



Global Business Dialogue on Electronic Commerce

## **e-Government Recommendations**

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### **SECTION I**

#### **INTRODUCTION**

Modern societies of today are experiencing fast and continuous change processes. This makes it imperative for governments to develop projects capable of making their full adaptation to these changes become a reality. This undoubtedly enhances the positive effects on both the citizens and business, given that, in today's information society, a country's competitiveness and its citizens' standard of living depend to a certain degree on the speed and efficiency of state services.

Building of citizen-oriented public services, development of commitments to quality, increasing policy maker and public administration employees' involvement in the change and modernization processes, e.g. making the most out of the opportunities provided by new information and communications technologies (ICT), is the main challenge that governments have to meet.

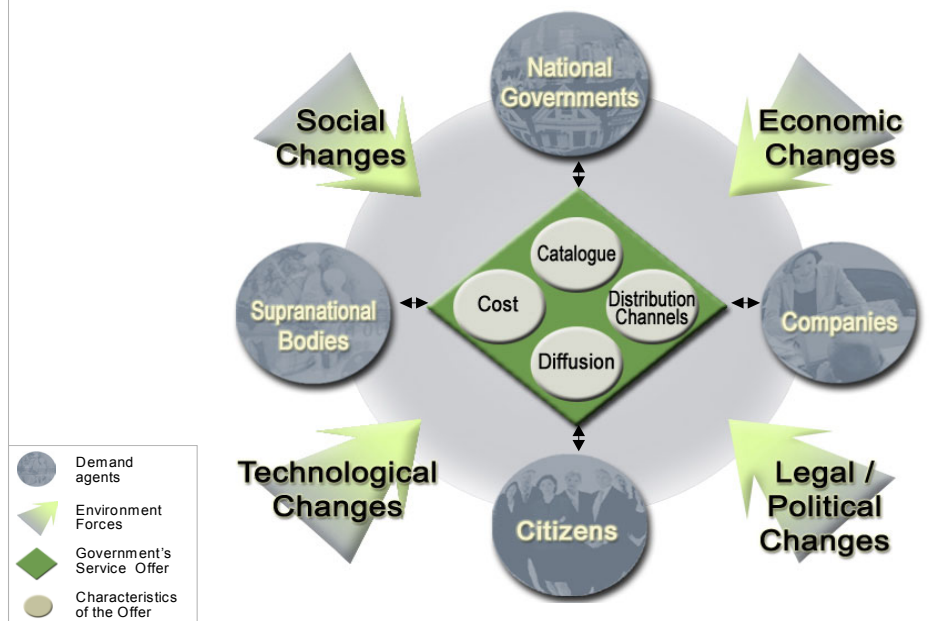
Electronic government, from the private companies' point of view, enables governments to provide public services with greater effectiveness,

speed and quality. As a result of using ICT, new types of public service can be designed, contributing to an improved relationship between government and its citizens. Increased efficiency in the workflow leads to cost reduction and can be utilized for further improvement in operation.

It should also be recognized that those regions, countries, and local governments with non-advanced electronic government policies run the risk of attracting less private sector investment. By the same token, the implementation of electronic government, improves the efficiency of private companies and increases their use of e-commerce. Additionally, as private companies actively join e-government development projects, ICT-related industries should flourish and thereby contribute to the country's overall economic development.

The GBDe proposes the present document as a checklist for governments on their way to implementing e-government. Its content should be valuable to countries that are already developing e-government infrastructure as well as to those that are just starting to promote it.

**"Model of Forces"**



**Context Analysis**

We can show by means of a graphic the general context of any government program in the world as a model of forces in the following manner:

**Demand agents:** Globalization and digitalization requiring relations with supranational bodies, a need for maximum integration and cohesion of the different levels of national government, a business community that requires better service performance and interaction with government to reinforce sustained growth, and citizens who are demanding more and more from their governments with regards to the services that the latter should render to them.

- **Environment Forces/Factors:** which demand quick adaptation from governments which include:
  - social change
  - economic change
  - political and legal, or regulation - related, change
  - technological change.
- **Government's Service Offer:** a continuously increasing catalogue of added-value services whose cost can be increasingly reduced, and whose rendering can be diversified through the greatest possible number of channels to become widely known, effective, and adopted.

**Characteristics of the Offer:** The pressure exerted by the environment factors and the demand agents on government, must be faced up

to, within this model of balanced forces, through the evolution of the service offer.

