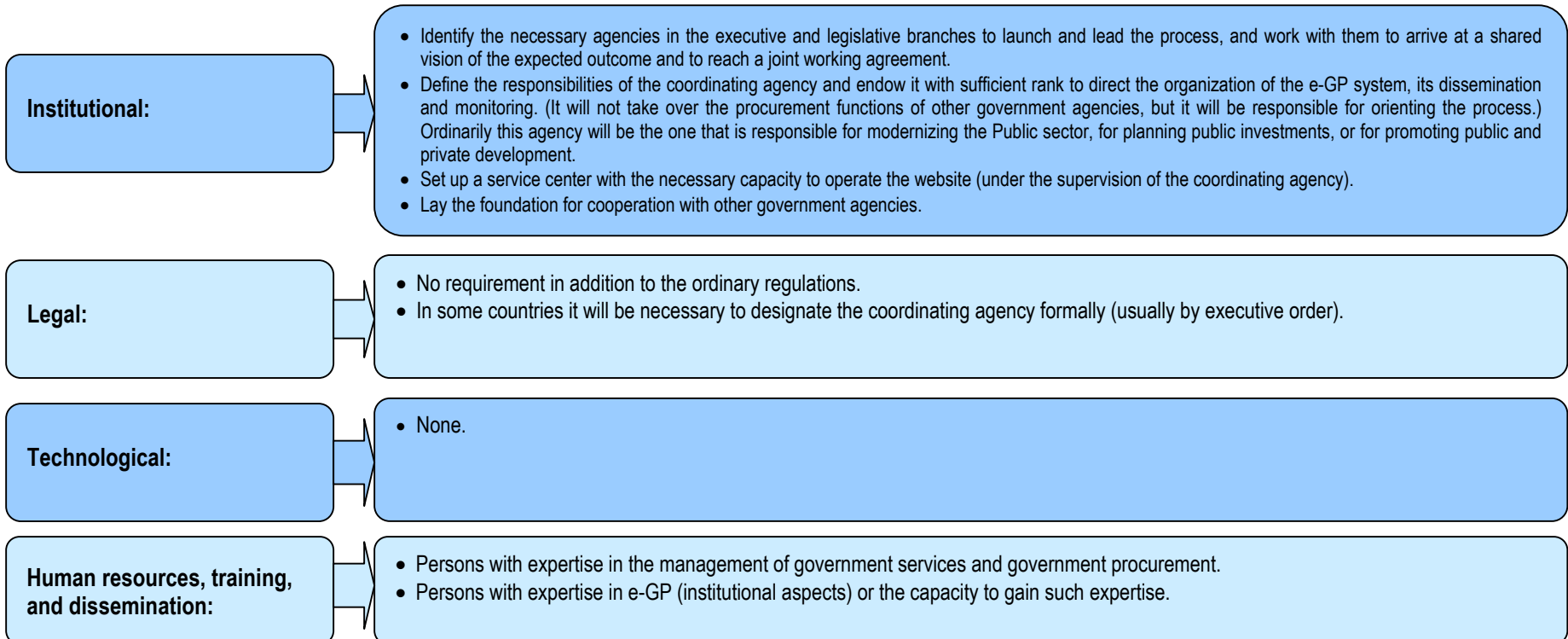


Specific objectives for this stage:

**Overview of requirements:**

- Initiate the process with **government agencies** capable of leading it.
- Establish a **coordinating agency** at a sufficiently high rank so that it can do its job.
- Set up a **service center** to provide e-support.

- Have a basic, shared vision of e-GP.
- Establish the institutional capacity for coordinating and guiding the process.





## **2. Preparation of a general assessment and a strategic e-GP plan**

Once the initial institutional aspects of the initiative have been defined, it is important to conduct an analysis of the baseline situation and form a clear view of the desired outcome. This is the reason for preparing a general assessment and a strategic plan.

The components of this task are:

- **Preparing a general assessment of procurement processes**

This assessment should provide a comprehensive picture of procurement procedures, including their strengths and weaknesses, so that the e-GP system can be adapted to suit conditions in the country. Emphasis should be placed on tendering procedures, since this procurement process will be the starting point for the transition to e-GP.

Annex 1 contains a list of the elements that may be covered by the assessment. The main such elements are:

- Overall description of the procurement system;
- Description of the tendering process: Methods and stages;
- Basic quantitative and financial procurement data;
- Institutional appraisal: Characteristics of purchasers and suppliers;
- Appraisal of efficiency: Duration and cost of the various processes;
- Appraisal of transparency: Availability of information within the public domain;
- Legal appraisal: Factors that will facilitate e-GP and obstacles to it;
- Advances in e-GP in the country.

- **Constructing a baseline with key indicators**

The assessment can then be used to construct a baseline with quantitative indicators for measuring the status of the system at the start of the project and how it changes as the e-GP system is implemented. The main elements that can be included in the baseline are listed in Annex 1 in italics. They refer to the following basic subjects:

- Average length of a tendering process;
- Average cost of a tendering process for the purchaser and for the supplier;
- Average number of bidders in each operation;
- Percentage of invitations to tender that are declared void per year;
- Price levels of the goods and services purchased.

- **Formulating a strategic e-GP plan**

At this point the general assessment can be used as a basis for formulating a strategic plan for the implementation of e-GP in the country. This plan should contain a description of the desired outcome, a road map for arriving at that destination which takes conditions in the country into account, the specification of



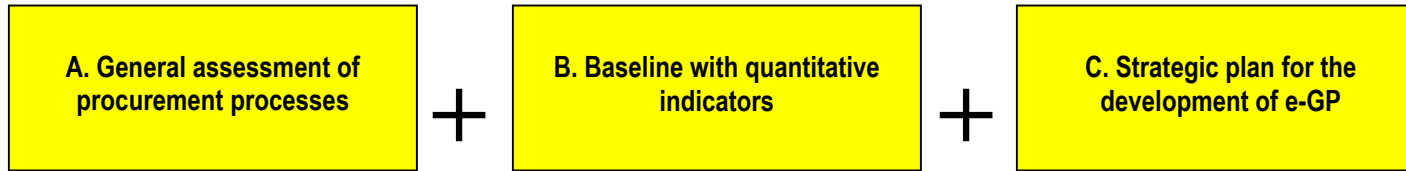
responsibilities and timeframes, and a system for monitoring the progress made on an ongoing basis and for making corrections where necessary.

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 of the civil service.



## 2. Preparation: General assessment and strategic e-GP plan

Components:



### Overview of requirements

- Preparation of an assessment of the strengths and weaknesses of the system and construction of a baseline.
- Formulation of a strategic plan and a road map.
- Capacity to monitor the process and correct its course.

### Specific objectives for this stage:

- Have an analysis of the baseline situation, a clear picture of the desired outcome, and a system for measuring progress.

### Institutional:

- Prepare an appraisal of the following areas:
  - + Quantitative and financial data on government procurement operations.
  - + Description of procurement processes.
  - + Evaluations: Institutional factors, efficiency, transparency, legal aspects.
  - + Analysis of development of e-GP in the country.
- Construct a baseline, with key indicators taken from the assessment.
- Formulate a strategic plan for developing e-GP:
  - + Planned stages and desired outputs for each (a “road map” suited to the conditions in the country).
  - + Institutional responsibilities.
  - + System for monitoring and evaluation.

### Legal:

- Ordinarily, none.
- In some countries, the plan may have to be approved by the agency within the executive branch that is responsible for development policy.

### Technological:

- None.

### Human resources, training, and dissemination:

- Multidisciplinary team with expertise in procurement and public finances, the ability to obtain and manage the necessary data, analytical capacity, and experience in joint planning functions.



### **3. Preparation of an assessment of Internet capacity and an e-GP connectivity plan**

A assessment focusing specifically on Internet capacity in the country and its dynamics is needed so that the strategic plan can be tailored to accommodate this situation. Either in tandem with the strategic assessment or following its preparation, an assessment should therefore be made of the strengths and weaknesses of the Internet's development in the country. This appraisal can then serve as a basis for the preparation of an e-GP connectivity plan.

The components of this stage are:

- **Preparing an assessment of Internet capacity in the country**

Annex 2 contains a list of factors that may be covered in the following areas:

- Internet status and trends in the country, including the dynamics affecting its penetration in the various sectors of society;
- Connectivity in the public sector;
- Internet access in the private sector, including small and medium sized enterprises;
- Status and trends in regard to the supply of human resources in the fields of informatics and computer technology.

