

ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC

ASIAN DEVELOPMENT BANK INSTITUTE

Implementing e-Government: Report of the Regional Workshop

Bangkok, 31 May–4 June 2004



UNITED NATIONS



ADB INSTITUTE

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PREFACE

E-government is now a central theme in information society at all levels: local, national, regional and even global. It can be defined as a transformation of public-sector internal and external relationships through use of information and communication technology (ICT) to promote greater accountability of the Government, increase efficiency and cost-effectiveness and create a greater constituency participation. Countries of the Asian and Pacific region engage in e-government, as they provide cost-effective government-related information via Web sites and most have already developed a national e-government strategy (often as part of an ICT strategy plan). The emerging economies in the region have already gone one step further in introducing internal information management at various levels of sophistication. However, only a few Governments in the region have successfully implemented a comprehensive set of online public services, and even fewer have backed these operations up with comprehensive knowledge management in ministries and between the various government agencies. Even though, most Governments in the region are eager to further benefit from e-government, by improving efficiency and transparency of the public sector, and providing inclusive public services, they may feel that e-government is a concept far removed from their current realities. ICT applications in the public sector can be used as a strategic tool for development and also a response to the current challenges of globalization.

This Regional Workshop on Implementing E-government was organized to prepare the countries in the Asian and Pacific region to take up this challenge and/or assist them to improve their e-government programmes. Countries were able to share their experiences in the implementation of e-government, discuss issues and options for implementation. The Workshop highlighted the potential of e-government to improve efficiency and transparency in the public sector, and to enhance quality of life through more inclusive public services for all. Some of the topics addressed at this Workshop included: benefits of e-government, e-training of government officials and re-inventing or re-engineering government and related ICT policies and strategies. Participants were required to submit a proposal for implementing e-government in their countries, which could potentially be further developed for future execution. The regional cooperation at the practical level was hoped to contribute directly to the goals enshrined in the United Nations Millennium Declaration.

ESCAP is thankful to the Asian Development Bank Institute for co-organizing the Workshop, the Government of France for co-sponsoring this Workshop and Microsoft Corporation, IBM, Toyota and GIXEL-AXALTO Schlumberger Company, for providing contribution financially and/or resource persons towards the Workshop.

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PART ONE

Report of the Workshop



I. ORGANIZATION OF THE WORKSHOP

A. Organization

The Regional Workshop on Implementing e-Government was organized by United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and the Asian Development Bank Institute (ADBI) with the support of the Governments of Australia and France, Microsoft Corporation and International Business Machines (IBM), in recognition that many governments in the Asian and Pacific region were in the process of introducing e-government services.

B. Objectives of the Workshop

The objectives of the Workshop were to highlight the potential of e-government to improve efficiency and transparency in the public sector, and to enhance quality of life through more inclusive public services for all. The realization of efficient and functioning e-government required more than just the adoption of information and communication technology. It also required the modernization and reorganization of government work and responsibilities.

For all Governments, e-government was a fundamental complement to the successful implementation of a range of other government policy targets. E-government was clearly linked to the international competitiveness of an economy and was a fundamental driver of economic growth along with monetary, fiscal, labour and trade policies. E-government pushed the limits of traditional government, changing the way in which government functioned and fostering a culture that made the customer and citizen central to everything it did. It involved building an integrated, enabling infrastructure that could meet the requirements of today's environment, while being readily adaptable to new and innovative developments.

While the benefits of e-government were growing, there remained a need for a better understanding of the impact and role of e-government. Owing to the tremendous resources required in implementing e-government, the sharing of knowledge and experience could help developing countries in the region to reduce costs and limit unnecessary mistakes. However, there was a need to define an e-government agenda, and give priorities and specific recommendations on how best to move e-government forward. In support of that goal, the specific objectives of the Workshop were as follows:

- (a) To provide an opportunity to share experiences of implementing e-government in the participating countries;

- (b) To examine issues in implementing or planning e-government; and
- (c) To draft an action plan to improve/introduce e-Government.

C. Opening of the Workshop

The workshop was opened on 31 May 2004. In her opening statement, the Deputy Executive Secretary of ESCAP said the Workshop would address an important topic that affected almost every country in the 21st century. She said e-governance was a central theme in all countries, at all levels. The Deputy Executive Secretary stated that e-government should be a tool, not a goal, and could help to achieve better governance. Further, she said citizens must be placed at the centre of e-governance, and inclusion and provision of access to all was essential.

