



REPUBLIC OF KAZAKHSTAN

Joint Economic Research Program (JERP)

**E-GOVERNMENT VIDEOCONFERENCES SERIES**

**MID-TERM PROGRESS REPORT AND THE ROAD AHEAD**



**Draft for Discussion**

**March 2006**

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# Executive Summary

## Background

The Republic of Kazakhstan has commissioned the State E-Government Development Program, 2005-2007, for the twin objectives of providing fast and quality access to public services and of improving public agencies' effectiveness through the widespread use of information and communications technology (ICT).

The Government of Kazakhstan (the Government), in an effort to maintain the momentum of its e-government program and to ensure greater socio-economic impact and more effective use of IT in the public sector, has commissioned a Joint Economic Research Program (JERP) on e-government in collaboration with the Bank.

As part of JERP, the World Bank is delivering a series of videoconferences (VCs) on various e-government related topics of particular interest to the Government during fiscal year 2006 as discussed and agreed in the course of negotiations with counterparts agencies (AIC, MoEBP, and NIT). This is a Mid-term Videoconferences Progress Report as part of the draft deliverables to be submitted and discussed at the High-Level Roundtable and Stakeholder Consultation Workshop on State e-Government Program.

This draft background report discusses in great detail the outcomes of the first four videoconferences in the JERP VC Series. The final version of the report will incorporate three remaining VCs and be published in June 2006. In the meantime comments and suggestions should be sent to report authors Oleg Petrov ([opetrov@worldbank.org](mailto:opetrov@worldbank.org)) and Asheeta Bhavnani ([ABhavnani@worldbank.org](mailto:ABhavnani@worldbank.org)).

## Key Messages and Lessons Learned

The following cross-cutting messages were emphasized by international experts among others:

- **Political will is crucial** – Ultimately, progress towards e-government will be seen only when the president or prime minister ‘speaks the language’ of e-government and championship from the highest levels is obtained.
- **Size doesn't matter, authority does** - It is not necessary or even desirable to have large e-government committees - a small policy advisory group at the prime minister or president's office or even a single individual can be effective, but it is crucial that they have the necessary authority to coordinate and manage initiatives.
- **E-Governance is about governance, not about “e”**. IT should follow and enable changes in administrative functions and process re-engineering – there has to be very close interaction between IT and the reform of governance itself. The driver for any administrative reform needs to be the desire for clearly identified process improvements, for which IT serves as an enabler.
- **Cross-agency collaboration is critical to success**: central e-government agency should engage other agencies, and have a good collaboration and governance system **Public-private partnerships can be very useful** - Partnership with the private sector is key to success of e-government programs.

- **Multi-stakeholder consultations are key for making e-government services usable.** One of the key lessons learned was to utilize user/focus groups, representing a wide spectrum of citizenry.
- **Learning from international experience** - the need not to reinvent the wheel – rather learn from existing models.

Read the detailed summaries and proceedings below for the full discussion of international experience and how it related to Kazakhstan.

## **Previous Videoconferences**

Four multi-country videoconferences (VCs) as part of JERP series have been organized as of March 1, 2006 in addition to a number of other global World Bank VCs, which gathered an audience in Kazakhstan:

1. Videoconference #1: Implementing E-Government Portals: Technical and Organizational Issues (November 30, 2005)
2. Videoconference #2: Centers of Excellence in e-Government: Key Models, Functions, and Lessons Learned (January 12, 2006)
3. Videoconference #3: Strengthening e-Government Leadership and Institutions: Key Models, Roles, and Lessons Learned (January 19, 2006)
4. Videoconference #4: Prioritizing e-Services: Lessons from the International Experience (January 26, 2006)

These videoconferences featured the following country experiences: USA (including Fairfax and Montgomery Counties), Canada (focusing on Province of New Brunswick), United Kingdom, Korea, Estonia, India, Sri Lanka, Russia, Ghana; and featured the following internationally renowned experts (among others):

- Mart Laar, former Prime Minister of Estonia,
- Tim Young, Associate Administrator, Office of E-Government and Information Technology, Office of Management and Budget (OMB)
- Jeongwon Yoon, Director, National Computerization Agency of Korea
- Alisoun Moore, CIO of Montgomery County, former CIO of the State of Maryland, USA
- David J. Molchany, Chief Information Officer (CIO), Fairfax County
- J. Satyanarayana, CEO, National Institute for Smart Governance (NISG), India
- Graham Walker, The Gov3 Foundation, Former Director of Strategy at the UK's Office of the e-Envoy ; and
- Ivar Tallo, Director, e-Governance Academy, Estonia

The complete list of 18 international experts who participated in the JERP VC series so far can be found in the Annex.

## **Upcoming Videoconferences**

In the coming months, three other videoconferences will take place:

1. **Inclusive e-Government: Enhancing Public Access, Demand and Participation in e-Government** (March 30, 2006). Countries, which could be possibly featured are UK, Canada, Brazil, India, Korea.
2. **Impact Evaluation for e-Government Projects** (April 2006). Countries, which could be possibly featured are USA, UK, Australia, Brazil
3. **Public-Private Partnerships for Delivery of e-Government Services** (May 2006). Countries, which could be possibly featured are USA, Estonia, Singapore, India

## **Ideas for Future Videoconferences**

Based on discussions with Kazakh counterparts, the following videoconferences could be organized after July 1, 2006 (among others):

- Building Information Society: International Models and Comparisons
- Joined-Up Government: From Many Agencies to One Government
- Enabling Administrative Reform with e-Government: Sequencing, Linkages, and Coordination
- Legal Aspects of e-Government
- Broadband Internet Access via Wireless and Power Line Networks
- Single Window Service Delivery Infrastructure: One Stop Citizen Service Centers
- Chief Information Officers in e-Government: Roles, Skills and Issues
- Electronic Payment Gateways & Systems
- Integrated Registers (Individual, Company, Vehicle, Real Estate)
- “Killer” Applications in e-Government
- National ID cards, PKI and Authentication
- Security & Privacy Issues in e-Government
- M-Government & T-Government: Government Service Delivery through Mobile Devices and Interactive Television

## **Videoconference #1:**

# **Implementing E-Government Portals**

## **Technical and Organizational Issues**

**November 30, 2005**

**Featured Countries: Canada, Korea, USA**

### **Featured Experts:**

- Dr. Jeongwon Yoon, Director, National Computerization Agency of Korea
- Alisoun Moore, CIO of Montgomery County, former CIO of the State of Maryland, USA
- Mary Ogilvie, former Vice President, Service New Brunswick, Canada
- Rajan Bhardvaj, Senior Information Officer, World Bank

### **Summary of Proceedings**

The session began with an introduction by Deepak Bhatia, Manager, e-Government Practice Group, who explained the genesis of the Videoconference series. The e-Government Practice Group has an engagement with the Government of Kazakhstan to support their e-government program as part of a Joint Economic Research Program – under which, specific topics of interest would be explored through video seminars connecting internationally renowned experts to discuss aspects of e-government implementation.

The topic of this videoconference would deal with the implementation of an e-government portal, one of the top priorities of the Kazakhstan e-government program, and would address some of the key related issues Kazakhstan policy-makers would have to deal with. Four international experts, speaking about their experience in developing international, national, local and provincial government portals, would make presentations.

### **Part I: Korea**

**Dr. Jeongwon Yoon,  
Director, National Computerization Agency of Korea**

Dr. Yoon began by commenting that although Korea started this ‘single window’ service through the national [Government for Citizens \(G4C\) Project](#) many years ago, the demand for high quality services has been increasing. The implementation of the G4C project and its services has since been reconfigured for the sake of citizen needs. The core concept of the renewed G4C project is, therefore, citizen centric service. The goal for the project has remained

simple and clear - providing services to citizens anywhere and anytime. As a result, quality, efficiency and productivity could be guaranteed.

- Within the G4C project, Dr. Yoon explained, there are **3 areas of implementation:**

1. E-Government One Stop Window: Through the one stop service window, citizens can access all available services through a single point in a manner convenient to them. In Korea, there are 4400 kinds of civil services, e.g. social security registration, real estate registration, tax records filing, business registration, etc. Through the G4C project, the number of applications available through online processes will be expanded from 410 to 1000 by the year 2007.

***Benefits:** As an example of the benefits made possible through e-services, procurement contracts have been made far simpler applications. Before applying one-stop window service, purchasers had to obtain 9 documents from 8 different offices by physical visits. Now, they need only 3 physical visits, and most documents can be obtained online.*

2. Information sharing system: Public and government officers can share and/or reuse information shared by 4 major government agencies without official requests or petitions. Korea has 74 kinds of administrative information, e.g. Residence and census information – 65 of these are now being shared through inter-governmental databases.

***Benefits:** Sharing this info with government agencies and the public is particularly important as it has increased business efficiency and reduced administrative costs by US \$400 million annually.*

3. Infrastructure building and application: Infrastructure is the prime enabler of G4C. Korea has 5 major backbones, other than already available physical networks.