- **Constructing an Internet-capacity baseline**

Provide a baseline that includes quantitative indicators for public sector connectivity, private firms' access to the Internet, and Internet penetration in the community.

- **Preparing an e-GP connectivity plan**

Strategies should be devised for bringing about a rapid improvement in public-sector connectivity and in Internet access for the private sector and the general community as a building block for e-GP. The plan may provide for the preparation of a manual for public-sector investments and a dynamic system for expanding Internet use.<sup>3</sup>

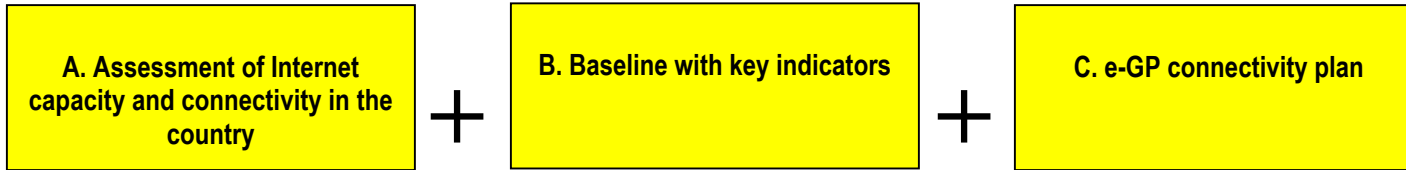
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<sup>3</sup> One good model for expanding Internet use in low- and middle-income sectors is provided by Peru's "Cabinas Populares" (people's booths), which have achieved a remarkable coverage rate in record time with minimal State subsidization.



### 3. Preparation: Assessment of Internet capacity and an e-GP connectivity plan

Components:

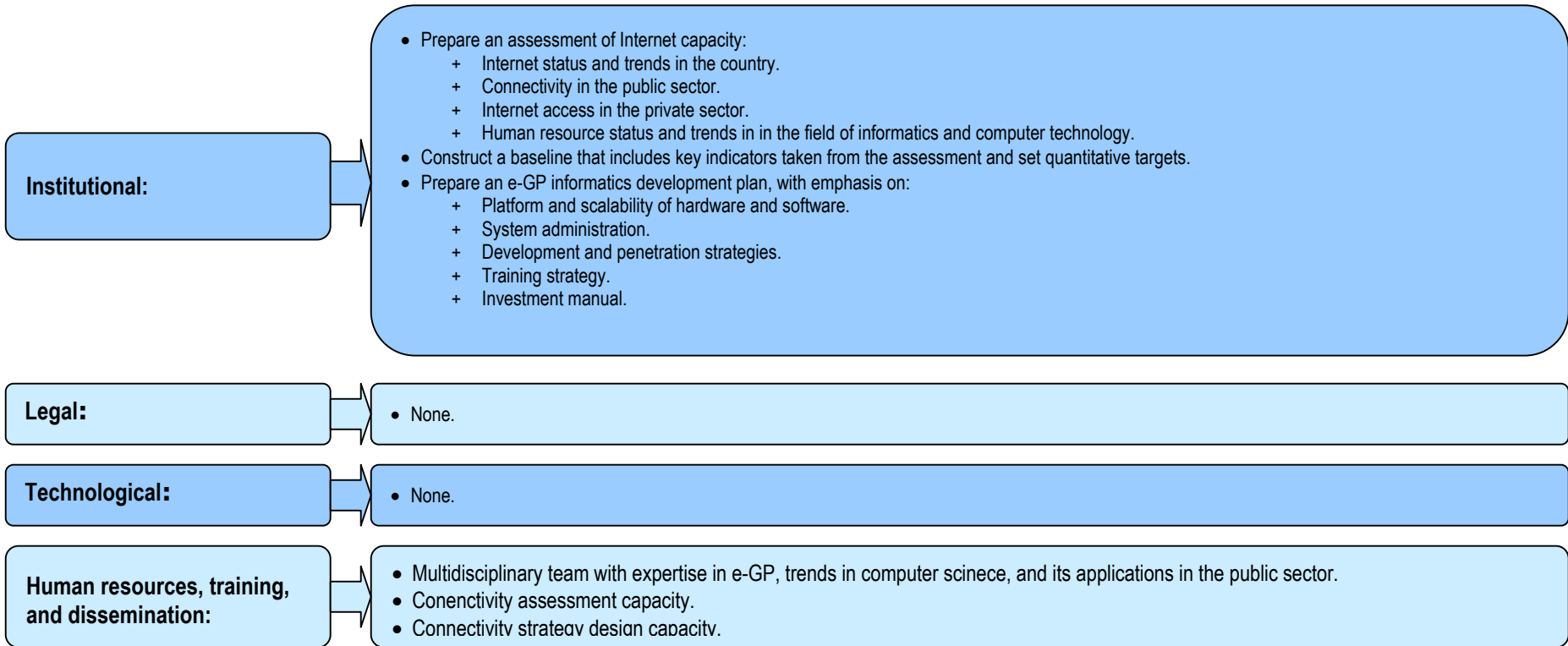


Specific objectives for this stage:

**Overview of requirements**

- Determine the connectivity component's strengths and weaknesses and trends in this regard.
- Baseline for developing the system from the information-technology standpoint.
- Strategy for maximizing the benefits and minimizing the costs of the e-GP informatics component.

- Adapt the development of e-GP to the country's Internet status and trends.
- Define criteria for the development of the e-GP connectivity in the public domain and in the business community.





## II. Tendering

The development of e-tendering calls for three main steps: posting all tendering information on a single Internet site, streamlining traditional processes, and facilitating oversight by the general public.

Efforts in these three directions will move the project toward the three central objectives of e-GP systems mentioned earlier: transparency, efficiency, and the advancement of balanced development and economic growth.

The establishment of e-GP bidding procedures can be accomplished gradually, in four stages: (i) Posting tendering opportunities and the results of tendering processes on a single Internet site; (ii) Posting the bidding documents and their clarifications; (iii) Permitting the submission of bids via the Internet; and (iv) Making user-specified information automatically available to the general public as a means of providing people with greater access to these processes and enhancing their oversight capacity.

The scope of these stages is as follows:

### **4. Posting of tendering opportunities and contract-awarded information on a single Internet site**

The first step is to provide information on a single Internet site about the tendering processes that are to be conducted and, later, about their results. This will help to generate the dynamics involved in the use of this Internet site by government agencies and suppliers.

Because e-tendering procedures are similar to traditional tenders, the 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. Experience has shown that it is better to maintain the existing legal framework and then make adjustments in it as the process proceeds, rather than starting out with a program of legal reforms in the procurement system.

The steps involved in this stage are:

- **Posting the procurement plan**

It is important to foster a planning discipline in the procurement system whereby government agencies will define their annual and quarterly procurement plans. These plans should be posted on the same site. Gradually, more options can be phased in so that these plans can be accessed on the basis of different criteria (by organization, sector, type of good, region, etc.). This will enable suppliers to plan their bids as well. The submission by all government agencies of plans detailing scheduled tenders should be made mandatory within a fairly short time.



- **Bid advertising**

Detailed tenders should be posted on the site. These postings should set out the basic information pertaining to the tender (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 will make it possible for any supplier who wishes to do so to ascertain what goods and services are in demand, without having to contact 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. In this case, at first the information posted on the site will be the same information as is submitted for the daily financial report, but progress will gradually be made toward ensuring that the purchasing agencies themselves are the ones that post their bidding data on the site.

- **Posting the results of each tendering process**

For each tender, the number of qualifying bidders, the name(s) of those who are awarded the contract, the amount awarded to each one, and the expected duration of the contract will be posted. When available, the date that the contract was signed and its 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 losing bidders is confidential, since no contractual relationship with them has been created.