In his opening statement, Mr Peter McCawley, Dean, ADBI, said the Workshop was the first occasion on which there had been cooperation between ADBI and ESCAP since signing of a Memorandum of Understanding (MoU) between the two organizations in Jeju, the Republic of Korea, two weeks previously. Mr. McCawley explained that ADBI was a small institute, closely affiliated with the Asian Development Bank (ADB). Mr. McCawley outlined the objectives and expectations of the Workshop and said the key word was “access” and how to improve access. Mr. McCawley said ADBI was committed to moving forward in that area.

He also thanked the sponsors and supporters for the Workshop, ESCAP, the Governments of Australia and France, and private sector partners, Microsoft, GIXEL and IBM.

D. Attendance

Participants attended from 18 countries in the region. Resource persons for the Workshop included experts from multinational corporations such as Microsoft, IBM and Toyota, as well as government ministries and regulatory agencies.

E. Election of officers

The Workshop elected the following persons to serve as officers:

Chairperson: Mr. Tauqir Ahmad (Pakistan)

Vice-Chairperson: Ms. Maria Louise Wau (Papua New Guinea)

F. Adoption of the agenda

The Workshop adopted the following agenda:

1. Opening of the workshop.
2. Election of officers.
3. Adoption of the agenda.
4. Report on the current status and trends of implementing e-government.
5. Presentation of country reports.
6. Presentation on integrating government services.
7. Benefits and issues of implementing e-government.
8. Digital inclusion to foster rural enterprise.
9. Factors and procedures to be considered in improving e-government.
10. Reinventing (reengineering) government.
11. Turning objectives into actions.
12. Designing e-government for the poor.
13. E-training of government officials and citizens.
14. E-government implementation and private sector participation.
15. Measuring the success of e-government.
16. ICT policies and strategies.
17. Conducive environments for e-government.
18. e-government and e-procurement.
19. Legal aspects of e-government.
20. Drafting and presentation of action plans.
21. Workshop evaluation.
22. Closing of the workshop.

G. Recommendations of the Workshop

The Workshop recommended the following areas for cooperation and action:

(a) The Workshop recognized the great potential of e-government to improve the access and quality of government services to citizens and to involve them in public policy-making. To promote the development of e-government in the Asian and Pacific region and to exchange best practices and lessons learned, the Workshop recommended that ADBI and ESCAP organize a regional workshop on e-government on an annual basis.

(b) Although ICT hold great promise for development, access to, and therefore, the benefits of, ICT is not universal. The digital divide threatens to increase the already existing development gap within and among the countries of the Asian and Pacific region. Recognizing that insufficient skilled human resources is one of the major barriers preventing developing countries from applying ICT for socio-economic development, including the development of e-government initiatives, the Workshop recommended the establishment of a regional ICT training centre under the sponsorship of a member country of ADBI and ESCAP.

(c) The Workshop recognized the importance of measuring the effectiveness of e-government strategies and success of e-Government programmes, and noted the outcome of the United Nations *Global e-Government Survey 2003*. In view of the fact that developing countries in the Asian and Pacific region had their own development characteristics, the Workshop requested that ESCAP identify measurable indicators in the Asia-Pacific context to monitor and assess the progress and impact, including social aspects, of e-government programmes.

(d) In view of the fact that over 60 per cent of the population of the Asian and Pacific region lives in rural areas, and is largely excluded from digital opportunities owing to poor telecommunications infrastructure; lack of necessary financial resources; and lack of capacity to develop appropriate technical, institutional and policy opportunities and solutions; the Workshop recommended that more effort be given to providing ICT opportunities to rural communities. Activities in that regard might include the development of e-community centres, and organization of a training workshop on e-learning.

(e) The Workshop appreciated the participation of the private sector and recommended that continued partnership be maintained in the future joint activities between ADBI and ESCAP.

H. Evaluation of the Workshop

The participants and the resource persons in attendance at the Workshop were satisfied with the Workshop preparations, logistics and organization. The participants acknowledged that resource persons were from varied fields of expertise and their presentations covered issues relevant to them. A

common suggestion made in relation to the presentations was that they should be more interactive. Another suggestion was the conduct of a field visit to a government ministry to view actual e-government infrastructure and implementation.