- Regarding **organizational structure**, Korea created 3 distinct organizations:
  - Under the president there is a Special Committee for e-Government
  - Informatization Promotion Committee provides an overall review of the project
  - National Computerization Agency is dedicated to the implementation of e-Government projects, through Technical Assistance, Project Management and Auditing
  - In addition, 3 ministries are also bound together to coordinate government policy and strategy for e-government: Ministry of Home affairs; Ministry of Planning & Budget; Ministry of Information & Communication.
- **Performance monitoring**: Clear annual targets were set for the project's progress, e.g. how many services were accessed successfully. If complaints were received, the project would try to identify the barriers for the service in question – then monitor processes monthly and make reports on its improvement. Auditing of major services and projects is also a regular occurrence, in order to identify inefficiencies in specific services.
- **Security**: Korea has 5 certification authorities that have issued more than 12000 digital certificates to the public, to be used for e-banking and G4C applications. E-services are available through all kinds of payment mechanisms, e.g. credit cards, bank cards.
- **Overall Impacts**:
  - Economic: The G4C project has saved the Korean Government at least US\$ 1.5 billion per year

- Social: It has increased accessibility of services. Citizens are actively engaged in the development of the project, as feedback from the public helps to renew and reshape policy and government processes.
- Administrative: The project has clearly established transparency within the Government, which is now exercising an open administration – all processes are open through online channels.

## Questions from Kazakhstan

*Q. What are some of the lessons learned over the implementation period? If you knew then what you know now, what would you have done differently?*

A. In Korea, every project is led by the government, and if we attempt any changes, we start from feedback from the customers. I would say one of the early mistakes was that we spent too much money on certain projects – our failure rate initially was pretty high. But in the beginning, this is unavoidable. Also, the evaluation process should be set up before beginning a project – in that way, trial and error can be reduced by the evaluation body.

*Q. What kind of certified cryptography system is Korea using? Internationally certified or in-house?*

A. Korea is using RSA based standards – for encrypting content, we have developed our own encryption algorithm, strictly for the use of government applications.

*Q. What mechanisms are in place for portal safety?*

A. So far, no critical breakdowns or hacking attempts have been experienced. But recently the portal was shut down for about a week, because some youngsters printed out register certificates from the portal, and altered the records of the printed documents. At the moment, we are discussing how to provide more secure printed material.

*Q. What percentage of the population has internet access in Korea? What is the proportion between e-services and traditional services?*

A. At least 30 million out of a total 45 million citizens use the internet. Broadband penetration is more than 80%. Regarding the proportion of e-services, only 20-25% of all services are provided online – but they represent the core services. G4C prioritized which services would be most impactful, and focused on getting them up and running – but we expect that the total percentage would increase to more than 50%, after finishing the integration of portals with all government processes by 2008.

## Part II. Montgomery County (USA)

### Alisoun Moore, CIO of Montgomery County, former CIO of the State of Maryland, USA

Alisoun started by describing a major paradigm shift that occurred about 8 years ago, in how the US viewed information systems. This shift had two major elements to it:

- The concept of citizen-centric portals or services – which means that it doesn't really matter which department the citizen interacts with – what matters is being able to access the services he/she needs as quickly and efficiently as possible. Online services should,

therefore, be designed based on what the citizen needs, and how best to facilitate their access - as opposed to the traditional method via departmental listings. This change in thinking led to the other paradigm shift:

- Movement away from individual government applications in individual departments, to a concept of the 'enterprise'. In trying to meet the demand for citizen centric service, systems can no longer be developed independent of each other – an 'enterprise' view needs to be adopted.

The state of Maryland developed its portal to reflect this view, to be a 'one stop shop' entry into government, and to offer - across the board - as many services as possible electronically.

- **Transparency:** The use of the portal also became, in addition to a service delivery channel, a Public Relations tool and a very important component of how government communicates with its citizens. Citizens are offered complete access to the county budget, video streaming of public hearings, and all public documents associated with the hearings.
- **Institutional arrangement:** An e-government office existed in the early days, but because the county administration recognized that they needed to develop all their systems to be web enabled, the concept of e-government became so entrenched into the department culture and how they delivered their services, that the office was eventually eliminated. New concepts had to be developed and introduced in order to reflect how they did business.
- **Technological challenges:** when they started out, the challenge was to aggregate 40 disparate websites into the main county portal. Each department had its own website with its own look and feel, offerings and URLs. There was very little commonality across the board as to how the county presented itself to its citizens. The first task, therefore, was to integrate all the sites, phase out individual URLs and re-brand the main portal. This entailed a significant cultural change for the agencies, and detailed back end work.
- **PPP:** The County utilized a number of private firms to assist with technical implementation; design, testing etc. for their expertise. They continue to partner with private sector firms to maintain services.
- **Lessons Learned:**
  - One of the key lessons learned was to utilize user/focus groups, representing a wide spectrum of citizenry. Before rolling out the portal, it is important to have these focus groups comment on alternative designs from a taxonomy, usability, and ease of navigation perspective.
  - **Importance of Search Features:** Search features are extremely important – people do not want to spend too much time browsing, so they often go for the search – the initial in-house developed search feature was not good, so the portal incorporated Google, which has been a huge success.
  - Language translations are particularly important for a diverse population.
  - Engage agencies, have a good collaboration and governance system

*Q. If you knew then what you know now, what would you have done differently?*

A. We probably would have started the architectural approach sooner. It was very important for us to get the applications out as soon as possible - in order to get the support we needed - but having an architectural blueprint to work from as you integrate systems in the back end is extremely important. All our funding and systems selection is based on this architecture, the foundation of which is web enablement of services and systems.

*Q. Who manages the content and information on a unified government website?*

A. In Montgomery County, the Public information office is responsible for content management and sets boundaries and standards for the unified site (in order to keep a common look and feel across the portal). Individual departments are encouraged to change content specific to their departments, to keep it current and up to date, but within these standards. This approach has been working very well.

We also use a content management tool to manage the vast array of content on the site, which offers control features that prevent users from posting content directly onto the site – supervisory approval is often required, in order to make sure standards are utilized and misinformation is minimized.

*Q. Who is responsible for deciding the priority list of applications?*

The County had a good idea from the beginning as to what applications we needed to put out first, taking into account the specifics of our population. We made it obligatory for all departments to put services online – department administrators were made accountable for progress in making these services available online. In addition, we put together an internal development committee, supplemented by private contractors that all agencies could access for technical support and expertise in this transition.

So on the one hand we mandated this change, and on the other, we provided the wherewithal to do so through the development team. As a result, a wide array of services was put online in a very short time.

*Q. What share of the e-government budget was spent for promotion and publicity? What about training services for people to become familiar with using e-channels?*

A. Training was a very important issue – what we did was introduce IT training in primary education, and provided training to teachers on how to use the internet and how to teach use of the internet. Local libraries also offer free computer access, and a trained librarian to teach at no cost. In addition, community colleges offer non-credit and credit IT classes.

Regarding access, Montgomery County has a 90% internet penetration rate, with broadband growing very rapidly. We also offer free Wi-Fi in certain areas.

In terms of promotion, next to nothing is spent. We sent out a press release, and advertised on buses, but did not have a promotional campaign as such. With internet usage, word of mouth gets around very quickly. What was more important was the branding of the site and the consolidation of services under that brand.

### **Part III. Service New Brunswick (Canada)**

#### **Mary Ogilvie, former Vice President, Service New Brunswick, Canada**

The New Brunswick portal is representative of the development of a regional/provincial site that links to other levels - national and municipal.

- **Multiple service channels:** Service New Brunswick provides many different kinds of transactional services for provincial departments through 3 channels: computer, physical and telephone.
- **Portal Design Evolution:** It is important to keep in mind that the Government structure affects portal design - in Canada, the provincial portals provide provincial level services, and

the national portal of Canada provides federal services at the national level. The provincial portals therefore developed independently of the national, and the integration ultimately came about through negotiation, not decree. This means that there are different technical architectures at national and provincial levels – but at all levels they are ultimately serving citizens, and must serve them through multiple channels, not only e-channels. The technical architecture of the e-channels must reflect the reality that services will be provided through these other means.

- **User feedback:** All channels at all levels are well served by frequent communications with their users with respect to look and feel, navigation, content and ease of use. The key to New Brunswick's success has been frequent communication through the user groups, citizen and business. That determines how they prioritize their services. In New Brunswick, there is essentially a 100% penetration, as everyone has access through their homes, their businesses, their local libraries, and through access centers.
- **PPP:** New Brunswick did not use PPPs in the traditional sense, but there is significant involvement from certain companies who do a lot of the development work, and some investment in the provision of infrastructure.
- **Technological Challenges:** Barriers to providing services were political, not technical – involved getting other provincial agencies to use the Service New Brunswick site for delivering their services. Ultimately, technology is less of an issue than relationships and people are.
- **Lessons Learned:** How to provide integrated portals?
  1. Set in place an infrastructure – negotiate the use of it by different levels of government, and the level of compensation you would receive in turn.
  2. Be flexible on visibility
  3. Adhere to performance standards
  4. Maintain relationships after agreements are reached - with departments on whose behalf they were providing services for – regular update meetings on progress

## **Part IV. Technology Aspects of Portal Implementation**

### **Rajan Bhardvaj, Senior Information Officer, World Bank**

Rajan's presentation focused on the technical aspects of developing a portal, of which 3 aspects are of primary importance:

1. Having a unified information architecture – In order for people to have an expectation of how they can find information and how the information is organized. This is similar to being faced with a random pile of books vs. a well-organized stack in a library.
  2. Single user identity – It is important to know who our user is - without a national ID, or social security, it becomes hard to identify an individual. For e-government, however, this is a priority.
  3. Consistency of look and feel – consistency of design features across portal layers is important, to minimize confusion.
- **Compelling Services:** Important to have relevant services, for which there is a demand. E.g. being able to renew a driver's license online is a hugely convenient service.