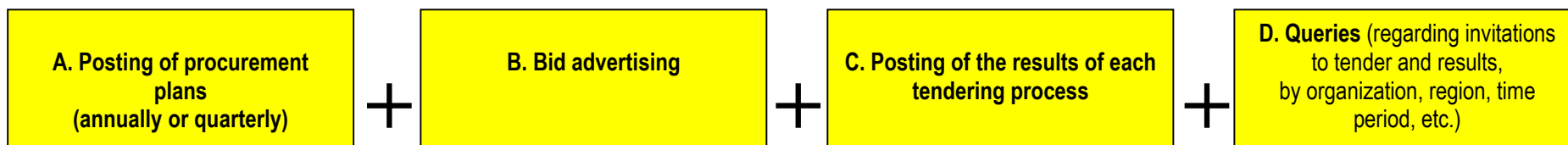
- **Information requests**

The above mentioned activities will result in a large pool of information on the number of tenders that have been conducted; their classification by agency, sector, and region; and their outcomes. Information will also be available on the winning bidders, the amounts awarded, and on contracts. This information can be used as a basis for the construction of indicators on behavior and channels for accessing the database to submit individual or aggregate queries based on user-defined classification criteria.



## 4. Bidding: Posting of tendering opportunities and contract-awarded information on a single Internet site

Components:



Specific objectives for this stage:

### Overview of requirements

- Existence of a website on which information on all public tenders can be posted.
- All government agencies that use bidding operations make use of the website.
- Businesses/bidders and the community know of and use the website.

- **Transparency:** Ready access for businesses/bidders to information, elimination of exclusions, facilitation of oversight by the general public.
- **Efficiency:** Increased competition, lower-cost access to information about opportunities

### Institutional:

- Substantial improvement in government agencies' capacity for planning tenders and determination of the optimum system for selecting suppliers.
- Coordination with government agencies that issue calls for tender (coordination with the official daily financial report).
- Partnerships with businesses, media, and civic organizations.
- Definition of electronic reporting formats and standards for agencies that issue calls for tender.
- Auditing.
- Monitoring.

### Legal:

- Elimination of legal obstacles, if any (usually by means of a more up-to-date interpretation of existing regulations).
- Issuance of regulations regarding reporting methods and timeframes.
- Issuance of regulations regarding auditing.

### Technological:

- Development, support, and advisory group.
- Technological platform and website.
- Connections with the Service Center for agencies that issue calls for bids.
- Applications for data compilation, posting, and consultation.

### Human resources, training, and dissemination:

- Instructional team, and training and dissemination plan.
- Training for agencies that issue calls for tenders.
- Training for suppliers.
- Training for information users (the media, civic organizations).
- Dissemination to the general public.



## **5. Open access via Internet to all bidding documents**

Since the website will have been launched during the preceding stage, the technology will be in place to permit access to full bidding documentation. The institutional challenges involved in the provision of access are formidable, particularly with regard to the need to streamline and standardize procedures, obtain the necessary legal authorizations, and encourage the general public to make use of the information.

The steps involved in this stage are the following:

- **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 them in order to boost productivity. Bidding documents must be simplified, the forms should be as straightforward as possible and should be standardized, and the items that are standard for all tenders or for a given category of bidding processes should be placed in hypertext on the website. 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 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 selection method based on "best price" to a method based on "best value".

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 "all or nothing" approach.

- **Set up a Procurement Committee**

It would be advisable to set up an organizational unit to be responsible for the settlement of disputes regarding e-procurement procedures, in the first instance, 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)".

- **Internet access to bidding documents and access via mail and 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 available, that they include all the relevant information (including graphs and blueprints), and that the clarifications issued during the process are attached.

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. This information can then be fed into a database that 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 "front", and to facilitate the provision of customizable information.

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 streamlining the process are far 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 review 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 obtained electronically.

Some suppliers may have difficulty obtaining bidding documents and their clarifications over the Internet. Suppliers should therefore also have the option of phoning in a request and having the documents sent by mail or by fax. Care should be taken to ensure that the documents sent out by this means are identical to their electronic versions in the interests of fairness.

- **Access via the Internet and by mail and fax to questions and clarifications of the bidding documents**

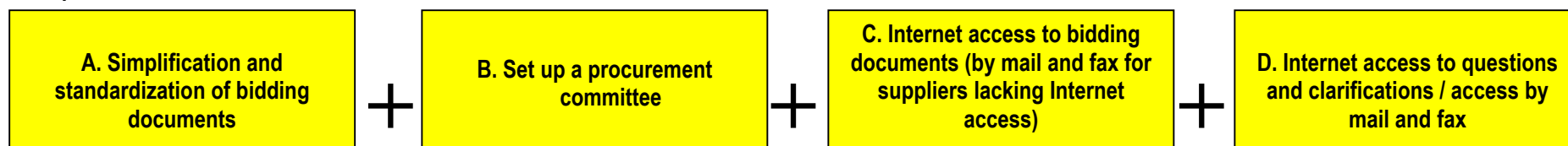
Questions seeking clarification of bidding procedures and the scope of proposals should be made public, along with their answers, by posting them on the site together with the bidding documents and by sending them via fax or mail upon request.





## 5. Tenders: Open Internet access to all bidding documents

Components:



### Overview of requirements

- Maintain an openly available roster of suppliers and use it for statistical purposes.
- Simplify bidding documents and made them readily available over the Internet.
- Facilitate access to bidding documents via mail and fax for suppliers lacking Internet access.
- Have an efficient, reliable, legitimate procedure for dealing with challenges.

- **Transparency:** Open access and large-scale distribution of bidding conditions and other documents; elimination of exclusions; facilitation of oversight by the general public.
- **Efficiency:** Savings for both purchasing organizations and suppliers through standardization, streamlining, and transparency. Improvements in quality and price.
- **Boosting economic growth:** Opportunities for local firms and for small and medium sized enterprises. Participation by more suppliers.

### Institutional:

- Discontinuation of restricted supplier rosters. Creation of an open roster to facilitate the provision of personalized information.
- Simplification and standardization of bidding documents by agreement between purchasing organizations and suppliers.
- Standardization of bidding conditions. Posting on the website of standard annexes used for various tenders.
- Simplification, systematization, and standardization, insofar as possible, and posting of evaluation criteria.
- Standardization of bidding identification codes.
- Capacity to respond to queries via Internet, mail, and fax.
- Creation of a rapid, reliable, legitimate system for the receipt of challenges.

### Legal:

- Legal recognition of the validity of bidding documents obtained electronically.
- Establishment of rules and an administrative unit (procurement committee) to make an initial determination regarding challenges when received.
- In some countries: Elimination of restricted rosters of suppliers or their conversion into open-registration lists.
- In some countries: Regulations to facilitate the simplification of bidding documents.
- In some countries: Requirement of a bid bond for challenges that seek to suspend the bidding process.

### Technological:

- Management of the open roster (uploads, updating and downloads, statistics and history of each supplier).
- Standardization of bidding identification codes.
- Infrastructure (hardware, software, and connectivity) for the services to be provided.
- Design and setting up of query service.
- Trained staff to provide services.

### Human resources, training, and dissemination:

- Trained staff to provide instruction and technical assistance to purchasers and suppliers.
- Personnel with the necessary skills to promote consensus-building for the standardization of bidding documents.
- Mass dissemination of new system and procedures.
- Dissemination of achievements (increase in number of bidders, administrative savings, savings through lower prices, etc.).



## 6. Electronic bid submission over the Internet

The next step is to facilitate the submission of bid proposals over the Internet. There are five basic requirements: (i) availability of electronic security mechanisms; (ii) simplification of requirements; (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:

- **Establishment of electronic security mechanisms**

Adoption of high-level security mechanisms to ensure the confidentiality of bid proposals during their submission and while they are being kept on file.

- **Simplification and standardization of bidding formats and other requirements**

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

- **Submission of bid proposals via the Internet**

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 penalization procedure is initiated and the contract is awarded to the second bidder on the list.

- **Service for checking on 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).

Obviously, the process calls for an **effective, transparent system 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 judgement to ensure they choose the bid that actually offers the best value.