The participants also requested to be informed of the requirements of drafting an action plan prior to commencement of the workshop, as that would have allowed more preparation time. The participants also stated that they wished to further develop the action plan to initiate such projects in their country upon their return.

Lastly, it was suggested that such evaluation be provided online rather than in hardcopy format, to save paper and to promote the use of information technology among participants.

II. PROCEEDINGS OF THE WORKSHOP

A. Current status and trends of implementing e-government

Mr. Stephen Braim, Government Programmes Executive for IBM Asia Pacific, suggested that many Governments were not working as well as they could. He said they were frozen in old industrial structures, often not implementing programmes properly and were at a risk of becoming irrelevant and losing the confidence of their citizens. He said the problems were not waste, abuse, poorly designed processes, lack of technology, or even bad management. Those were presenting symptoms. Instead, after 25 years of trying to “fix” government, it was possible to conclude that Governments were not doing the right thing poorly, but in fact, that they might be doing the wrong thing. Yet successful institutions were often the last to change – becoming victims of their past success. The government structure was over 100 years old, and it was not adapting well to the new environment. However, Mr. Braim said that did not mean that Governments were in danger of becoming obsolete, but rather, they would be much less effective unless they made the change to e-governance.

The challenge for government transformation was how to transition from an industrial model of big government – centralized, hierarchal, and operating in a physical economy to one with a new model of governance – adaptive to a virtual, global, knowledge-based, digital economy and fundamental societal shifts.

Mr. Briam stated that changing to a new model of government that was adaptable, fast, virtual and focused on fundamental societal shifts would

be key to the future of government. Much of e-government was engaged in one-way sharing of information focused from the centre out, but Mr. Braim said the next wave of e-government should start to think about investment in two-way technology that could take advantage of both channels. E-government provided opportunities for more effective information flow back to policy makers, assisting them to become better policy makers, and policy makers that would make them more highly regarded by their constituency.

While much of e-government relied on telecommunication innovations such as bandwidth and speed, there was also a need to focus on how to distribute e-government applications to potential users. E-government access was about providing services to citizens and business in ways that they chose to apply to them, at a time appropriate to them. Further, universal access was essential. Therefore, providers must choose the most appropriate delivery channels.

Mr. Braim said governments should aim for customer-centric use of e-government, and transformation rather than automation. E-government had traditionally been pushed from the supply side, from governments out. However, Governments could use technology, skills development and organizational transformation to also improve the way the market worked for them. Correspondingly, it must also be focused on customer needs and the demand side.

Mr. Braim emphasized integration and said e-government had impacted on all levels of government. Successful economies were those where a central coordinating agency had been formed to oversee the shift to e-government. If there was not a uniform approach, e-government was destined to failure. e-government could have effects on policy and programmes objectives through:

- Improved services, e.g. customer satisfaction, burden reduction and savings
- Enhanced economic development
- Improved policy formulation
- Redefined communities
- Increased operational efficiency
- Enhanced citizen participation

Furthermore, e-government could be used as an anchor to drive transformation across the public and private sector and as a tool to drive foreign investment and economic development. It was important not to over-emphasize the role of technology – technology was often a large part of cost, and

- (2) Australia's State Government of Victoria's strategy for information and communications technologies for connecting the State
- (3) The Government of the Republic of Korea's e-government vision and strategy
- (4) Singapore Government's visions and plans

Factors that could impede success included institutional weakness, poor human resources, lack of funding arrangements, local environments, technological and information changes. There were many implementation options, but initially with, Governments needed to:

- Prioritize initiatives across government
- Be citizen-focused and business-oriented
- Get the right governance model-balance central control with facilitation
- Recognize and reward senior managers
- Look for existing solutions – it might not be necessary to invest a lot of money in a new system
- Agree on a satisfactory funding model
- Set the pace – leadership is critical

Mr. Braim provided a summary of the implementation parameters for e-government, which were:

- Vision (Strategy) – Leadership
- Integration – Funding/Finance
- Education/skills – Fostering Demand
- Channel Management Adaptiveness – Partnerships, Business
- Technology (OSS) – Procurement
- Privacy – Security
- Legal Frameworks – Review and Accountability
- Communications – Open Standards
- Customer Focus – Branding

Lastly, Mr. Braim stated that in the future, the role of government could expect to become less intrusive and more invisible; less process and

more focused; less centralized and more distributed; less hierarchical and more networked; and less administrative and more productive.