For government, the Internet is an environment force which alters the stability of the current administrative model, and which must be met in an appropriate manner, by introducing value-added services offered through the Internet channel, thus optimising the cost associated with providing public services and improving their quality.

**SECTION II**

**METHODOLOGY**

From the standpoint of the working methodology, in order to define the framework for the development of G2C (Government to Consumer) and G2B (Government to Business) programs, it is necessary to define first the GBDe's vision of the optimal **relationship model** between G2C and G2B; in other words, the optimal e-government program. This model is based on the practical international experience gained by the set of companies that make up the e-Government Working Group of the GBDe. Moreover, the GBDe has also built a framework for the development of e-government programs to further help the governments to accelerate the establishment of the Internet as a new relationship channel between G2C and G2B.

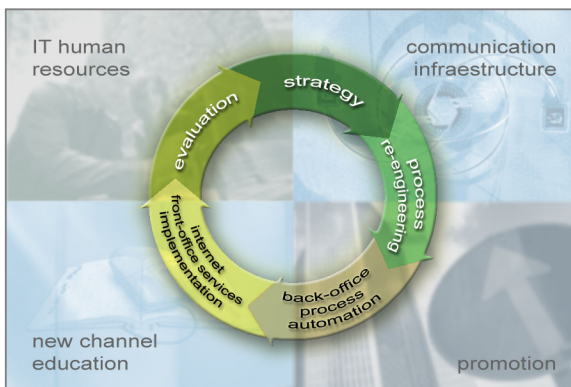
**MODEL**

The relationship between government and citizen /government and business through the Internet channel should:

- Be unconditionally based on confidentiality and privacy for all personal data.
- Be based on guarantees of absolute security and reliability.
- Offer fully executable online services available anytime, anywhere.
- Reduce bureaucracy, minimize the number of Government departments to be visited/consulted by the citizen to obtain a service.
- Allow easy integrated communication between different public administration systems (interoperability).
- Become effective and efficient, agile and simple.
- Allow access to all available services through multiple channels.
- Be socially inclusive, e.g. be able to reach all the citizens, and including those with special needs (handicapped and non-native speakers).
- Allow greater participation of the citizen in the democratic process (e-Democracy) and improve electoral processes.
- Be oriented towards the users and not towards the structure of Governments.
- Be personalized, so that a Government can be capable of offering services adapted to the characteristics of citizen needs.

**Framework for the development of e-Government**

The following scheme presents our proposed framework that we want to share with governments at all levels to help accelerate the development of e-government.



• **Strategy**

An appropriate segmentation and prioritization of the governments' service catalogue should be the first step of any initiative. This should be accompanied with a clear definition of its different implementation phases and plans on the way to comprehensive e-government.

• **Process re-engineering**

Administrative processes, rules and regulations should be re-engineered to reap the real benefits of ICT. Automation of bureaucratic processes simply transfers the bureaucracy to the new channel. The possibilities being provided by the channel to optimize the processes and the services to be offered are tremendous and must be identified and capitalized in such a way that process adaptation reaches the level of reliability required by the relationship model (There should be neither legal doubt, nor legal disputes concerning the transactions carried out through the Internet).

• **Back-office process Automation**

This step is imperative to allow efficient and effective rendering of services digitally. It is important to ensure that the automation solutions are interoperable and integrate any legacy system.

• **Internet front-office services implementation**

This involves defining easy to use, single points of access to provide multiple channel access to any service of the public administration by all citizens, including those with special needs.

• **Evaluation**

Establish measures and procedures to appropriately evaluate governments' digitization. Publicize the evaluation results. Draw conclusions to modify/improve the overall e-government strategy for the future.

• **Human resources in information technologies**

In order to manage the new e-government solutions and provide adequate service to citizens, governments need to have access to the best human resources in the field of IT. This can be achieved through service outsourcing from the private sector, to capitalize on their experience, recruiting of IT professionals and the training of current public administration employees on the new technologies. Establishment of help desks in different locations with professional assistance would further facilitate and encourage e-government adoption.

• **Communications infrastructure**

Planning and adaptation of communications infrastructure including broadband and network security as prerequisites is critical in order to provide citizens with fast, simple, reliable and accessible services.

• **New channel education**

While making the necessary mechanisms to access the channel available to citizens, digital

literacy should be developed in order to ensure the capability of taking advantage of the offered services by all citizens and thereby bridging the digital divide.