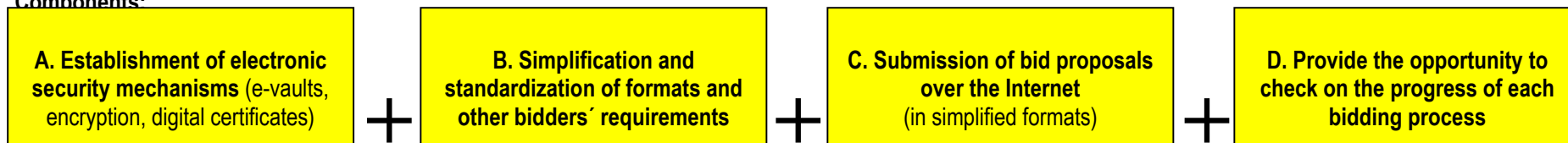
This stage concludes with the **signing of the contract.**





## 6. Bidding processes: Suppliers can submit bids via Internet

### Components:



### Requirements:

#### Overview of requirements

- Simplification of formats and other requirements for the submission of bid proposals.
- Creation of secure conditions for the submission and filing of bid proposals.
- Facilitation of queries by suppliers and the general public.

- **Transparency:** Broadening and equalization of opportunities; maximization of participation and oversight; minimization of chances for errors or corruption.
- **Efficiency:** Additional savings for purchasing organizations and suppliers through standardization, streamlining, and transparency; improvements in quality and price; promotion of efforts to create an e-commerce platform.
- **Promotion of economic growth:** New opportunities for local firms, including small and medium sized enterprises; participation of more suppliers.

#### Institutional:

- Capacity to receive bid proposals and ensure essential electronic security (e-vaults, encryption/decryption).
- Simplification and standardization of formats for the submission of bids based on agreements reached by purchasers and suppliers.
- Elimination of bid securities and certificates in the bidding process that are not needed until the contract is signed.
- In some countries: Introduction of digital certificates ("electronic signatures"), to include the establishment of a certifying authority.
- Capacity to receive non-electronic bid proposals and to process them on an equal basis with electronically submitted bids.
- Consolidation of processes from preceding stage (standardization, evaluation criteria, auditing, processing of challenges).

#### Legal:

- Legal recognition of bid proposals sent electronically.
- Legal recognition of security mechanisms for safeguarding electronic processes.
- Regulations for protecting the confidentiality of private documents.
- Regulations to help simplify proposals and discontinue the requirement of assurances not needed until the contract is to be signed.
- Definition of legal procedures for opening the e-vault.
- In some countries: Establishment of certifying authority (digital certificates)

#### Technological:

- Design, testing, and operation
  - + of the secure information transmission system (encryption/decryption and antivirus protection).
  - + of the e-vault and of transparent procedures for the opening of electronically submitted bid proposals.
  - + of digital certificates (if required).
- Strengthening of query system.

#### Human resources, training, and dissemination:

- Trained staff to provide instruction and technical assistance to purchasers and suppliers.
- Personnel with the necessary skills to promote consensus-building for the simplification of bid submission formats.
- Mass dissemination of new procedures.
- Training of suppliers and purchasers.
- Dissemination of achievements (increase in number of bidders, administrative savings, savings through lower prices, etc.).



## **7. Additional services and customizable functions**

Facilitating access to customizable information maximizes transparency, efficiency, and the promotion of balanced development.

An essential element in the transparency of the e-GP process is that it allows members of the general public to oversee each of the aspects of that process and to cross check any variables they wish to compare. This makes it possible for the general public to exercise comprehensive oversight and minimizes opportunities for corruption.

The objective of this stage is therefore to provide access to all available information and to facilitate cross checks, classifications, series, and comparisons. This is accomplished with the help of a readily accessible database and personalized information services.

During this and subsequent stages, independent studies of bidding practices will also be undertaken in order to document the best practices and disseminate that information on a large scale.

This will involve the following elements:

- **Easily accessible information for the public**

Online data, indicators, and series on major procurement operations.

- **Personalized information for suppliers and purchasers**

Automatic delivery, at the request of suppliers and purchasers, of the information they need (individualized data, series, comparisons, etc.).

- **Personalized information for the general public**

Automatic delivery, at the request of any individual, of the information he/she needs. This information will be classified on the basis of the criteria specified by the person requesting it. This function will facilitate oversight by the media, regional and local authorities, civil society organizations, etc.

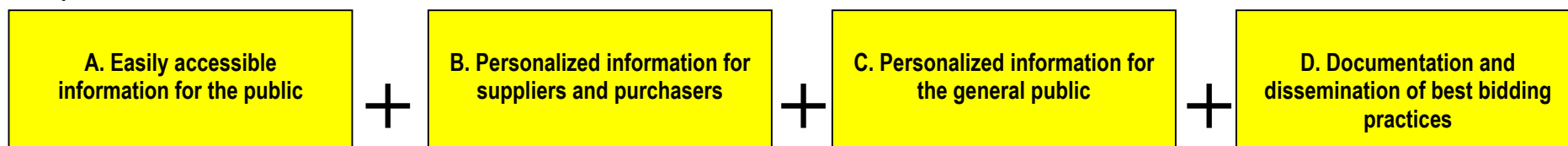
- **Documentation and dissemination of best bidding practices**

The documentation and dissemination of best practices from the perspective of suppliers and purchasing organizations will serve as a tool for evaluating initiatives, making adjustments, and optimizing the relevant processes. It is best if these studies are conducted independently in order to foster greater confidence in their findings.



## 7. Tenders: Additional services and customizable functions

Components:



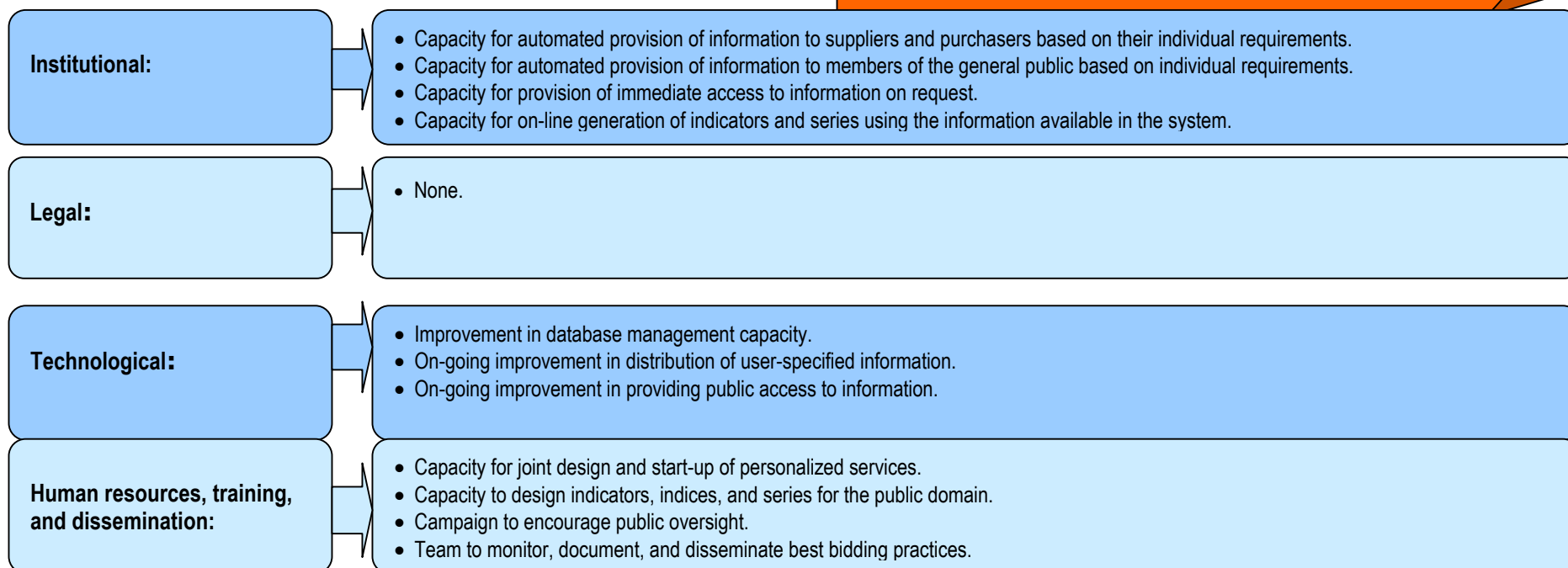
Requirements:

### Overview of requirements

- A system capable of automatically transmitting information to users in response to previously-specified individual user requirements.
- Database of indicators, comparisons, and series that can be consulted by the public.