The plenary session commenced with a question on why it was so important to agree on a funding model ahead of implementation. Further to that, the sustainability of projects that relied on government funding was raised. Mr. Braim said it was crucial to know ahead of time where the funding would come from to enable proper planning. That also would help to avoid overlap and encourage integration. In terms of ensuring sustainability for government funded projects, Mr. Braim said it was a question of educating Governments to see the returns on their investments. Many projects also had the opportunity to become self-funding. It was also a question of leadership. The representative of the Government of the Republic of Korea suggested that it might be useful to set up an e-Asia Fund to finance such activities and to establish a Knowledge Partnership Fund to share experiences with other countries.

B. Integrating government services

The second presentation by Mr. Stephen Braim, Government Programmes Executive for IBM Asia Pacific, focused on open computing, integration and privacy challenges faced by e-government. He defined “on-demand e-government” as a government whose business processes – integrated end-to-end across the government departments and with key partners, suppliers and citizens – could respond with speed and agility to any citizen demand, changing political or economic dynamic, or external threat. Mr. Braim said the biggest challenge to e-government was providing a single integrated portal across all levels of government. Integration focused on speed, agility, responsiveness to customer and supplier needs and demands. Integration was only one element, however, also necessary were vision, leadership, and skills. Integrated e-government needed to be:

- (a) Responsive in real time;
- (b) Moved from fixed to variable cost structure, i.e. on-demand fashion;
- (c) Focused on what was core to governing; and
- (d) Resilient around the world, around the clock – 24-hour government.

Integration of internal government services allowed government to focus on the core goals of governing. Access to government content and transactions should be through an integrated gateway, which enabled the users’

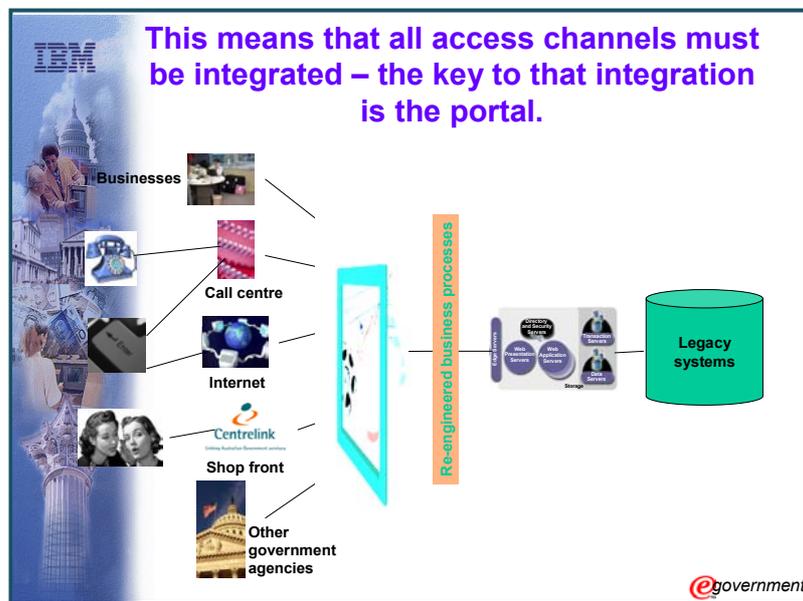


Figure 2. Integration of services through an e-government portal

view to depend upon the function required. Further, operational functions could be integrated to drive increased efficiencies.

Mr. Braim said each department did not need an accounts arm or human resources arm; those could be centralized in one portal (figure 2). The key to integration was the portal. The portal provided a single service window across government. That integration challenge was one of the most difficult challenges that faced government.

There were five key building blocks for integration, namely: lines of business, enterprise, platform, people and process. Integration built upon the vision, strategy and roadmap. The platform block provided integrated access to government services through a consistent and coherent foundation, which included:

- Infrastructure – IT was not a core critical success factor, but in the integration phase it was the driving ability for content management and content integrated across departments
- Content and content management
- Privacy and security – no one would access a government service if they thought government departments shared their information without permission or consent

- Channels and portals

Government integration involved not just applying technology – the major challenges were also *organizational*. To meet the challenges, government needed to re-educate management and staff. The enablers of integration included technology, people, other governments, the private sector and political awareness. The barriers were independent programmes, islands of autonomy, lack of integration, resistance to change and outdated legislation. For e-government to be successful, Mr. Braim said it needed to start small, with small programmes housed in individual departments. That, however, ran the risk of strengthening islands of autonomy and lack of integration, therefore, it was essential to ensure there was an independent body overseeing integration.