- **Federation of portals:** in e-government, there are so many different provincial, regional, local govt. agencies that it is not possible to have one portal providing all the services. There would need to be many different portals, linked to a national portal, but with a navigational, information architectural perspective, so users do not get lost. These could be segmented by audience, geography, topic, etc.
- **Technology selection:**
  - Buy vs. Build – if the need exists to go to market quickly, an off the shelf product may be the best option, but ultimately both will be necessary.
  - Open source vs. commercial – given the momentum in the industry, open source is becoming a real force. Most requirements can be met with open source, which has the added advantage of being a quicker process, since procurement cycles will not be a constraint. However, commercial software will still be needed, especially in banking transactions.

Key Considerations:

1. Firstly, make sure that requirements are set up. What tends to happen is that the focus shifts to the technology in the beginning, which is a mistake – technology is a commodity, and can be dealt with after the requirements are drawn up.
  2. Process issues should be tackled next – partnerships with different contributors, governance structure, etc – these, again, are much more important than technical issues
- **Start with pilots:** It is better to start small and have deliverables every 6 months, in a manner that enforces a certain amount of discipline, than focus on a larger project that promises applications in a few years. This approach ensures that problems in the technology domain, relationships or content management can be dealt with before they become insurmountable.
  - **Performance monitoring:** is an extremely important consideration – if a site is slow or a service is slow, people will tend not to use it. Especially in low bandwidth conditions, having very rich pages that are slow can detract from usage. Keep it simple, keep it fast.

**Define success factors:** Success factors should be defined at the very outset, or else it is very easy to get ‘runaway trains’ in a technology sense. Users may end up using only a small subset of services. To avoid this, it is important to keep the first iterations simple. Pick small audiences and keep it low tech to get it up and running quickly.

## Videoconference #2

# Centers of Excellence in e-Government: Key Models, Functions, and Lessons Learned

January 12, 2006

**Featured Countries: Estonia, Ghana, India, Sri Lanka, Russia**

### Featured Experts:

- J. Satyanarayana, CEO, National Institute for Smart Governance (NISG), India
- Vickum Senanayake, Manager, e-Government Centre of Excellence, Sri Lanka
- Shoban Rainford, Program Manager, ICT Agency, Sri Lanka
- Ivar Tallo, Director, e-Governance Academy, Estonia
- Irina Zadirako, Deputy Head, Department for New Economy, Ministry of Economy and Trade
- Vladimir Drozzhinov, President, e-Government Competence Center
- Dorothy Gordon, Director General, Kofi Annan Centre of Excellence in ICT

## Summary of Proceedings



The session began with an introduction by Oleg Petrov, Information Officer, World Bank, who described the focus of the day: an elaboration of different models for implementation of e-Government Excellence/Competence Centers. Kazakhstan aims to establish such a Center, which will be responsible for making best practices in e-government available for the implementation of the national e-Government program.

While there is no single best practice model of an Excellence Center, several models are interesting in different ways and deserve a special look. There appears to be a continuum of models in terms of the extent of public-private partnerships: from fully government owned and managed agencies to fully private owned and operated agencies, and many intermediate models. These models also differ in terms of main focus (e.g. training, research, analytics/M&E, communications/PR etc) and in terms of breadth of scope of functions (from only one to many).

In this VC a closer look at models implemented in three countries: India, Sri Lanka, and Estonia will be taken, supplemented by discussions related to the experiences of Russia and Ghana.

## Part I: India

### J. Satyanarayana, CEO, National Institute for Smart Governance (NISG), India

Mr. Satyanarayana began by stating that a Center of Excellence should not attempt to implement e-Government programs itself, but **act as a think-tank and catalyze implementation** by other agencies of government.

**Objective and Role of NISG:** NISG was set up 3 years ago in order to bring the resources of the private sector - financial, human, technological and managerial - into the e-government arena, because government alone would not be able to accomplish the huge task of introducing e-government across the whole country. NISG chose 3 lines of business, deemed to be critical for e-government:

1. **Strategy Planning:** Initiatives under this category include:
  - Designing e-government Roadmaps for state governments – involves a clear plan of action, a prioritized basket of projects that can be implemented in each state over a 3 year framework
  - Designing the Program Management Unit (PMU) for National e-Government Implementation – standards are formulated in this PMU.
  - Designing a gateway for Interoperability
  - Designing architecture and standards for e-government
  
2. **Project Development:** NISG typically conceptualizes projects and supports ministries until they are ready to start implementation. Projects include:
  - Providing online services to all companies registered in India
  - An integrated G2B portal to serve all the business entities in the country
  - Making ICTs work for people in rural areas
  - Integrated Land Management Systems
  - Designing e-Procurement for States
  
3. **Capacity Building:** NISG organizes specific training programs, tailor-made for requirements at different levels. The hierarchy of capacity needs include:
  - Leadership & Vision: Policy Formulation; Committing Resources; Taking Hard Decisions
  - Program Development: Preparing Roadmaps; Prioritization; Frameworks, Guidelines
  - Program Management: Monitoring Progress; Inter-agency collaboration; Funds Management; Capacity Management
  - Project Development: Conceptualization; Architecture; Definition (RFP, SLA..)
  - Project Management: Bid Process Management; Project Monitoring; Quality Assurance

**Partnership Model:** NISG is registered as a private company, with 51% share of the private sector and 49% with government, in a PPP model. Private partners include NASSCOM, the apex IT organization in the country. The PPP model has offered NISG a great deal of flexibility in what they do – they are relatively independent from government in decision making, which has been a huge advantage.



**Organizational Structure:** NISG is a small organization with about 23 employees, and intends to stay thin and flat by leveraging private sector resources.

Mr. Satyanarayana concluded his presentation by reiterating the key aim and functions of a Center of Excellence:

- Strategic rather than operational focus
- Should not DO things, but enable government to do things
- Become a knowledge organization of global standard – government and other organizations domestically should look to this institution for knowledge on all e-government matters
- Should promote cross-fertilization of ideas and best practices – in order to prevent reinvention of the wheel

## Part II: Sri Lanka

### Vickum Senanayake, Manager, e-Government Centre of Excellence, & Shoban Rainford, ICT Agency, Sri Lanka

Vickum started his presentation by discussing the evolution of Centers of Excellence, as an outcome of the key problems experienced in the implementation of e-government in Asia Pacific, such as:

- Many governments try and **reinvent the wheel** by recreating existing e-government solutions, rather than re-using or re-engineering them.
- There is **insufficient institutionalization** of e-Government initiatives, which are driven from the outside world, i.e. from vendors – rather than through innovative solutions from within the organization itself
- There are issues with finding **sustainable models** for e-government applications in different agencies
- Often, there are **no service level agreements** in place across agencies
- Many governments have tried to get things done quickly, often **automating arcane manual processes**, rather than undergoing necessary Business Process Re-engineering.
- A lot of governments do **not have appropriate legislation** in place to tackle privacy and security aspects related to e-government implementation.

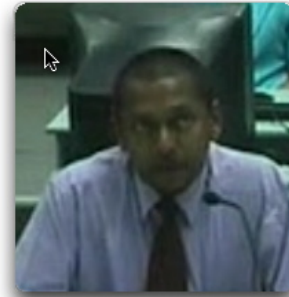


Centers of Excellence help to reduce the cost of ownership of e-government solutions, by short-circuiting a lot of the work that would take a long time to accomplish. They make available the expertise and know-how of other countries that have initiated e-Government, learning from the pitfalls and successes from best practices around the world. In addition, they help to build capacity in government by

building the knowledge base of people charged with driving e-government initiatives.

**Objectives and Roles:** Two key reasons were identified for setting up the Sri Lanka Center:

- To help propagate e-government and practice solutions across layers of government.
- To promote the dissemination of best practices and knowledge sharing – to ensure that other initiatives developed, not necessarily led by ICTA, still adhered to standards and practices developed.



The Charter of the Center of Excellence includes:

- Providing support to Chief Innovation Officers of government, the key initiators of e-government projects
- Conducting workshops on e-government
- Enhancing e-governance capability within government

Through demonstrations of best practices and the showcasing of technologies, the Center also helps agencies identify the best path to take in delivering better services through e-Government. A constant knowledge sharing is facilitated between government personnel and the Center, to promote awareness and guidance for e-Government implementation. At further stages, the Center will also facilitate the development of proof of concepts for initiatives that originate within a given government agency, with local expertise tapped to test the ideas and see they are workable solutions and can be deployed on a pilot basis.

**Public-Partnership Model:** In Sri Lanka, the Center is a collaborative initiative between some government agencies and the private sector, under the overall guidance of the office of the President and the ICTA, the owners of the e-Sri Lanka roadmap and key e-Government initiatives. The SL Institute of Development Administration (SLIDA) is also a partner, whose primary role is to train government personnel. Since the Center comes under the office of the president, it has a lot of mileage and credibility within government, allowing it to interact with agencies at a high level.

Ultimately, they concluded, the **critical factor in the success of the Center in Sri Lanka is that it is driven by the private sector** – government must move away from trying to develop in-house complex e-government solutions, and use the expertise and systems available outside.