Specific objectives for this stage:

- **Transparency:** Providing the fullest possible information to purchasers, suppliers, and the community; elimination of all exclusions; oversight by the general public is optimum because information access is personalized and autonomous.
- **Efficiency:** Increased competition, lower-cost access to information about opportunities.
- **Promotion of economic growth:** Maximizing the supply of useful information for locating and optimizing investments.





### **III. Comprehensive Contract Management**

During the preceding stage, e-GP procedures will have been introduced for the selection of suppliers through a tendering process. This process is completed when the contract is awarded. The next step is to set up a contract management system and to draw upon this experience to consolidate the issuance of contracts and their management.

This stage can therefore be divided into two phases: management of contract performance, and consolidation of contracting capacities.

#### **8. Management of contract performance, or management by results**

To achieve the objectives of transparency, efficiency, and promotion of balanced development the performance of the contract, once it has been awarded, must be optimal. Electronic procedures can serve as fundamental tools for ensuring successful contract performance based on management by results. These tools are as follows:

- **Performance management**

This task involves specifying interim and final outputs and the establishment of a timetable for producing them. Computerized monitoring of results can be used to signal when the deadline for a given output is approaching. In the event that an output is delivered after its deadline or its quality is deemed to be inferior to contract specifications, the person or factor responsible for this must be identified (the contractor, the contract issuer, force majeure), the corresponding penalties or corrective measures should be applied, and the performance and payment schedule will have to be adjusted. It is best if the output monitoring system to be used in each sector and organization is designed on a consensus basis by suppliers and the purchasing organization.

- **Payments management**

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

- **Management of disputes and of adjustments and modifications**

Management by results based on close monitoring of performance and payments will invariably give rise to an on-going need for adjustments, and agreement will have to be reached on these modifications under the terms of the contract. In some cases, disputes may arise. It is therefore important for each contract management unit to set up an efficient administrative mechanism for making adjustments and



settling disputes so that unnecessary delays and recourse to the judicial system can be avoided whenever possible.

- **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, good 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.

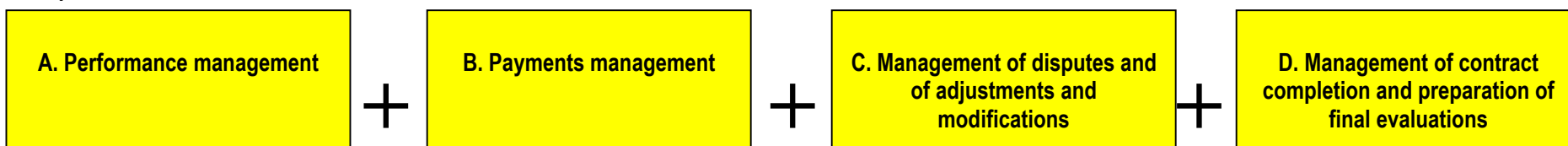
This task also includes the preparation of final evaluations of contract performance based on previously defined parameters. These evaluations can then be used to compile records of each process, identify best practices, and systematize the information on each supplier's performance for use in subsequent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





## 8. Comprehensive contract management: Contract performance management

Components:



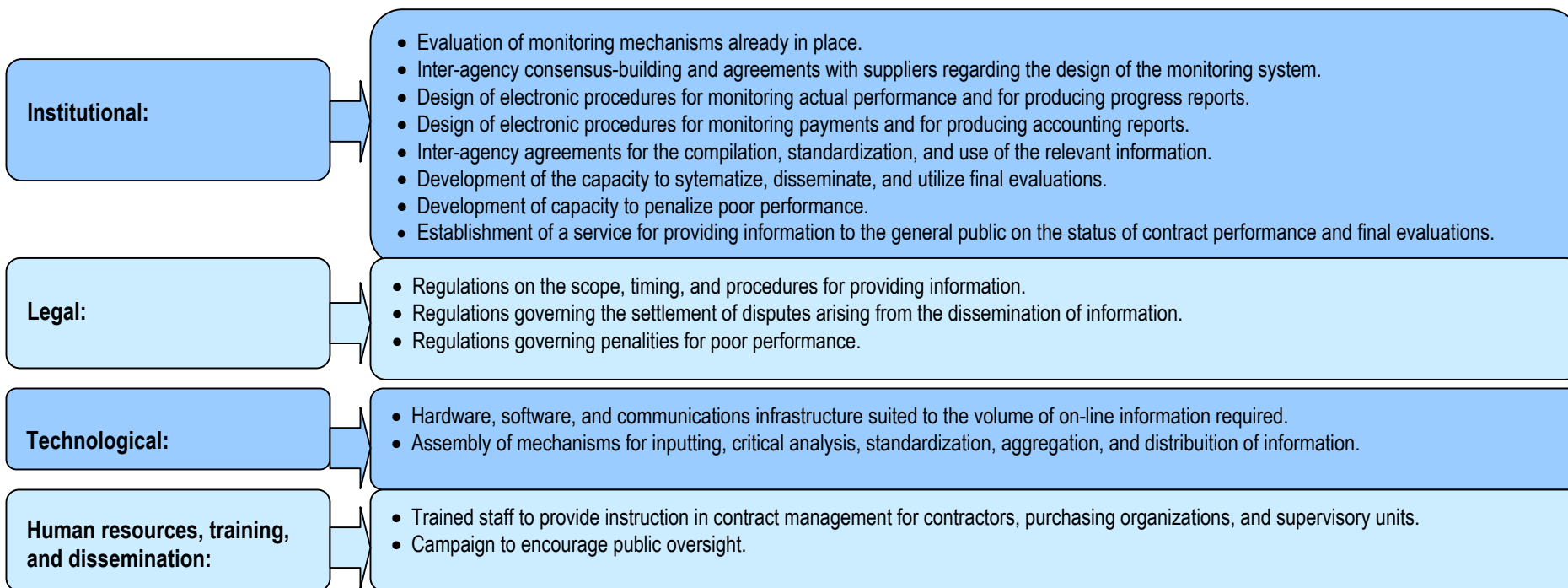
Requirements:

### Overview of requirements

- Capacity to carry out performance and payments management functions.
- Capacity to administer contract adjustments and modifications.
- Capacity to manage contract completion and final evaluation.

Specific objectives of this stage:

- **Transparency:** Public awareness of the progress and status of contract performance; identification of persons or factors responsible for delays or defects.
- **Efficiency:** Maximization of contract performance.
- **Promotion of economic growth:** Use of information on performance and fulfillment in the determination of future awards.





## 9. Consolidation of contracting capacity

By the time these contract management functions and e-GP practices have been structured, a great deal of experience will have been gained that can be drawn upon in order to optimize all the relevant procedures and standards.

The purpose of this stage is to gather all this experience by reviewing the existing literature, surveys, independent research, and evaluation panels and, on that basis, to define and reach agreement on procurement procedures and regulations to be used in the public sector.

This will help ensure the consistency and sustainability of the stated objectives of transparency, efficiency, and promotion of balanced development.

The steps involved in this stage are basically the following:

- **Consolidation of bidding policies, procedures and manuals**

This task calls for a critical systematization of the available experiences with a view to defining an optimum procurement system for use 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.

- **Consolidation of contract management and procurement rules and regulations**

Steps should be taken to promote passage of 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 passage 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 system, 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.