Mr. Braim discussed open standards policy approaches that could provide support to e-government service integration. He stated that open computing was an approach that applied to hardware and software and emphasized modularity, interoperability, interconnectivity and system flexibility. It was largely based on industry standardized interfaces. When governments applied open standards, open source was enabled. Open source software could assist governments in the integration process by:

- Reducing costs
- Easing integration and interoperability
- Increasing freedom of choice/flexibility
- Running on multiple platforms
- Tailoring to specific needs
- Stability, scalability, security
- National IT Strategy/Economic Development
- Low Risk Implementation/Ease of Migration

Security and privacy were also major issues in moving towards e-government. Privacy was the right of individuals to determine for themselves when, how and to what extent, information about them was communicated to others. Privacy required effective security, but effective security did not guarantee effective privacy. The privacy principles of the Organization for Economic Cooperation and Development (OECD) expressed the concepts that underpinned most privacy legislation and fair practices around the world. Those included the following:

- Purpose specification
- Collection limitation

- Use limitation
- Accountability
- Security safeguards
- Openness
- Individual participation
- Data quality

If any of the above expectations were not met, a loss of trust would occur. The customer needed a high level of assurance that the above principles would be upheld. The challenge, therefore, was to build an integrated environment where an individual's concern for privacy could be respected and protected while allowing information-based enterprises to thrive.

In the plenary discussion, Mr. Braim was asked how best to achieve integration if a regulatory infrastructure was not already in place. He replied that if the infrastructure was not already present, then governments should start there. E-government did not have to be put on hold however to achieve that. It could run in parallel with the building of infrastructure, with one driving the other. The impact of outsourcing on government was also raised. Mr. Braim agreed that there needed to be a considered review of what could and could not be outsourced and when it should be done. However, he said it should be based on industry capabilities.

More detailed information was asked on the Common Service Delivery Architecture developed in Australia. That system was a tool for infrastructure integration. A government committee called the Chief Information Officer Committee (CIO Committee) was established as a cross-agency committee to coordinate investment needs across government. That core coordinating government agency, said Mr. Braim, was an important component of successful e-government. He directed participants to the Committee's web site at www.agimo.gov.au. The web site provided information on Australia's investment strategy and its strategic framework for the information economy, as well as details on the integrating of government services.

C. Benefits and issues of implementing e-government

Harnessing the full potential of IT was a major challenge to all Governments. Ms. Caroline Fan from the Government of Hong Kong, China, shared with the workshop the e-government experience of her country in meeting that challenge. She said, the Government of Hong Kong, China had implemented e-government gradually. The 'first wave' initiatives had created interest, drive and momentum for e-government, through:

- Fostering e-business opportunities
- Enhanced productivity and efficiency
- Improved quality of life for the community
- Sustained competitiveness and position in the world

By the end of 2003, Hong Kong, China had successfully achieved its target of providing an e-option for 90 per cent of public services amenable to the electronic mode of delivery. A recent survey conducted by AC Nielsen showed that about 70 per cent of Hong Kong Internet users had used e-government services. A number of other notable successes had also been achieved:

- More than 95 per cent of the official trade-related documents were submitted electronically to the Government
- Over 80 per cent of procurement tenders were carried out through electronic means
- About 10 million hits per month on the employment searches through the government web site <www.jobs.gov.hk>

That success had been assisted by the adoption of strategies to prepare for the information economy. In 1998, an ICT blueprint, Digital 21 Strategy, was developed to guide the use of IT to enhance productivity, generate economic growth and improve the quality of life for all. As an initial step, the focus was to build Hong Kong's information infrastructure and to create a foundation for growth in the use of IT. The Strategy aimed at establishing a favourable environment that encouraged both public and private sectors to adopt IT and e-business. Since then, Hong Kong, China had made great strides in putting in place the necessary environment, infrastructure, skills and culture to encourage the development and adoption of IT by the community.