### **Discussion Points:**

#### Implementation Period and Staffing:

- **In India**, the time taken was about 9 months from Nov 2003 to June-July 2004, when NISG became fully operational. Regarding staffing, 3 backgrounds have become necessary– those with management backgrounds, because strategic planning is a huge part of operations; those with technology management experience (not technology per se, but its management); and finally, those with government backgrounds, who bring the domain knowledge of working within government. Each should ideally form 1/3 of the



staff.

- **In Sri Lanka**, The government began implementation in 2004 – from that point, it took about 6-7 months to get the Center running. Staffing of such centers is dependent on the kinds of initiatives being undertaken. It is necessary to have a number of staff conversant with the kinds of tools available for rapid, quick deployment of e-Government. It is also good to have a Center manager who can drive marketing aspects, promoting the Center within government and the Private sector, serving as a conduit between the two.

#### Process of Developing Capacity Building Programs:

- **In India**, NISG organizes a 1-2 day workshop at the **ministerial level**, focusing on demystifying e-government and cultivating leaders and champions for e-government at the highest levels – the workshops discuss leadership, vision, principles, and case studies of e-government. A **second level** of programs is developed at the senior secretary level, targeting heads of particular departments – these programs run for 3-5 days, and are held in Hyderabad. Curriculum is developed by NISG itself.
- **In Sri Lanka**, ICTA would drive capacity building programs and training, in the form of 1 day workshops sponsored by private sector partners. But of late, the need for capacity development has become greater – the Center of Excellence is now embarking on a series of workshops that are logically coordinated and connected to one another, related to the successful initiation of e-government projects towards completion. Some of the curriculum is being adopted from NISG, India, with some customization for local needs. Training is being offered at **two levels**: at the CIO level, which is more strategically inclined; and at the technical staff level, targeted towards supporting programs initiated by CIOs.

### **Part III: Estonia**

#### **Ivar Tallo, Director, e-Governance Academy, Estonia**

**Objective and Role:** To facilitate knowledge creation and transfer on e-governance topics. With the Estonian experience in e-Government gaining worldwide recognition, it is particularly sought after for medium and small countries.



The Academy has 3 areas of operation: Training, Research and Advisory Services. A standard training module has been developed, in the form of a 1 week long course for top level civil servants who are not really versed in technical issues. This serves as more of a policy introduction, to create awareness about the potential for e-gov. The Academy also encourages peer-to-peer learning and knowledge transfer, and invites people who have successfully implemented projects to speak about their experiences. Its initial target was to train about 400 top-level civil servants; a target fulfilled in 2 years. To date, it has trained people from 26 countries.

**Partnership Model:** The E-Governance Academy in Estonia is different from those in India and Sri Lanka, because its activity is not directed domestically towards the Estonian Government. It was set up through a Memorandum of Understanding between the UNDP

regional office in Bratislava, the Open Society institute in Budapest and the Estonian Govt to advise top-level civil servants, policy makers and NGOs in other countries.

**Institutional structure:** The academy has a core staff of 8 people, supplemented by consultants who are contracted for their specialized knowledge. The Academy provides mostly logistics for training and knowledge transfer, but have developed in house capacity as well.

**Discussants:**

**Russia: Irina Zadirako, Ministry of Economy and Trade and Vladimir Drozzhinov, President, e-Government Competence Center**

- E-Government in Russia: The federal program, e-Russia, has been in implementation since 2000, and has accumulated a lot of positive, and some negative experiences - especially with regard to autonomous, stand alone introduction of new technologies in isolated agencies:
  - **IT should follow changes in governance functions and BPR** – there has to be very close interaction between IT and the reform of governance itself. This was a challenge in Russia.
  - While introducing new technologies, Government agencies do not always fit their technology priorities with the strategic priorities of government as a whole.
- **Need for a Competence Center:** In order to address these issues, the logical conclusion was that there must be some kind of overarching agency or mechanism for overall state ICT policy. A Competence center should communicate this policy to all participants in the process, and collect and distribute successful experiences along the way – Russia is a huge country generating a number of project solutions, but oftentimes neighbors in different regions do not know what is happening nearby. The Center works to remedy this by making these solutions available at all levels.
- The Russian Competence Center made use of **existing institutional structures:** the Academy of Government Service has many chapters in regions across the country, with a network of fulltime professors and instructors. A system was already in existence, with venues and channels and conduits - all that was needed, was to collect foreign experiences, adapt them to local contexts, and disseminate them through these channels. The Center is now generating some new solutions and it has pioneered proposals and projects, in collaboration with global IT companies like IBM, Microsoft and HP
- **Political will is crucial** – Ultimately, progress towards e-government will be seen only when the president ‘speaks the language’ of e-government and championship from the highest levels is obtained.



**Ghana: Dorothy Gordon, Director General, Kofi Annan Centre of Excellence in ICT**

Dorothy began by highlighting some general principles that were agreed upon: the need for high level political support; the need not to reinvent the wheel – rather learn from existing models; the need to link to other institutions to create a larger impact; and need for Centers to serve as knowledge repositories and vehicles for sharing.



In addition, an important function for a Center is **educating the public about e-government** and enhancing their level of understanding of how it will affect their lives.

Regarding partnerships with the private sector, she raised a question about the **potential for conflicts of interest within PPPs**, i.e. how much will a partnership influence the procurement and design of components and solutions? Another aspect is the **capacity of the local industry** to support the e-Government program as it progresses. The Center could focus on building this capacity as a part of its activities.

### Discussion Points:

#### Use of existing institutional structures for Excellence Center, or creation of a new agency:

- **India:** e-Government requires a multidisciplinary approach to implementation, and a lot of concepts are taken from the private sector. Left to itself, the government would not be the best to conceptualize projects in the e-government space and implement them in the most efficient manner. For this purpose, **India created a new institution** to help bring in private sector knowledge and best practices.
- **Sri Lanka:** The ICTA is a small agency with a small staff that does not undertake any implementation inside the agency, so the Center of Excellence was placed outside the ICTA and left with a great deal of flexibility in how it deals with partners - private sector and government.

#### Potential conflicts of interest resulting from PPP:

- **India:** In NISG, per its constitution, equity cannot be held by any individual private company - only an association of companies like NASSCOM, CII etc., which represent a sector. This removes the question of conflict of interest.
- **Sri Lanka:** In Sri Lanka, the Center acts as a facilitator and works with government ministries and private sector partners to catalyze implementation by them. The Center does not involve itself in the implementation process, and thus does not directly influence procurement.
- **Estonia:** Estonia focuses on enhancing transparency of interactions, in order to diminish conflicts of interest.



#### Ensuring buy-in from ministries:



- **India:** the incentive for making use of an Excellence Center is in the value proposition made to an individual ministry. If ministries/departments had to learn about all aspects of the management of e-government in general on their own, the learning would be slow, incomplete and tangential. When these things are available in a central agency, the uptake would be faster for each ministry – this is their *value proposition*. The learning from one project can be transferred to another in a different agency, which is not something they

could experience on their own.

- **Sri Lanka:** Leadership from the top is not the only pre-requisite - ICTA has a working relationship with other ministries and departments, and is up to them to make the relationship work.

### Enforcement of standards for e-government

- **India:** NISG is trying to solve this issue by making sure that for every project that they develop, standards are built into the design and architecture.
- **Estonia:** has a very decentralized approach to ICT which focuses on information exchange rather than coercion for standards setting.

### Cost-effectiveness and Return on Investment of Centers of Excellence,

- **India:** Need to have a clear objective regarding the purpose of such Centers – whether it is to implement projects, or facilitate implementation by agencies. Ideally, the Centers would serve more as ‘think-tanks’, in which case they do not need too many resources. The bottom line is that an institution of this type should be designed to be self-sustaining in nature. It should collect advisory service fees or strategic planning fees, so it is not dependent on budgetary support or on a political mandate for survival.
- **Sri Lanka:** has created a true collaboration in the formation of its Excellence Center. Unlike the case of India, it is not a company or legal entity – but came about through a Memorandum of Understanding (MoU) between the private and public sectors. No fees are charged under this arrangement; each partner takes care of its commitment per the MoU, which ensures its sustainability.
- **Estonia:** The Estonia government supports the Center on a limited basis, but there is a lot that can be done on a small budget, by leveraging IT.



## Videoconference #3

### Strengthening e-Government Leadership and Institutions: Key Models, Roles, and Lessons Learned

January 19, 2006

**Featured Countries:** USA, Korea, Estonia, Sri Lanka

#### Featured Experts:

- Dr. Jeongwon Yoon, Director, National Computerization Agency (NCA)
- Wasantha Deshapriya, Director, Reengineering Government, ICTA
- Mart Laar, former Prime Minister of Estonia
- Arvo Ott, former Head of Department, State Information Systems, Ministry of Economic Affairs and Communications
- Tim Young, Associate Administrator, Office of E-Government and Information Technology, Office of Management and Budget (OMB)

#### Summary of Proceedings

The session began with an introduction by Deepak Bhatia, highlighting the diverse group of international experts sharing their knowledge on strengthening e-government leadership and institutions. It was the experience of the e-Government Practice, he continued, that there really was no single best practice model that could be applied across countries. There are many different models of decentralized and centralized leadership - corresponding institutional structures - that operate successfully within individual country contexts. Although it may be difficult to identify one approach being superior to the other, critical evaluations of e-government experiences do, however, show that high level political support is crucial in every case to drive the e-government agenda at all levels of government.