• **Promotion**

Society (citizens, including those with special needs, and the private sector) needs not only to be able to access and to know how to use the services provided by the administration. It also needs to know that they are available, and what their advantages are. The government system should be referred to as a model and major contributor for achieving a national information society.

**SECTION III**

**PRIVATE SECTOR SUPPORT FOR E-GOVERNMENT IMPLEMENTATION**

In previous sections we have proposed the model of e-government and the development acceleration framework. However, the road to successful implementation of such a complex project as e-government is not an easy one. A series of potential barriers can be drawn from the framework that make the implementation of the e-government programs difficult.

Such barriers include:

- Lack of privacy, confidentiality and security.
- Lack of appropriate telecommunications infrastructures, lack of broadband access.
- Absence or insufficient automation of governments' back-office processes.
- Laws and regulations not being in line with the existence of the Internet channel and its peculiarities of use for the rendering of services.
- Lack of digital literacy.
- Low computer penetration in the homes.
- Electronic signature not being legally accepted.

In case such barriers exist, the private sector's know-how in the technical and managerial aspects of ICT implementation and usage can serve as a facilitator to overcome them. Therefore, the GBDe has identified a number of ideas on how the private sector can contribute to the implementation of e-government.

**Private Sector can assist governments on their road to successful e-government implementation in the following ways:**

1. **Provide technical solutions, such as:**
  - Public Key Infrastructure (PKI), e.g. electronic certificates.
  - Identification technologies (smart card, biometrics, etc.).
  - Cyber centers and Internet-access kiosks promoted by the governments.
  - Multi-channel technology to allow access through Interactive Digital Television (IDTV), handheld and mobile devices, etc.
  - Broadband access and broadband content development.
  - Application of Customer Relationship Management (CRM) technology regarding the citizen as a customer of government services.

2. **Facilitate desirable e-government features**

- Actively utilize the digitized services provided by government, as well as offer suggestions for improvements.
- Private companies' Business Process Re-engineering (BPR) method can be shared with governments.
- Cooperate on identifying interoperable platforms.
- Cooperate with the government in research and development.
- Present successful examples of ICT utilization in the private sector.
- Provide strategies for increasing user convenience and user satisfaction.
- Private companies may provide universally acceptable solutions for citizens. and governmental officials with various handicaps.
- Cooperate in ICT education of governmental officials (seminars, trainings etc.).
- Introduce effective methods of evaluation in private companies to evaluate government operations where appropriate.
- Provide consulting services during all stages of the project: development, implementation, evaluation and maintenance.
- Offer outsourcing services suitable to the public sector.

**SECTION IV**

**RECOMMENDATIONS**

The GBDe, led by its interest in supporting governments in the development of e-government programs, proposes the following recommendations for a successful e-government

implementation. The main concern underlying these recommendations is the improvement of the G2C and G2B relationship. The recommendations for both areas are presented separately followed by recommendations on globalization issues.

### 1. G2C - Government to Citizens

To increase overall added value of e-government for citizens, governments are recommended to:

- **Enable 100% of administrative procedures online, and achieve one-stop service provision.**  
Currently, users of administrative services often have to follow separate procedures with different agencies in order to complete one single transaction. e-Government should offer one-stop *seamless* services that allow users to complete these procedures (e.g. document submission and fee payments) at the same time via an integrated front office window. Partial digitization of current administrative services does not provide a big improvement in user relations with the administration. Additionally, the benefits of digitization for the private sector can be limited if business transactions with governments remain partially manual and offline.
- **Conduct administrative reforms and establish the favorable legal framework.**  
Operations within government agencies should be integrated and simplified. Mere digitization of current administrative services without business process re-engineering may not provide sufficient results in enhancing the effectiveness of public sector. Furthermore, laws and institutions should be adapted to make these reforms possible and insure interoperability across the government agencies. One of the most important issues here is the legal acceptance of the electronic signature. Corresponding regulations are required in order to make remote delivery of services to citizens possible.
- **Ensure privacy, confidentiality and reliability for services rendered to the citizens through the Internet.**  
The e-government system must be securely protected so that citizens can access, provide and exchange information (personal and transactional data) at ease. We suggest posting clear statements on security measures being taken by

governments should be outlined on the web-sites in order to reassure the citizens of their privacy and give them confidence in e-government usage. This will also serve to the overall promotion of e-services.