Having set a strategy and targets, the Government progressively put in place the physical, legal and technical infrastructure in which IT and e-commerce would flourish. To enable interconnectivity, telecommunications and broadcasting regimes were liberalized to enhance competition, consumers' choice and quality of service. Within government, a broadband, wide-area communication backbone connecting all department networks was built. A Cyber Central Government Office (CCGO) was established on the Intranet to enable information dissemination among the bureaux and departments and to facilitate their daily operation. Further, an Accessibility Programme for the whole Government was launched. The three-year initiative aimed to provide shared IT facilities to all government employees, to further drive the adoption

of Government-to-Government (G2G) and government-to-business (G2B) services within the Government.

An Electronic Transactions Ordinance was enacted in 2000 to provide a legal framework. Under that Ordinance, electronic records and digital signatures were given the same legal status as that of their paper-based counterparts. It also laid down a framework for certification authorities to support the conduct of secure electronic transactions.

Information security was a key element in e-business and a number of agencies were established to monitor and regulate various aspects of e-government in that area. The Information Security Management Committee was set up to formulate IT security policy and oversee IT security implementation in government systems and electronic services.

The Government Information Security Incident Response Office was also set up to carry out the various tasks to proactively combat threats and monitor the effectiveness of protective measures. The Hong Kong Computer Emergency Response Team Coordination Centre (HKCERT/CC) was established to monitor virus and disseminate information. An IT security portal was launched to promote the security awareness and concern of computer related crimes to the community (www.infosec.gov.hk).

Since 1998, Hong Kong, China has implemented a series of programmes to raise awareness of, confidence in, and familiarity of, the community with the use of IT. A five-year IT education strategy was also formulated to integrate IT into education.

To increase access to all, the Government also installed personal computers with Internet connections for free use by the public at convenient locations across the territory, such as community cyber points, district cyber centres and post offices. Some stations were supported by assistive devices to meet the distinct needs of groups such as senior citizens and people with disabilities.

To sustain competitiveness, the adoption of e-business needed to be encouraged. In Hong Kong, China, more than 95 per cent of enterprises were small and medium-sized enterprises (SMEs). While large corporations and multinational companies required less assistance to go “cyber”, SMEs needed encouragement and assistance in migrating to e-operation.

Ms. Fan discussed some of the services offered by the e-government initiative in Hong Kong, China. One successful initiative was the Electronic Service Delivery (ESD) Scheme. With ESD, members of the public were provided with convenient, innovative, reliable and high quality access to some

180 public services from over 50 government agencies in a one-stop manner through the Internet. Since its launch in 2000, ESD has won a number of major awards. The ESD Scheme was a public-private partnership arrangement. By running commercial services and accepting advertisements, the ESD operator had the incentive to make investment and assume the business and financial risk, thereby saving public money investment in the implementation. It was an innovative business model, the ESD operator was allowed to run its commercial business in addition to the government business. For example, the operator could provide commercial marriage packages while citizens made their bookings for marriage registration date.

Being a commercial organization, the ESD operator could also adopt various measures to motivate greater utilization in the community. They had collaborated with some credit card companies to rebate customers on payment for government leisure facilities when using credit cards. They also offered e-shop coupons to customers using their tax filing services.

The Multi-Application Smart Identity Card project was another major inter-departmental undertaking of the Government. Through that project citizens had the option to include a digital certificate in their smart ID card. They could also opt for value-added applications including a library card and in the future, their driving licence.

The Automatic Passenger Clearance (APC) System was to be implemented at Control Points by 2005. That would enable citizens to cross the border by presenting their smart ID card at an APC kiosk in a self-service manner.

Additional e-Government initiatives included the Government Electronic Trading Services (GETS). GETS enabled the foreign trading companies to submit official trade-related documents to three government departments: Trade and Industry, Customs and Excise, and Census and Statistics. Starting from January 2004, traders had the choice to submit trade-related documents using either the XML or EDI format (www.gets.gov.hk).

The Easy Change of Address (ECO) was another joined-up e-Government initiative enabling citizens to notify 12 government departments of their change of address at the same time. The service has been expanded to 12 other commercial entities or charity organizations.

Further, Ms. Fan stated that Hong Kong, China aimed to streamline the processes involved in the criminal justice system, from the arrest of suspects, through to identification, prosecution, trial, and correctional and rehabilitation processes leading to the ultimate release of the convicted. The planned Integrated Criminal Justice Process would help to improve the criminal justice efficiency and service quality through timely sharing of complete, accurate and critical information among various government agencies involved in the process.