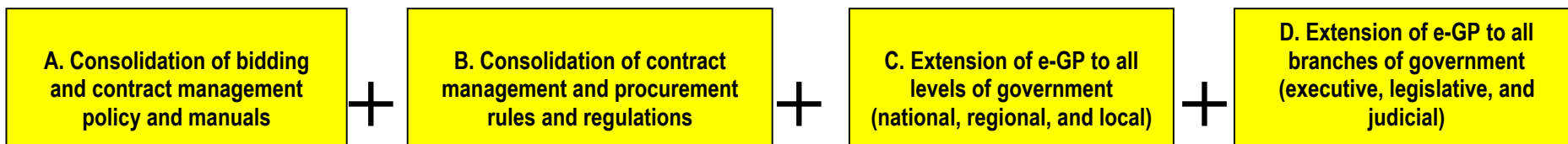
- **Extension of e-GP to all branches of government**

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



## 9. Comprehensive contract management: Consolidation of contracting capacity

Components:



Requirements:

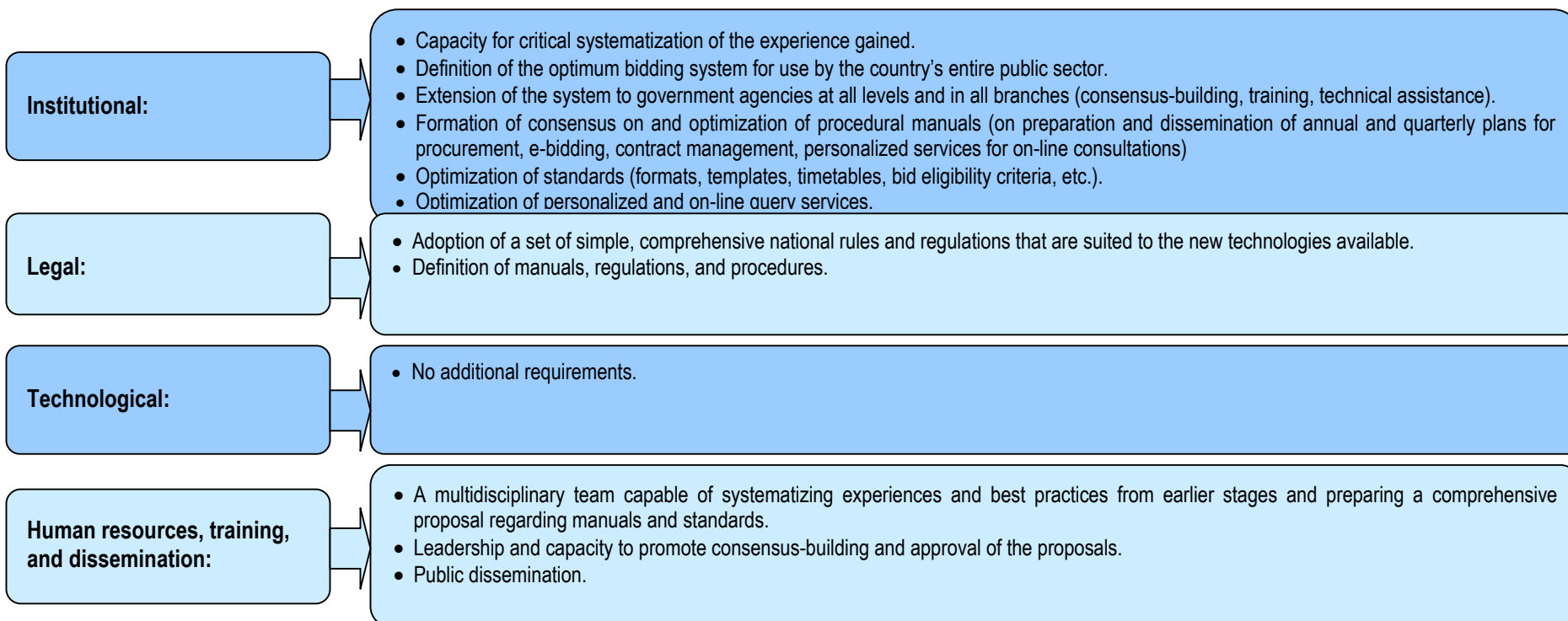
### Overview of requirements

- Based on the experience gained, a set of simple, consistent, comprehensive standards and procedures need to be developed that are suited to the new technologies available.
- Adoption of these rules and procedures throughout the public sector.

Specific objectives for this stage:

Consolidate and ensure the sustainability of achievements in the areas of:

- **Transparency**
- **Efficiency**
- **Promotion of economic growth**





## IV. Purchasing

At this point the process will be far enough along to permit the most complex segment involved in the introduction of e-GP to be handled with ease: Government procurement based on the use of online price quotes (e-purchasing). This method is used for low-value goods and services, for which tenders are not required; instead, a list of sources of supply is used for such purchases.

The main strength of an e-procurement system is that it permits the inclusion of all possible sources of supply in a given location, without excluding any. This helps to foster open competition, transparency, efficiency, and local development.

An e-purchasing system basically operates as follows:

- When a specific good or services is to be purchased, the system offers a list of eligible suppliers within a given area or locality.
- The rules permit the purchasing organization to choose any eligible supplier, but the chief procurement officer must be able to justify that choice to the organization and to the general public.
- The selected good or service is ordered directly from the supplier and the necessary funds to pay for it are set aside.
- Once the order is delivered, the person who accepts delivery (the government agency's depot officer, for example) inputs the items' acceptance into the system. The system will then 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 public oversight.
- When the product is used up, it is automatically removed from the inventory.
- With this kind of system, public-sector budgetary accounts and inventories are kept up to date, and information is available to the public on each transaction or group of transactions.

There are three stages involved: first, the eligible sources of supply in each region or locality are posted on the Internet; second, an online purchasing mechanism must be created; and, finally, the range of personalized information services are expanded and the available information may then be used for the promotion of economic development.

These stages are examined below.



## 10. Posting of eligible sources of supply on the Internet

The two main elements required in order to post eligible suppliers of low value goods and services on the Internet are catalogues and the establishment of reference prices. These elements provide the basis for open registration of suppliers that meet the eligibility requirements. The necessary steps are:

- **Use and coding of catalogues**

Catalogues can be used to facilitate product comparisons. Use of the Universal Standard Products and Services Classification (UNSPSC) catalogue is recommended. This catalogue, which has been prepared by the United Nations to serve as a standard for the classification of goods and services (<http://www.unspsc.net/>), is recommended for two reasons: its use will lower the cost of preparing a catalogue and permit international price comparisons, and it will facilitate the use of e-GP within regional and global integration schemes.

The catalogue will need to be adapted to local conditions and should be widely disseminated for use as a standard. Intensive technical assistance will therefore be required.

- **Systems for establishing reference prices**

There are two main price formation systems for ordinary goods: (i) e-bidding on large lots of the product in question, which can be used to obtain a floor price; and (ii) historical cost information, which will provide an average price for use as a benchmark.

When e-GP begins to be implemented for online purchasing, the tendering system can be used to arrive at a reference price. Once a database has been formed, price information can be kept up to date as time passes.

- **Open registration system for eligible suppliers**

Once the reference price for a specific good or service in the catalogue has been set, eligible suppliers are defined as those who can provide the good or service at, or within a few percentage points of, the reference price.

This variation will depend on the particular conditions in each country.

Suppliers who can provide the product within the established price range may then sign up with the system to offer the product within a specified area.

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.



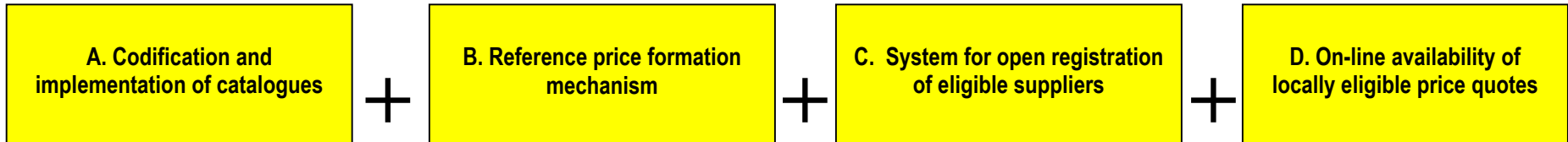
- **Online availability of locally eligible price quotes**

Once the above steps are completed, the system will provide government agencies with a list of all eligible suppliers in their region or locality who can provide the product in question.



## 10. Price quotations (shopping): Posting eligible suppliers' price quotes on the Internet

Components:



Requirements:

Specific objectives for this stage:

### Overview of requirements

- Catalogue and reference prices.
- Posting of eligible suppliers' price quotes on the system.
- Purchasing organizations check price quotes in their area.

- **Transparency:** Public awareness of goods offered for government procurement based on the shopping method.
- **Efficiency:** Increased competition.

### Institutional:

- Use and coding of catalogues of goods and services, divided by categories (UNSPSC recommended).
- Determination of system to be used for reference price formation (bids, historical cost series).
- Determination of mechanisms and conditions for open registration of eligible suppliers.
- Determination of electronic procedures, standards, and formats to be used for suppliers' postings of price quotations.
- On-line availability of eligible price quotes in each locality.
- Establishment of auditing system.
- Establishment of monitoring system.