- **Support the development of the telecommunications infrastructures.**  
In order to comply with the defined characteristics of the e-government model, the telecommunications infrastructure needs to be expanded and enhanced, in particular in the "first-mile" with broadband access, and broadband connectivity between government agencies. State-of-the-art solutions should be tested, and broadband and network security, as a minimum, should be set as the overall target to encourage development of media rich content.
- **Sponsor the digital literacy of the citizens.**  
ICT, although a potentially valuable tool, can be turned into a divide between those who own it and use it, and those who do not. In order to make the benefits of e-government fully available to the citizens, governments have to familiarize their citizens with the Internet.
- **Support the establishment of Internet access points.**  
An increase in number of public Internet access points will contribute to a corresponding increase in number of potential service requesters ("customers") and lower the risk of the exclusion for the citizens who are not connected at home.
- **To create an environment to diversify the means to access services.**  
e-government services should be accessible not only from personal computers but also from other technological platforms, e.g. mobile terminals, digital TVs, etc. This is necessary in order to expand the merits of e-government. Additionally, countries have different situations in the prevalence of network access facilities. Therefore, e-government should be accessible via various types of user devices.
- **To apply new technologies in the participation and electoral processes to promote e-Democracy.**  
With the help of online participation citizens are able to express their views directly to government. For example, electronic voting facilitates such processes as elections and

referendums and thus makes it easier for citizens to exercise their democratic rights. It would also allow for great savings, both in time and in money.

- **To consider all the steps of the proposed framework.**

All the steps need to be considered. This allows the effective implementation of e-government, and avoids negative reaction from the public. Governments must not frustrate citizen expectation and miss their requirements concerning public service delivery.

## 2. Government to Business - G2B

In order to facilitate the business community and thereby ensure the development of a favorable economic climate, governments are recommended to:

- **Establish an institutional system that permits private companies' needs to be considered for government digitization projects.**

Important 'users' of e-government are not only citizens but also business. Therefore, it is important to establish an institutional framework that permit private companies' demands to be considered for e-government projects. An example of such an institutional framework could be an 'e-government committee' that includes representatives of the private sector as members.

- **Disclose and publicize e-governments' information systems.**

Government systems should be referred to as a model or prototype by the rest of the society. Therefore, governments should disclose details of their information systems, as well as their development processes, except those that require limited disclosure (e.g. national security matters). By doing so, the rest of the society (i.e. private sectors and the citizens) can understand the ways in which information systems are developed and realize the merits of ICT utilization.

- **Express milestones and a roadmap for e-government implementation.**

Governments should clearly state the objectives, substance and the roadmap of e-government. Governments should incorporate private sector's opinions when setting such milestones. By responding to the government's roadmap, private

companies could be able to make more effective ICT investments.

- **Establish evaluation criteria for government digitalization and publicize evaluation results. Let private companies join the process of evaluation.**

Private companies, as tax-payers, have the right and the duty to join the evaluation process regarding the development and the effects of e-government.

- **Specify 'feedback merits' of digitization of procedures.**

Governments should notify private companies about the merits they can receive from e-government. For instance, governments may quantify and publicize the data on 'time reduction for a transaction', or 'increase in service fees', that occurred as a result of digitization. By doing so, the private sector can clearly recognize the merits of e-government and ICT utilization.

- **Standardize operational forms of central and local governments. Enhance simultaneous digitization process in central and local governments.**

Citizens and private companies engage in procedures and transactions with government at both central and local level. For this reason, it is more convenient for the users if operational forms of central and local governments are the same for equivalent procedures (e.g. identical application forms). If the speed of digitization differs in central and local governments, the private sector cannot enjoy the full merits of e-government. What is worse, such difference in formats or procedures in central and local government operations may cause confusion, errors or delay. Therefore, there should be a simultaneous process of digitization in central and local governments.

- **Foster a favorable environment for providing e-government services to small and medium-sized enterprises (SMEs).**

SMEs often lack sufficient financial and human resources, which may hamper their reaction to governments' digitization. Thus when compared to larger enterprises, SMEs typically have smaller chances to fully enjoy the benefits of e-government. Therefore, governments should strive to create an environment in which SMEs can use e-government services more easily.

Such an environment can be achieved by an interoperable framework of software, infrastructure and systems. This framework may consist of three parts: SMEs paying service fees (that are set at low price), big vendors providing necessary products/services cheaply to SMEs, and government providing subsidies to SMEs.