Drive and support from the top were a critical success factors for e-government development. In recognition, the Government of Hong Kong, China set up a policy bureau in 1998 to steer IT directions and policies. An e-government Coordination Office was also established under the bureau to centrally coordinate and drive e-government initiatives across government. The factors contributing to the successful e-government implementation were summarized as the following *SECRET*:

- Strategy
- Enabling environment
- Customer-centric and create value
- Re-engineering processes in delivering the e-services
- Continuous drive and support from the Top

In the plenary discussion that followed, Ms. Fan was asked about the format and structure of the e-government Coordination Office and how e-Government activities were financed. She answered that the bureau formulated policy, while all the planning of e-government activities was executed by the e-government Coordination Office. That helped to create a channel of communication among policy and executing agencies. Financing of those activities was a difficult issue in many countries in the region wishing to start up e-government activities. In Hong Kong, China, the Government invested in infrastructure and offered some incentives to operators to attract them initially. Ms. Fan said it might be interesting for other countries to look at Hong Kong's model in terms of replication, but reaching that level might take some time.

D. Factors and procedures to be considered in improving e-government

The presentation by Ms. Marie Johnson, Department of Industry, Tourism and Resources, Australia, focused on the establishment of the Business Entry Point (BEP), an information portal for the Government of Australia. Ms. Johnson gave a brief overview of the Australian government structure, which she said was a complex, three-layered system with a federal government, six state governments, two territory governments and 680 local councils at the local level. The BEP was an initiative of the three levels of government.

Small business was said to be Australia's largest employer. It employed 3.3 million people, 67 per cent of which operated from home, and one third were operated by women. In the online environment, 56 per cent of SMEs recovered their investment on technology, but not always at one point in time. The strategic beginnings of BEP were in 1996, when the Australian Gov-

ernment commissioned a report on the burden faced by businesses engaging with government. The recommendations from the Bell Report, involved regulatory reform and technology development, such as developing technological solutions to transform the way in which business interacted with government, for example, single entry points and unique business identifiers.

The BEP operated not just as a web site, it also worked with government to provide solutions online. In addition, BEP was also a transaction hub and provided information on government assistance, as well as hosting key tax-related transactions for the government. During the second phase of the BEP (the transaction phase) the portal began working with the Australian Taxation Office. The take-up rate of online registrations was currently around 75 per cent. That was significant and showed that implementation created demand where there was no such previous demand. It also revealed that businesses only went online to carry out specific tasks, not to browse. Following the success of phase two, the programme started to look around for other transactions that could be managed online through BEP.

While BEP did not reduce the paperwork involved in managing small businesses, one of the benefits of going online was that it exposed the complexity of a policy decision, in that case, the burden on businesses of government compliance. As an example, Ms. Johnson explained that to start a hair-dressing business in Victoria, a business operator had to submit information to approximately 27 different government agencies.

In recognition of the burden that placed on small business, BEP developed an online tool, which made available with 5,000 government forms and licenses that were managed through the site. BEP also developed a transaction manager for businesses, which was the first one globally. She discussed the technical model, which combined BEP with intermediaries to provide the transaction manager functionality on their web sites (figure 3).

Ms. Johnson cautioned against overreliance on portals. Internet users typically did not have government web sites added to their favourites lists, therefore, it was important to find out what businesses had on their favourites list. Those could then be tracked, providing information on where they were going. That then enabled government agencies to post information on those sites as well as their own sites, increasing the chance of reaching their target users. There were 120 third-party organizations using BEP content. Uptake of syndication had increased over time.

The BEP business model was designed to reduce the compliance burden on Australian small businesses (figure 4). It had been updated over its period of operation to leverage off the information-to-transactions evolution. BEP had developed business cases for specific projects, built primarily through recognizing a specific business need.