### Legal:

- Legal authorization of selected catalogue (if necessary).
- Definition of legal liability of suppliers offering products over the Internet.
- Establishment of an administrative procedure for investigating and penalizing improper price quotes or product offers.

### Technological:

- Development, support, and advisory team.
- Technological platform and website.
- Assistance for supplier links with the Service Center.
- Creation of databases.

### Human resources, training, and dissemination:

- Team with the necessary skills to promote a consensus-based development of system procedures.
- Team for training suppliers and purchasers.
- Public dissemination.



## **11. E-purchasing and e-processing of transactions**

Once the supply system has been structured, the next step is to create the capability for online purchasing, as follows:

- **Online processing of purchase orders**

In addition to being able to consult lists of eligible suppliers, government agencies should be able to order the product they select online. In order to provide this function, supplier selection criteria will need to be established, while providing the purchasing organization with some leeway, and an online mechanism for issuing purchase orders will need to be designed (approval, authorization, notification, etc.).

- **Development of suppliers' capacity to handle purchase orders online**

Suppliers also have to be able to receive and fill purchase orders online. Emphasis needs to be placed on ensuring their connectivity to the system (via computer, cellular phone, fax, etc.).

- **Online receipt, payment, and inventory management**

Government agencies using this procurement system need to have access to electronic means of recording the delivery of orders so that, in a single operation, they can authorize payment, update the accounts, record the shipment's entry in the inventory, and generate the statistics required for the system's monitoring and oversight.

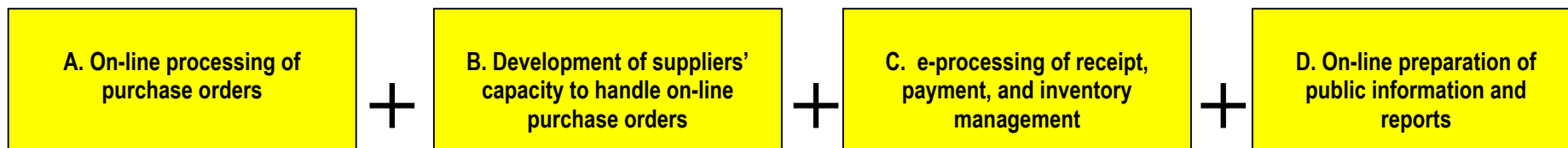
- **Online production of public information and reports**

The information generated during the preceding process should be entered into a database for subsequent use in checking individual transactions and classifying information by purchasing organization, supplier, region, price, type of good, and any combination of these criteria. This information is useful for oversight by the general public and by supervisory and auditing units.



# 11. E-purchasing and e-processing of transactions

Components:



Requirements:

### Overview of requirements

- Definition of e-procurement standards and mechanisms.
- All government procurement is conducted and paid electronically.
- Information is available for the public domain.

### Specific objectives for this stage:

- **Transparency:** Substantial reduction of opportunities for undue preference; facilitation of public oversight.
- **Efficiency:** Increased competition; substantial reduction in timeframes, processing, and procurement administration costs; gradual reduction in prices.
- **Promotion of economic growth:** Selection of suppliers based on criteria designed with a view to the promotion of local development and the development of small and medium-sized enterprises.

**Institutional:**

- Definition of criteria for the selection of suppliers; the criteria should provide some leeway so that government agencies may exercise some degree of discretion and may provide favorable treatment for local businesses and small and medium-sized enterprises.
- Definition of procedures for the formulation, approval, and authorization of on-line purchase orders.
- Development of suppliers' capacity to fill on-line orders.
- Electronic mechanism for recording the receipt of goods and services.
- Electronic mechanism for automatic payments and account clearances.
- Mechanism for on-line entry of transactions in the relevant accounting records.
- Auditing.

**Legal:**

- Standards and regulations for on-line transactions.
- Standards and regulations governing the bunching of demand and/or its disaggregation for e-GP operations, the award of umbrella contracts and arrangements for ancillary procurements.
- Standards and regulations on the selection of suppliers based on electronically posted price quotations.
- Standards and regulations on electronic authentication and certification.
- Standards and regulations on e-payments.
- Modernization and harmonization of budgetary and accounting categories and of the treasury's financial management procedures.

**Technological:**

- Hardware, software, and communications infrastructure.
- Creation of databases and design of applications to provide access to purchasers, vendors, supervisory agencies, and the general public.
- Creation of the Service Center and backup arrangements.

**Human resources, training, and dissemination:**

- Trained staff to foster consensus-building and develop the system's procedures.
- Team to train suppliers and purchasers.
- Public dissemination.



## **12. Public information, 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:

- **Automatic transmission of user-specified information**

Transmission of such information should have the same rationale, scope and characteristics as described earlier in the section for tendering.

- **Compilation of statistics on government procurement operations**

These statistics can be developed from the information furnished by the system and can be used to monitor practices, evaluate performance, and formulate policies on supply-side incentives for the private sector that can be tailored to a country's various regions.

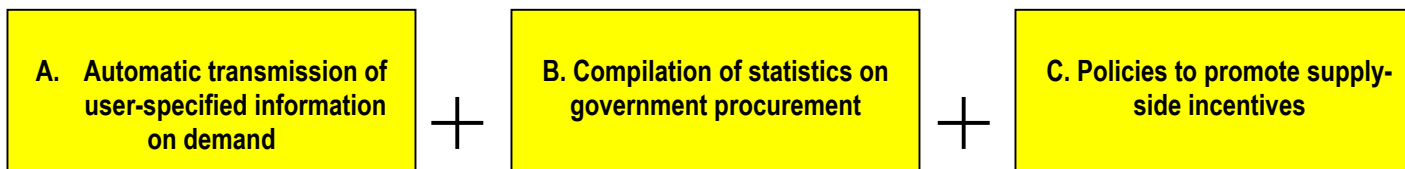
- **Supply-side incentive policies**

These policies should be based on the information gathered by the system and can be implemented by modifying its operating criteria. Such policy measures may take the form, for example, of preferences for certain types of suppliers or regionally-based modifications in the price ranges set for eligible suppliers.



## 12. Public information, personalized services, and supply-side incentives

Components:



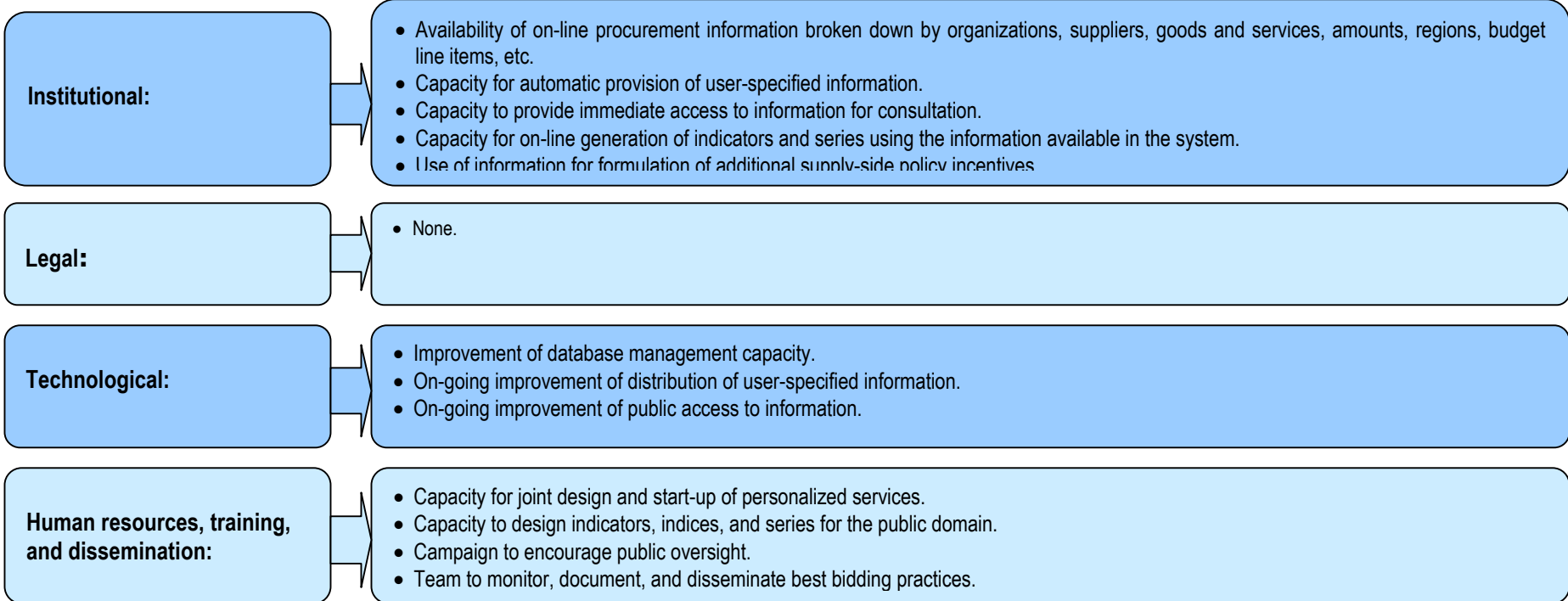
Requirements:

Specific objectives for this stage:

**Overview of requirements**

- A system capable of automatically transmitting information to users in response to previously-specified individual user requirements.
- A database for public consultation.
- Development of investment promotion policies based on available information.