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Ultimately, he concluded, e-governance is less about the 'e' than it is about governance itself, and that the driver for any administrative reform needs to be the desire for clearly identified process improvements, for which ICT serves as an enabler.

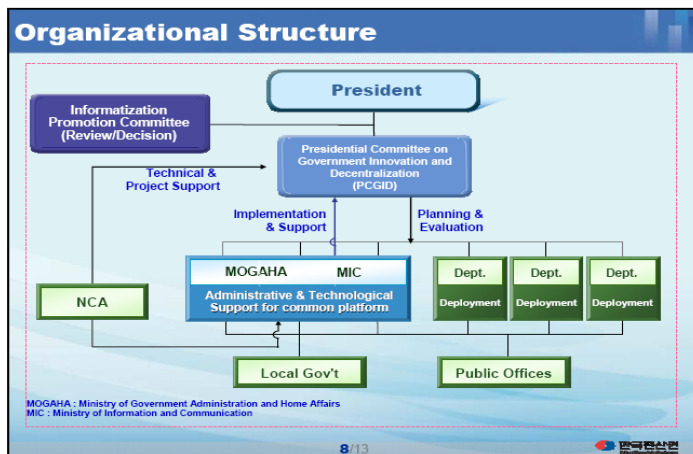
## Part I: Korea

### Dr. Jeongwon Yoon, Director, National Computerization Agency (NCA)

Dr. Yoon focused his presentation on the institutional aspects of Korea's e-government program. Korea has had 3 major phases of e-government implementation:

- The **first phase** was led by the Korean Informatization Promotion Committee and the Ministry of Information and Communication (MIC), and lasted from 1994-2000. During this phase, the Information Promotion Act was enacted in 1995.
- The **second phase**, during 2001-2003, led to the establishment of a Special Committee on e-Government under the President, coordinated by the Prime Minister's office. Through this Committee, 11 key e-Government initiatives were selected for implementation, the responsibility for which was distributed among several ministries. These initiatives included e-procurement, the Government 4 Citizen Program (G4C), National Financial Information system, among others.
- The **third phase** has been underway since 2003, focusing on the advancement of e-government. During this time, the Special Committee on e-Government was decommissioned, reconvening as a Presidential Committee on Government Innovation and Decentralization (PCGID), under the charge of the Ministry of Government and Home Affairs (MOGAHA). This was felt to be appropriate, since e-government is more about process reform and innovation than technology. In addition, as 11 key projects had already been carried out, with major e-government services running very well, the focus shifted towards the integration of services in an effort to improve their efficiency.

**Organizational Structure:** The Presidential Committee covers more than just e-government,



focusing on all aspects of government administrative reform and decentralization – e-government is viewed as one component of such efforts, overseen by an e-Government unit under this overarching Committee.

#### Roles and Responsibilities:

- Each Department is responsible for its own e-government initiatives and each ministry has its own CIO office.
- MOGAHA is in charge of overall e-government implementation, but works closely with MIC from whom it receives technical support, and whose minister is the Chief Technology Officer for the national government.
- MIC is also responsible for setting up the national data center for all ministries, and is in charge of all security aspects.
- NCA provides management and technical assistance for project implementation. It also reviews the government budget, and evaluates proposals from different ministries to provide

recommendations to the Presidential Committee. They then prioritize which projects to implement first.

- At the bottom are local government and miscellaneous public offices that follow directions from their superior ministries.

**Vision and Strategy:** The current e-government program in Korea is focused on integrating independent services, made accessible through a single window. According to Dr. Yoon, this would necessitate reforms across 3 major areas: Administrative processes reforms (to allow for a paperless government); Civil services reforms (for online service delivery); and Information resource management reforms (to ensure integration and interoperability).

**Current Initiatives:** Some of the current projects include:

- Sharing of administrative information initiative: overall objective to integrate administrative entities - out of 74 kinds of administrative information (census, residential, etc), 65 are now accessible through public databases
- Government-wide integrated information environment: initiative to create integrated data centers, the first of which is currently accommodating 24 agencies, with the second to be launched later this year, to accommodate 23 agencies. They will operate in viewer mode – all ministerial data centers will now be integrated into these datacenters.
- Online civil service (G4C): focusing on single window access to services through the government portal, and
- Expanded Online Citizen Participation – encouraging online voting.

According to their estimation, Korean e-government services have reached level 4, on a scale from 1 (emerging) to 5 (seamless, fully integrated). The goal now is to reach level 5 by 2007.

### **Discussion Points:**

Percentage of spending on e-government and IT in Korea: For fiscal year 2006, the IT budget was 2% of the total budget. This may seem small, but it should be acknowledged that Korea already has a major e-government program in place – before 2000, a lot of money was invested into e-government infrastructure and other key e-government initiatives. At this stage, large investments are not needed.

## **Part II: Sri Lanka**

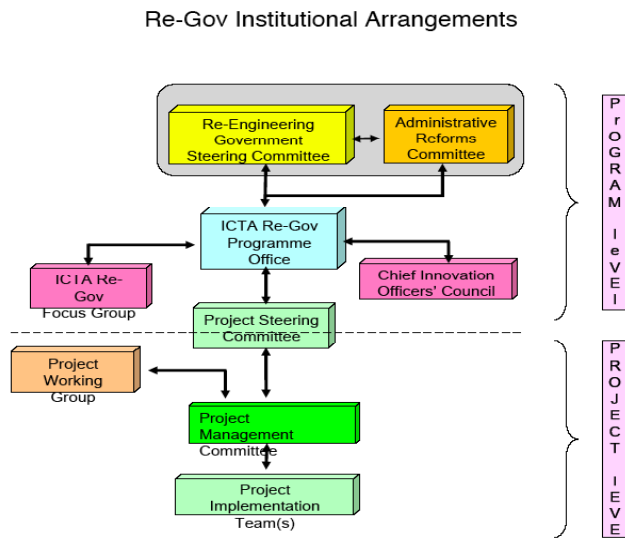
### **Wasantha Deshapriya, Director, Reengineering Government, ICTA**

Mr. Deshapriya began by introducing the Information and Communication Technology Agency (ICTA), the apex agency for formulating and implementing ICT policy in Sri Lanka, and responsible for managing the nation-wide e-Sri Lanka initiative, a World Bank supported program. E-Sri Lanka has 5 program areas, geared towards fulfilling the ambitious objective of connecting every village in Sri Lanka, and bringing the benefits of ICT to all its citizens.

The Reengineering Government program component focuses on improving the efficiency of the Sri Lankan public administration. It is called the reengineering government program rather than

e-government, since the focus is on Business Process Reengineering (BPR) as key to success, rather than on technology itself.

**Organizational Structure:** Established under the ICTA act of 2003, the agency is a government body that is under the direct charge of the President’s office – the highest authority in the country. The ICTA is a small but dynamic body, with staff strength of 25 professionals.



A Re-engineering Government steering committee, comprising key secretaries and ministers, is at the top of the administrative hierarchy that oversees the ICTA Program office. ICTA also receives advisory support and guidance from a Chief Innovation Officer’s council, comprising 650 government-wide CIOs.

**Roles and Responsibilities:**

**ICTA:** Plays a catalytic and facilitation role – the agency does not implement e- Sri Lanka projects, but serves more as a project management body.

**CIOs:** ICTA works through CIOs of line ministries to implement projects – representing the second tier of government hierarchy (officers that directly report to the heads of organizations). CIOs play a major role in the planning and implementation of projects, and projects are formulated in discussion with them - the implementation of which is entirely their responsibility.

Ultimately, CIOs serve as the link between ICTA and the government, and are the drivers for e-government based reforms, responsible for creating a receptive environment for such process changes. As implementers of projects, they are also responsible for the ICT budget of their organizations.

**Capacity building:** CIO in the Sri Lankan context refers to ‘Chief Innovation Officers’, as their key responsibility is in leading the process of change in government. Given the multi-dimensional nature of e-government, however, capacity building of CIOs plays an important role in the e-Sri Lanka program. A comprehensive 4-stage training program covering basic ICT literacy to ICT leadership was instituted, in addition to which, regular national CIO conferences on many topics of relevance are organized to continue their education.

Incentives play a major role in working with CIOs, and a key recommendation for such a program is the setting of monthly incentives for e-government course qualifiers - foreign study tours; higher study opportunities are among some incentives that the ICTA has developed.

**Current Initiatives:** ICTA was financially endowed in 2005, and over the course of this first year of its operation, has conducted several BPR and systems studies for 4/5 projects, and is hoping to see tangible results in 2006 and the coming years.

**Key Discussion Points:**

- Professional Background of ICTA staff: Given that the e-Sri Lanka program has 5 program components, it requires a diverse team to manage all aspects. E.g. the e-Society component program managers have backgrounds in development, whereas the Reengineering Government component's managers have specialized IT backgrounds. Others primarily have backgrounds in engineering, with MBAs and Project Management certifications.
- Program Implications for Government staff: Ultimately, the program works to increase the efficiency of government, i.e. input should be reduced, and output increased. The question of staff cutbacks due to these enhanced efficiencies has been a fundamental concern from the very inception of the e-Sri Lanka program. This has been addressed by reintegrating those employees made redundant through efficiency gains, into those areas of government that have been neglected or underserved. E.g. customs, help desks.
- Percentage of spending on e-government and IT : Since Sri Lanka is in an accelerated stage of implementation, it is receiving funds from WB, CIDA, and other international donors – public sector investment is, therefore, about 5-10% of the total budget. If all spending is taken into account, however, the amount would be closer to 10-20% of the government budget.