- **Disclose more information on government services. Speed up the process of information disclosure.**

Government information should be released on the Internet simultaneously with corresponding publishing and press releases. This is necessary because differences in media coverage, and the extent and timing of information disclosure may cause confusion or discrepancies among users. For instance, it may cause companies to need to refer to many different media to obtain information about one single matter.

- **Establish methods for timely resolution of conflicts in transactions between business and government.**

Methods for timely resolution of conflicts (e.g. alternative dispute resolution) are necessary to account for the real-time nature of e-commerce. This applies not only to company-to-company disputes in e-commerce but also to that of company-to-government disputes.

- **Facilitate easy-to-use information provision and its disclosure.**

Efficient information provision and disclosure with the help of the e-government is very important. To achieve this, a corresponding easy-to-use format that users can utilize in their system directly (or by applying a conversation tool) is necessary. For instance, it is more convenient to have government information released in code data format rather than graphical format such as bit map.

- **Establish a transparent system and further assure transparency in operation.**

There is a need to construct a transparent system and operate it impartially so that governments cannot utilize it in favor of certain stakeholders.

### 3. e-government in the Global Context

Taking into account the world globalization process and the international character of the

Internet, each country's e-government program is highly advised to:

- **Adopt as many languages as possible.**

Providing government services in several languages may enhance business opportunities for companies in more countries and regions. At the same time, it will also expand opportunities for government to acquire products and services with better cost performance, by having access to a wider selection of products and services.

- **[Technical Standard] For access method and protocol, adopt specifications and technologies of internationally neutral standard.**

The ICT field is highly competitive. Relying on the existing fixed specifications may prevent further development of technologies. It may also hinder e-government usage by many different companies. As for the language used for Internet services, the use of XML is becoming widespread. Yet there are other areas in which specifications and technologies are used. For such areas, it is advisable to use common formats and to provide converting tools between them in order to facilitate interoperability.

- **[Management Standard] Promote adoption of international or global standards.**

Methods and specifications used in transactions and procedures should meet a certain international standard in order to facilitate free trade and globalization. For instance, meter-kilogram-second is adopted as a standard for International System of Units (SI units). Yet exemptions may be required for some areas of particular importance to a country's security (e.g. defence, diplomacy). Another possible solution would be to lay out certain conditions that must be met instead of prescribing a single format. Business and governments should consider and consult on the standardization of business methods.

- **Collaborate with foreign governments to strive for global digitization and international networking.**

Business is rapidly becoming more and more international. Secure international networks are necessary for prompt communication between different governments. Likewise, this will be useful for private companies communicating with

foreign governments through their home governments.

- **Publicize necessary qualifications and standards for bidding, as well as proper reasons for setting them.**

It will become easier for companies to decide on whether or not to take a bid when the government's information on bidding qualification is transparent to them. This may facilitate international bidding as well as conventional domestic bidding.

- **Give high priority to digitization of government operations related to international e-commerce (e.g. trade/import and export operations).**

Administration of customs as well as regulating export and import involves a number of Ministries and government agencies. Therefore, the advantageous effects of using the Internet to simplify the processing in this area are significant.

- **Extending the application of alternative dispute resolution for e-commerce procedures to the international level.**

There may be cases in which a company has a dispute with a foreign government in e-commerce transactions. In such cases, it is difficult for a single private company to resolve the dispute. There is a need for agreements between the governments for handling such disputes.

solutions used, as well as the scope of the solutions offered, are marked by classification. We believe that such a categorization of the e-government experiences is the key to providing value to governments. Additionally, the database contains direct links pointing to the implementation of the solutions.

## SECTION V

### GLOBAL CASE STUDIES: E-GOVERNMENT DATABASE

As one of the outputs of e-Government Working Group, an e-Government Database has been created and is available at <http://www.gbde.org/egovernment/>. This database is comprised of reports of e-government projects in various countries all over the world. The aim of the database is to enable both the GBDe member companies, as well as different governments to follow the evolution of e-government projects throughout the world. It should serve as a platform for an international experience-sharing, thus fostering a faster development of comprehensive e-government programs.

A particular value of this database lies in the fact, that it provides a useful reference on e-government initiatives on three levels: central, regional and local. These functional areas are differentiated with respect to different governmental departments. The technological