- **Transparency:** Provision of as much information as possible to purchasers, suppliers, and the community; elimination of all exclusions; facilitation of oversight by the general public.
- **Efficiency:** Increased competition; lower-cost access to information about opportunities
- **Promotion of economic growth:** Maximization of useful information for locating and optimizing investments.





## **ANNEX 1: GUIDELINES FOR ASSESSING THE NATIONAL PROCUREMENT SYSTEM**

All countries have their own procurement processes. Therefore the implementation of an electronic government procurement (e-GP) system never starts from zero. The purpose of carrying out an assessment is to identify the most important characteristics of the pre-existing system.

This assessment will serve as a tool for identifying the processes and outcomes that should be modified. In addition, the main indicators included in the assessment can be used to construct a baseline for monitoring the progress and successes of the e-GP system.

It should be borne in mind that this is a pragmatic assessment. It should therefore be rigorously researched, but it should also be concise and be prepared as quickly as possible.



## **1. Basic information**

### **a. Leadership in government procurement**

- Organization(s) in charge of policies on procurement, purchasing, and contracting.
- Consensus-building in regard to adjustments in policies and procedures.
- Tools for directing procurement operations, policy-making, and monitoring.
- Procurement boards:
  - Are there national, provincial or local procurement boards?
  - Who sits on these boards?
  - What functions do they perform?

### **b. Direction of e-GP processes**

- Lead agencies:
  - Which are they?
  - Are they coordinated?
  - Do they play an active leadership role? Is there recognition of that role?
  - Is there a medium and long-term e-GP development plan?
- Agency to promote and coordinate e-GP:
  - Has it been established and is it in operation?
  - Is an e-GP development plan already in place? What are the plan's objectives and scope?
  - Is the institutional and technical capacity in place for guiding and managing government tendering procedures conducted via electronic media?
  - Is the institutional and technical capacity in place for directing the development of contract management capabilities?
  - Is the institutional and technical capacity in place for conducting purchasing operations via electronic media?

## **2. Assessment of tendering processes**

### **a. General information**

- How many tendering systems are there (national, regional and local)?
- How many government agencies conduct tendering processes?
- Are there restricted bidder lists?
- What percentage of the bidding documents concern legal matters and what percentage of them concern technical aspects?



## **b. Quantitative data and financial information**

- Amount of funds:
  - Amount of procurement funds expended via tendering.
  - What percentage of total procurement do they represent?
  - What percentage of total public expenditure do they represent?
- Number of tenders:
  - How many tenders are held per year?
  - Number and sum of competitive tenders.
  - Number and sum of limited tenders.
- Number and sum of tendering processes, by sector.
- International bidding processes:
  - When are international bidding processes conducted?
  - Number and sum of international bidding processes.
  - What preferences do national suppliers receive in international bidding processes?

## **c. Transparency**

- Public information:
  - Is information about scheduled calls for bids provided at one designated location or point within the public domain?
  - Can suppliers find this information easily?
  - Is information about contract awards provided at one designated location or point within the public domain?
  - Can the general public find this information easily?
- Facilitation of competition:
  - Do suppliers have to pay for bidding documents?
- Average number of valid bidders per bidding process (disaggregated by sector or agency, if possible).
- Awards:
  - Are awards based on the lowest-price criterion?
  - Are awards based on the best offer/price ratio? What criteria are used to determine this?
- Challenges:
  - What percentage of processes are challenged?
  - Mains reasons given for such challenges.
  - Average length of time required to make a determination.
  - Is the process suspended when a challenge is submitted?

## **d. Efficiency**

- Average time taken to complete a bidding process (disaggregated by main sectors):
  - Average amount of time spent on determining the need for an invitation to tender and on preparing the bidding documents.
  - Average amount of time between the opening and the close of the process.



- Average amount of time passing between the close of the process and the contract award.
- Average amount of time passing between the announcement of the award and the signing of the contract.
- Average cost of a bidding process:
  - Average cost to the government (as a percentage of the total).
  - Average cost for bidders (as a percentage of the total).
- Bidding processes declared void:
  - Number of bidding exercises declared void per year.
  - Sum involved, as a percentage of the total sum involved in all bidding exercises.
- Have the unit costs of the tendered goods and services risen more or less than inflation (%)?
- Procedures:
  - Are there standard bidding documents, or are documents prepared for each invitation to tender?
  - Are there standardized formats for tenders?

#### **e. Development impact**

- Percentage of the total sum involved in bidding processes in the past year that has been awarded to the two suppliers in each sector that have won the most bids.

#### **f. Monitoring**

- Agency in charge:
  - Is there an agency in charge of monitoring bidding exercises?
  - What does it do?
  - Does it widely disseminate its findings?

#### **g. Legal considerations relevant to e-GP**

- Difficulties:
  - What obstacles to e-GP are created by existing rules and regulations or by the way they are currently interpreted?
  - Which of these obstacles could be overcome by a more modern interpretation of the regulations or by the issuance of executive orders?
  - Which of these obstacles could only be overcome by legislative action?

#### **h. Perception**

- What major problems have been detected?
- What are the desired solutions for these problems?
- What solutions are being applied?



**ANNEX 2:**  
**ASSESSMENT OF INTERNET CAPACITY AND CONNECTIVITY**



## **1. Overview of current status of the Internet and foreseeable trends in the country**

- Current status:
  - Availability of Internet services by region, bandwidth, stability and reliability of communications.
- Foreseeable trends in the development of the Internet, by region, in the short run (one year) and in the medium term (three years).

## **2. Public Internet access**

- Percentage of the population having access to the Internet (at home, at work, through Internet cafés), by region.
- Internet culture among the general public: A brief description of the most frequent types of use made of the most popular portals.

## **3. Internet access by government agencies that use tendering as a procurement procedure**

- Number and percentage of government agencies with Internet access.
- Foreseeable trends in the expansion of connectivity in the short run (one year).
- Technical parameters: Regulations (if any) and preferences regarding network architecture, hardware, and software; average useful life of equipment.
- Number, percentage, and list of agencies having interactive websites capable of handling functions related to the work of the agency (filings or submission of forms, questions and answers, etc.).
- Organizational cultures as they relate to the transmission and receipt of documents.
- Types of Internet service used by the agencies whose procurement operations account for the largest bidding volumes: bandwidth, stability and reliability of communications.
- Evaluation of the degree of “permeability” to Internet use existing in the agencies whose procurement operations account for the largest bidding volumes (organizational culture, supply of human resources, technical constraints).

## **4. Private-sector Internet access**

- Overall status of Internet use in business, disaggregated by the size of business establishments (large, medium sized, small) and by regions.
- Most common practices in the private sector with regard to finding and using business information, disaggregated by the size of business establishments.



- Most common practices in the private sector with regard to sending and receiving documents, disaggregated by the size of business establishments.
- Evaluation of the degree of “permeability” to Internet use existing in small and medium sized enterprises.

***5. Appraisal of current status and trends in the supply of human resources in the field of information technologies:***

- Existence of a sufficient supply of professional personnel qualified to:
  - Perform programming and development tasks based on the most advanced technologies available.
  - Provide technical assistance and support to government agencies involved in procurement operations.
  - Provide technical assistance and support to private businesses (of different sizes and in different regions).