### Part III (A): Estonia

#### Mart Laar, former Prime Minister of Estonia

Former PM, Mart Laar joined the videoconference from Georgia, and discussed the **evolution of e-government in Estonia**, beginning by pointing out that in Estonia's e-government experience, all possible organizational models had been attempted, sometimes in parallel. E-Government was initiated in the mid '90s, when Estonia was fairly underdeveloped in the field of IT. At that time, a special IT council was created, representing mostly scientists and the business community, to advise the government in its initiative, led by an appointed CIO.

- **Lack of coherence characterized the initial stages**, with the first projects launched at the line ministry level very separate and not linked to each other, sometimes resulting in wastage of time and resources - and with limited results. The IT council then proposed that Information Technology be promoted at a higher level, and instituted a public-private foundation to lead this effort.
- In 1996, the President instituted 'Tiger Leap' foundation came into being, with the **objective of creating an IT culture in Estonia**. It's activities included connecting all Estonian schools to the Internet; creating computer classes in schools; and the training of teachers. This foundation was only partly state financed – international donors, European foundations, and private companies all contributed to its operating budget. Over the course

of 3 years, its main goals were achieved, with very positive results having been achieved in schools.

- **The lack of government level IT projects was, however, a growing consideration.** The political will to remedy this, was demonstrated by the then Estonian President, who, in consultation with the IT council, created the post of the Prime Minister's Personal Advisor on IT - tasked with coordinating all IT related activities of line ministers. Through a very clear political decision, every step from then on would have to be coordinated by this one advisor, in order to **eliminate redundancies and link activities.** From that point on, every penny of the budget allotted to IT was passed through this one advisor. Procurements were coordinated to make it cheaper, software usage was coordinated to promote interoperability, and common portals were developed.
- This was the most successful period with regards to IT projects, because at the same time, necessary legislation was passed that facilitated the implementation of e-government project that allowed citizens to participate in decision making, access government information online, and allowed for online elections. **Estonia's recent 2005 municipal elections were path breaking, as they were the first online elections in the world.**
- E-government in Estonia has, therefore, not only made the government more efficient, but has allowed citizens the real possibility of participating in decision making, through the citizen portal, and work out through this, the necessary services to provide. The most successful service has been the e-taxation, **75% of tax declarations in Estonia last year were made electronically.**
- Tiger Leap foundation continues its activities, but another foundation was created to bridge the digital divide in Estonia, called the "Look to the World" foundation. Also a Public Private Partnership, the foundation promotes IT education, and has supported the training of more than 100,000 people for free, in addition to creating public access points all over Estonia. During this time, **smart IT cards were introduced to allow online transactions with the government.**
- The movement towards e-government in Estonia supplied some key learnings:
  - High level political will and support is crucial
  - It is not necessary to have large councils or commissions - a small advisory group or even a single individual can be effective, but it is crucial that they have the necessary authority to coordinate and manage initiatives.
  - Partnership with the private sector is key to success.

When all three are combined, Mart Laar concluded, it is possible to achieve very successful results in e-government.

#### **Key Discussion Points:**

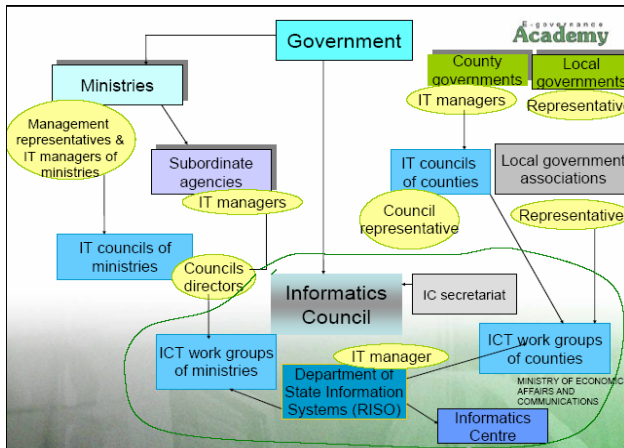
- E-Government budgets within ministries: are usually small, approx \$2 million per ministry. Government investment in e-government projects has been limited, but success has been achieved through effective coordination of initiatives and private sector partnership.
- E-elections in Estonia: allowed people to vote from their homes, through IT smart card technology. The elections functioned extremely smoothly with no disruptions.

### **Part III (B): Estonia**

## Arvo Ott, former Head of Department, State Information Systems, Ministry of Economic Affairs and Communications

Arvo Ott continued the discussion on Estonia's e-Government experience, focusing on the institutional arrangements currently in place, as well as the current e-government strategy and action plan of Estonia. Reiterating Mart Laar's concluding point, he stressed that clear political will has been the most important factor in Estonia's success.

**Organization Structure:** In Estonia, e-Government implementation is **decentralized**, with projects implemented by line ministries. Coordination is carried out by the center, through



regulations, budget control, and soft methods such as training, discussion and awareness building.

IT initiatives are driven by the Information Policy of the government, reached through coalition agreements. Every year, Action Plans are developed that guide projects at the ministry level for that period. Coordination of IT Policy is the purview of the **Ministry of Economic Affairs and Communications**, advised by an Informatics Council. IT councils of ministries coordinate the work in their

fields of responsibility.

**Roles and Responsibilities:** Responsibilities for different projects are then the purview of different agencies, highlighting the decentralization of implementation.

CIOs: All ministries have CIOs, who have clear fields of responsibility, covering management, rather than technology – they are responsible for project planning, implementation issues, procurement, but not so much about technology itself. All ministries, county governments and boards have independent IT budgets which are planned in cooperation with their CIOs.

Department of State Information Systems: A small unit within the Ministry of Economic Affairs and Communications, it is responsible for overall IT budget planning issues, strategy and legislation. It also coordinates work between inter-ministerial CIOs, and all matters related to international cooperation.

## Part IV: USA

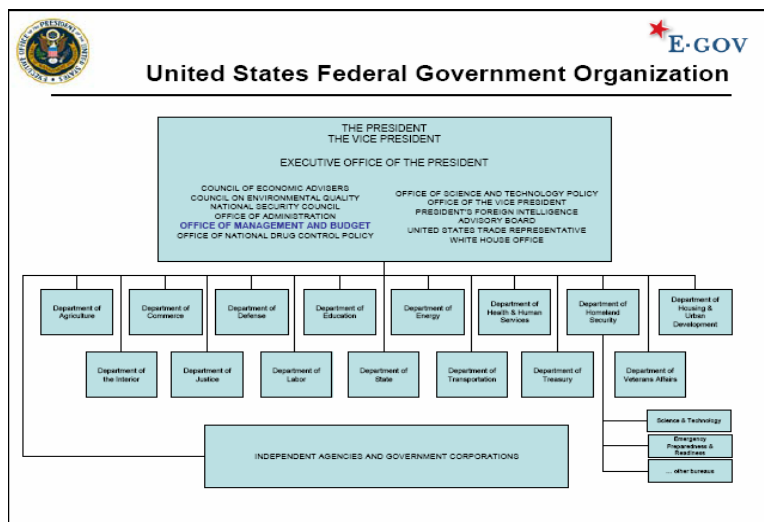
### Tim Young, Associate Administrator, Office of E-Government and Information Technology, Office of Management and Budget (OMB)

The final presentation was made by Tim Young, who provided an overview of the e-Government experience of the US and the institutional structure that facilitates its operation. He started by highlighting the scope of e-government in the US, as a subset of the government's annual spending on IT - an amount that is approximately \$65 billion on an annual basis. E-government spending, on the 25 ongoing initiatives, reaches about \$200 million. Given the amount spent, Tim continued, a significant focus is on **achieving results and measuring performance**.

The e-Government strategy is based on the President’s Management Agenda, focusing on 5 pillars, one of which is e-government. Federal Agencies are required to report on their progress in implementing e-government in an annual meeting with the President, where they are scored on their success achieved through the year. Success, in the federal context, is measured by actual results achieved – how much money saved, how much more efficiently the agency operates and to what extent e-government has allowed the agency to fulfill its core mission. The focus is strongly on **outcomes rather than outputs**.

In the current administration, agencies take advantage of the Federal Enterprise Architecture to achieve the beneficial impacts of sharing systems and solutions. One example of a positive result is the Federal Payroll System. Originally, there were 26 separate, agency-specific payroll systems – e-government has consolidated these into 2 partnerships consisting of 4 systems, **ultimately saving the government an average of \$1.1 billion over the next 10 years**. Tim highlighted this case as an example of their focus on using e-government investments wisely, to consolidate administrative systems in a way that allow agencies to focus more on their core mission.

Another mechanism the government uses to bring focus on outcomes is through quarterly assessments that evaluate all agencies on their impacts achieved through e-government investments.



**Organization Structure:** At the head of the structure is the Executive office of the President, within which lies the OMB, tasked with overall control of e-government. Planning and strategy for e-government comes out of the OMB, but implementation is very decentralized - every federal agency is responsible for implementing e-gov, consistent with the overall plan and strategy set out by the OMB.

Within the OMB, the e-government office has the specific responsibility for overseeing all e-government matters, developing the policies that support its implementation, e.g. cyber security, privacy, disability inclusion, etc.

**Future e-Government Initiatives:** The next phase of e-government in the US will involve ‘lines of businesses’, which takes an architecture based approach to identifying, developing and providing common solutions and components across the government.

Currently, 6 lines of business, including HR Management, Financial Management, Information Systems Security among others are in operation, focusing on consolidating certain activities to develop ‘centers of excellence’ - with fewer service providers of federal agencies, as opposed to every agency implementing these in a disparate, cost inefficient way. Partnerships with the

Private Sector are crucial in such approaches, bringing together the best in government with the best in the private sector to create service quality and efficiency.

**Capacity Building:** In an effort to improve the IT human capital in government, an IT work force committee under the federal CIO council prepares an annual survey of federal agencies to identify skill gaps, and then works with every agency to develop a plan to fill those gaps – through increased hiring, training, outsourcing, etc. In addition, an annual CIO boot camp is organized, where new CIOs go through intensive training to learn what works and doesn't in the federal IT environment.

### **Key Discussion Points:**

Comparison criteria for rating the effectiveness of different agencies: A standardized comparison criteria is used – (1) Cyber security (*to what extent is the agency securing its systems, consistent with overall guidance*); (2) Earn-value management (*to what extent is an agency implementing an IT system within a 10% variance across cost, schedule and performance targets*). (3) e-government implementation (*to what extent is an agency implementing e-government and shutting down duplicative systems on a quarterly basis*). At the President's annual meeting, agency scores for all measurements are shown.

The most serious problems encountered while implementing e-government: The number 1 challenge is in **obtaining executive level support** – on occasions where senior level executive was not involved and there wasn't an appropriate accountability structure, little was achieved. Another key factor is in **engendering a level of trust and commitment** to e-government goals among federal agencies – agencies are used to managing their own IT projects, as they deem appropriate. With e-gov, agencies are required to share systems, and look beyond their own needs. Lastly, problems are often encountered with regards to **finishing the implementation** – in hitting the necessary milestones for success. All the success the US has achieved to date, has been due to executive level support for planning and implementation and realizing results.

Stimulating participation by citizens in e-services: The US makes ongoing efforts to measure the extent to which e-government services are utilized by constituencies – not just citizens, business, etc – but within citizen groups, there are different kinds of stakeholders, such as those interested in grants, and those interested in other specific federal services. For the e-tax filing initiative, the administration has hired an outside agency to determine to what extent people are aware that such a service exists, and the level of customer satisfaction that would encourage increased usage.

Relationship with the state governments: States function independently, but there is an e-government portfolio that provides states with systems and tools to utilize, along with their federal agency counterparts. Within this, there are a number of initiatives that states actively utilize – first is grants.gov, which allows anyone, including states, to find and apply for federal grants; another is for geospatial data which provides access to all such unclassified information. The Federal Government does work with states through the CIO council as well, which has a state liaison.

Role of the private sector for developing e-government in the US: the private sector has had a very strong role since the very beginning - when the 25 e-government initiatives were decided on, they were consulted on the scope and design. Best practices are elicited on an ongoing basis, through monthly meetings with vendors to learn about new solutions; for feedback on how they could improve service delivery given the developments in IT and commercial offerings.

## Videoconference #4

# Prioritizing e-Services: Lessons from International Experience

January 26, 2006

**Featured Countries:** Sweden, UK, USA

### Featured Experts:

- Åke Grönlund, Professor of Informatics, Örebro University
- David J. Molchany, Chief Information Officer (CIO), Fairfax County
- Graham Walker, The Gov3 Foundation,
- Former Director of Strategy at the UK's Office of the e-Envoy

### Summary of Proceedings

Deepak Bhatia, Manager, ISG e-Government Practice opened the session by welcoming the speakers connected via videoconference as well as those present in the Washington, DC studio. The focus of the day was on the prioritization of e-services, a topic very relevant to the design of the e-Government program of Kazakhstan. An online tax filing system has been successfully implemented in the country, and the effort is currently underway to enable more e-services to be provided – an effort coordinated by the Agency of Informatization and Communication (AIC). In order to ensure appropriate resource allocation and high-quality outcome, the Government is trying to establish a method to prioritize possible e-services.



This videoconference session was organized to help the Government in formulating an appropriate approach to prioritize e-services. The session will, he explained, briefly cover the general landscape of how countries/regions are prioritizing e-services and explore possible trends that have emerged. Then, two examples will be presented, from the UK and from Fairfax County in the state of Virginia, USA. The question of cost-benefit also gains importance in a discussion about prioritization, he concluded, and due consideration must be given to the risks involved in bringing services online, and how these risks can be mitigated.

### Part 1: International Overview

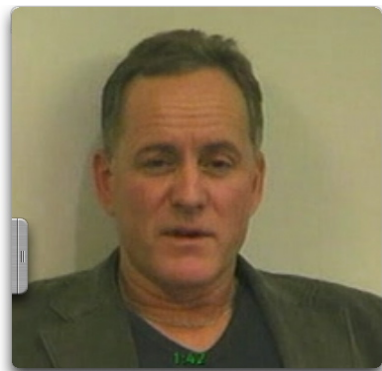
#### Åke Grönlund, Professor of Informatics, Örebro University

Åke provided an overview of the international approaches to e-services prioritization, identifying 3 major approaches that have been tackled:

1. **Centralized top-down:** In this approach, a central agency decides upon e-service priorities and mandates a particular group or agency to implement the program. Agencies are governed through this process by detailed regulation. *Examples include Korea, Russian regions, Singapore*
  - Positive aspects: enables a quick start; standards are easy to enforce (technical, data, service processes), has the ability to pool technical expertise and resources crucial for running services
  - Negative aspects: little sensitivity to business and user requirements; does not create incentives for agencies to innovate; potential threat of privacy intrusion; susceptible to bureaucratization – not so adaptable to new requirements as they develop
  
2. **Decentralized:** called ‘New Public Management’, is an approach to government management in which government agencies are perceived as business units, with considerable independence, controlled by goals and performance rather than detailed regulation. E-Service selection in this approach is decentralized to departments, with the central government guiding the process through ‘whips and carrots’. Whips include legislation, technology and information standards and budgeting amongst others, whereas the ‘carrots’ include best practice awards, ‘plug-in’ services and central funding.

Services selected are chosen at the national level within the overarching framework set for standards governing volume of online services, security, privacy and service quality. At the local level, the drivers are the business goals, and economic feasibility. *Examples include most Western countries, but in different forms. Netherlands and Sweden are highly decentralized, but UK is more centralized in direction and oversight.*

- Positive aspects: Services are selected and designed in close contact with business needs; service design rests with business departments, not central IT dept; provides incentives for departments to change; less bureaucracy, quicker decisions, less project backlog.
  - Negative aspects: Often not possible to achieve scale advantages; important national goals (PPPs, inter-agency cooperation) difficult to achieve as costs and benefits occur in different budgets; different and often conflicting sets of priorities due to decentralized service selection; special measures are needed to create a national information infrastructure providing standards
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3. **Goal-oriented decentralized:** This approach is becoming an increasingly popular option because of the limitations of decentralized systems. In this version, decentralization is still the approach, but a central unit is empowered as facilitator, in charge of comprehensive frameworks that are introduced into a decentralized system.
    - Frameworks may be **product** (Enterprise Architecture, e.g. US Federal Enterprise Architecture) or **process** (Service strategies for compatibility with national goals, e.g. Gateway Review Process, UK)



The trend in the West has moved from 2 to 3, but individual services are increasingly centralized, e.g. e-banking is replacing bank branches, and in the public sector, call centers are replacing govt. offices.

Whatever strategy is chosen, there are **3 basic goals for e-government** cited around the globe, for which governments typically want to select/stimulate services:

1. More efficient government service production
  - o Tangible financial gains; more efficient operations; empowered Public Sector employees
2. Better services to citizens (effectiveness)
  - o Reduced administrative burden; increased user value and satisfaction; increased access to opportunities
3. Government and citizens tied more closely together
  - o Transparency and accountability; openness and participation

The attempt now is to find concrete measurements for success for all these areas. However, in actual practice, the following priorities are more in play:

- Cost/revenue: because services are financed by individual agencies' budgets, reduced cost/increased revenue is often most prioritized.
- Security
- Privacy: in many countries, lack of appropriate privacy safeguards have resulted in the postponement of projects- trust in electronic services is often the main concern of users.

Åke concluded by saying that a **goal-oriented decentralized approach to e-government** is increasingly prevailing, leaving infrastructure responsibilities with central government and business responsibilities with departments. Selection criteria at the decentralized level need to consider infrastructure and business requirements, as well as the global e-government agenda.

### **Discussion Points:**

The percentage of budget allocation for e-government: If there is a decentralized system, the national budget allotted is usually small, but each agency's budget would correspondingly be large – it is almost impossible to quantify in such systems. In Sweden, there is almost no budget for e-gov, because agencies are supposed to cater for technology and e-services within their own budgets. IT investments are also so entangled with regular business that it is hard to separate the two.

Another example is the case of India, where states have been mandated to spend a certain percentage of their budgets on IT and e-gov, but have been unable to achieve these targets due to reliance on Public-Private Partnerships. This illustrates that the percentages of spending on IT are not true indicators of the governments' commitment towards it, or of actual initiatives underway.

Duplication of service delivery due to decentralization: In Sweden, the agencies that invest heavily in e-government are the large, federal ones like taxation, social services etc, for whom benefits arise from scale. In smaller agencies, investments are on a smaller scale, and there are occasions of duplication – but a situation of voluntary cooperation among agencies offering similar services is growing.

## Part II: UK

### Graham Walker, The Gov3 Foundation, Former Director of Strategy at the UK's Office of the e-Envoy

Graham began by reiterating the point made by Åke that the UK has indeed moved from a decentralized system to a goal-oriented decentralized system. Even before the New Public Management system came into being - which encourages a business orientation towards public service delivery - the UK parliamentary system empowered individual agencies with the responsibility for their budgets, for delivering results and accounting for money. The connection between departments, he explained, is at the cabinet level where the 'joining-up' of government comes to be. When UK started with the office of the e-Envoy in 1998, there were only a few cases where agencies collaborated with each other in delivering services. The goal of e-government, that of joining-up government, creating a shared infrastructure and delivering seamless services across departments is a challenging one, especially in environments where vertical silos are in existence - which is often the environment within which e-government initiatives begin. It is, therefore, important to be aware of these challenges at the outset.

As a central unit in this environment, there are 3 ways to effect change:

1. Change can be mandated, through legislation and backing of the PM's office
2. Through various levers, sticks and carrots to encourage change
3. By creating a common vision for government

Over the long term, it is more effective to win over stakeholder support for improving the quality of services by creating a vision that people can get behind. When agencies work together, they are essentially adding risk to their activities - in encouraging a 'whole of government' approach to risk, **communication is key**.

**E-Government Progress in UK:** The priority initially was for all government services to be offered online by 2005. This was a measure to drive activity in this direction, to push agencies that were lagging in online service delivery to make progress towards e-government. Despite early progress, the targets were amended over the years to reflect a business case for particular online services. The **focus then shifted towards the provision of core services** and on citizen take-up by identifying a number of key services to drive up high levels of use among the population. By 2005, however, 95% of government services were made online, with key services achieving high take up rates. The focus at this point, is on the **complete transformation of government** through e-processes.



Ultimately, e-government can only be taken so far before necessitating the reorganization of government itself - if the goal is really to offer services that are organized around citizens, then departments will have to work together in ways they never have before. The UK, Graham said,

is ready to “take the plunge” into total e-transformation - requiring organizational changes to really exploit the potential of e-government.

**Prioritization of e-Services in UK:** using a 3 pronged approach:

1. Identify key priorities – this is how the UK moved down from 592 to about 30 online services. This involves looking at:
  - User benefits, i.e. which services offer the greatest conveniences – the only way to find out is by asking citizens
  - Govt. benefits, i.e. are there high volume services that would benefit from IT?
  - Strategic fit: mainstreaming into public service priorities, depending on key government goals
  - Do-ability, i.e. services that offer quick wins and show benefits early on to create enthusiasm
2. Identify high-level strategic risks of the programs – then select those programs that can be run from the center of govt., working with departments to overcome these risks. UK organizes risks into 3 main categories: Risk that the service wouldn't be delivered; risk that it would be delivered but wouldn't be used; and risk that it would be delivered but at high costs.  
All services delivered from the center of govt. fall within one of these categories.
3. Ensure clear accountability in the govt. structure.

Graham concluded by making the point that it is often the onus of e-government champions to communicate their vision to other departments, in order to create buy-in for it and to increase its priority level within government.

### **Discussion Points:**

Interaction between govt. agencies within the framework of e-government: At the UK ministerial level, there is a cabinet sub-committee where ministers from all key e-government departments sit, and make decisions on e-government issues. Now, most major departments have CIOs and have formed a CIO council which makes recommendations to the ministerial sub-committee and provides a framework for operation. There also exist a number of sub-groups and task groups that work together on specific projects.

Main functions of UK e-Government coordinating body: A new structure was introduced in 2004/2005 – because the earlier e-envoy office had the responsibility for all areas of knowledge economy development, including e-gov. Towards the end of 2003, it was felt that good progress had been made on other areas, such as supporting businesses and creating a market environment for e-services - including lowering the cost of access to telecommunications and the internet. E-government was becoming a greater concern, and the e-envoy had no authority over key areas of this, like IT shared services across departments for back office. It became clear that a central team was needed to focus just on the e-transformation agenda that UK was moving towards.

Main responsibility:

- To transform outward facing services, bring up quality and improve satisfaction, and reduce costs
- To work with departments on the back office shared service agenda, human resources, finance, etc.

- To professionalize the IT function in government

Improving citizen access to the Internet: 61% of the UK population regularly uses the Internet. The market drives this, so market improvements need to be encouraged, such as lowering the cost of access.

1. Focus on increasing competition in the telecom sector to bring down prices.
2. Invest heavily in IT education – investments in schools and in local community centers and libraries for offering basic training.
3. UK also introduced a low cost PC program, administered through employers, offering employee low cost financing options for PC purchases.



Quality control for e-government services: Quality of the service is the responsibility of the department delivering the service. In a decentralized system, this will always be the case. In the ministry/department, there will be CIO that oversees and governs the quality of their services.

**Recommendation:** do a huge amount of market research, before services are launched and when they are up and running to get citizen feedback.

### Part III: Fairfax County, USA

#### David J. Molchany, Chief Information Officer (CIO), Fairfax County



David's presentation was on the topic of **localizing e-government**. Fairfax County is a very customer-centric government, focusing on e-localization, which involves understanding the local customer, community and culture, and designing a customized e-service program that reflects this understanding. Fairfax County e-government has won a number of awards, mostly, because of their **focus on customer service**. The County strategic direction is distilled from 3 sources:

- Constituents (citizens, businesses, etc);
- Elected officials; and
- The senior management team.

The strategic direction determines all government investment including IT and e-government services.

**E-Government Structure:** Fairfax County Board of Supervisors sets the County's strategic direction, based on constituent input. The County executive and senior management team then **interprets** the Board's strategic direction. This forms the basis for government operations and services and for budgeting and investment in technology. The county has high-level political support for e-government, and the office of the CIO reports directly to the County Executive (highest ranking official). The CIO office also works closely with the office of Public Affairs and with the Economic Development Authority. The CIO responsibility is to make sure all these

functions tie together in an integrated whole - complementing one another seamlessly, and promoting the County as a place where people would want to live, and do business.

**CIO Leadership:** operates within a Senior IT steering committee, comprising the County Executive, deputy executives and Director of the Department of Management and Budget. The CIO also heads an Information Technology Policy Advisory Committee – comprising 15 citizens who ensure that IT investments make sense for the overall community.

**Budget and Funding:** The IT investment budget is really quite small, \$73 million, but they have managed to accomplish a lot within that amount, through prioritization. There is a Technology Modernization Fund with capital of \$9-\$20 million annually, through which funding for modernizing IT systems is provided. All funding within this is allotted to projects in keeping with overall strategic priorities, and is ultimately endorsed by the external citizen advisory committee. IT investments in the County, as determined by the strategic direction, include: Infrastructure, to support robust IT applications; Land based systems and GIS; Human services systems; Homeland Security; Tax/Revenue systems; Administrative systems and e-Gov.

**Service Delivery Channels:** Fairfax did not just rely on the web for providing e-services– they also use interactive Voice response (IVR), multi-media kiosks, mobile phone access, cable TV, and emergency alert text messaging.

David stressed the importance of taking a holistic approach to determining which electronic channels need to be deployed, in order to ensure that all customers are able to interact with government in a manner of their choosing.

**Service Prioritization:** Fairfax uses citizen focus groups and surveys to see what services businesses and citizens need and are responding to. They **piloted all services at first**, to test audience response through focus groups – this determined overall service prioritization and expansion. Citizen feedback has changed the e-service program continually.



**Benefits of e-Government:** Since 1991, 170 new county facilities have been added, the population has increased by over 28% and a number of new businesses have moved into the area. The number of county staff, however, has remained flat due to the leveraging of IT. This has been one of the greatest benefits accrued through e-Government service delivery.

## Annex. Featured Experts

1. Mart Laar, former Prime Minister of Estonia
2. Tim Young, Associate Administrator, Office of E-Government and Information Technology, Office of Management and Budget (OMB)
3. Jeongwon Yoon, Director, National Computerization Agency of Korea
4. Alisoun Moore, CIO of Montgomery County, former CIO of the State of Maryland, USA
5. David J. Molchany, Chief Information Officer (CIO), Fairfax County
6. Ivar Tallo, Director, e-Governance Academy, Estonia
7. Graham Walker, The Gov3 Foundation, Former Director of Strategy at the UK's Office of the e-Envoy
8. Mary Ogilvie, former Vice President, Service New Brunswick, Canada
9. J. Satyanarayana, CEO, National Institute for Smart Governance (NISG), India
10. Vickum Senanayake, Manager, e-Government Centre of Excellence, Sri Lanka
11. Shoban Rainford, Program Manager, ICT Agency, Sri Lanka
12. Irina Zadirako, Deputy Head, Department for New Economy, Ministry of Economy and Trade
13. Vladimir Drozzhinov, President, e-Government Competence Center
14. Dorothy Gordon, Director General, Kofi Annan Centre of Excellence in ICT
15. Wasantha Deshapriya, Director, Reengineering Government, ICTA
16. Arvo Ott, former Head of Department, State Information Systems, Ministry of Economic Affairs and Communications
17. Åke Grönlund, Professor of Informatics, Örebro University
18. Rajan Bhardvaj, Senior Information Officer, World Bank