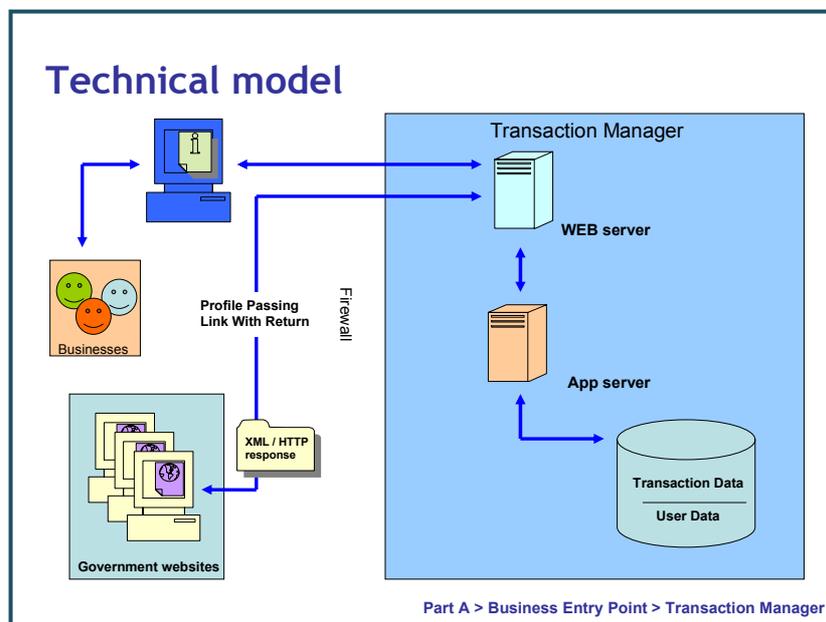


Figure 3. Technical model for the transaction manager use in business web sites

Ms. Johnson stated that BEP governance involved all relevant players. The individual projects had their own governance arrangements and collaborative projects that were managed in conjunction with stakeholders. BEP had input to strategic e-government policy, which helped to ensure ongoing cooperation and support from all areas of government. BEP did not pay agencies to put forms online. The project was planned with milestones and the agencies and project members made a resource contribution against the project plan.

In terms of collaborative projects, 70 per cent of B2G transactions took place at the local level, therefore that was where governments had to focus. In Australia, the government enabled that focus through the Demonstration Programme, which partnered with local governments to develop online services. In undertaking collaborative projects, BEP was looking for progressive agencies, industry sectors and projects that could be replicated. Ms. Johnson emphasized the importance of coalitions in e-government delivery. She said companies needed to form coalitions, not cartels. Coalitions created new opportunities as each business added value to the business processes and offerings of the others.

Lastly, Ms. Johnson discussed the 10-point action plan for implementing e-government:

1. **Identify the problem:** That provided a focus for the rest of the planning process. Identifying stakeholders, formulating evalua-

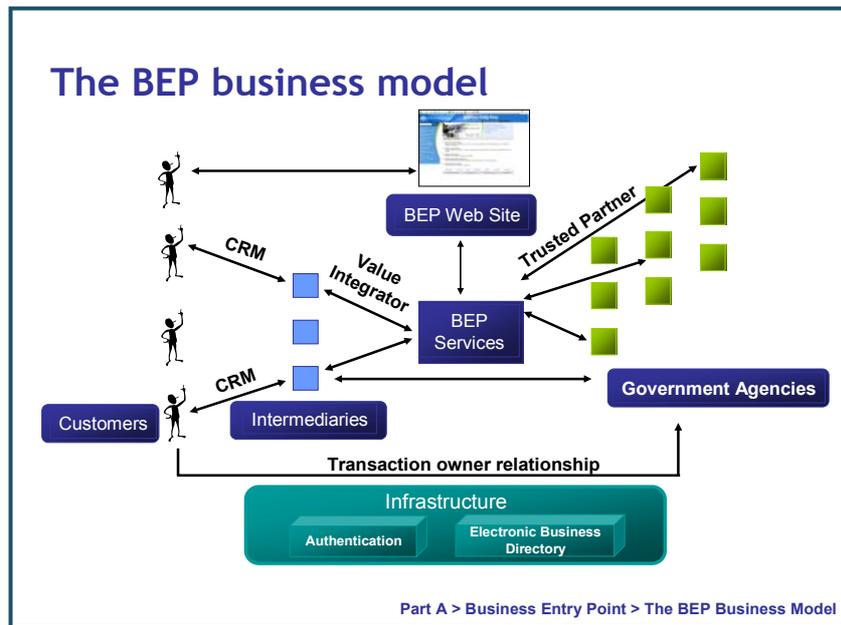


Figure 4. BEP business model

tion criteria, how to measure success and the processes needed to be sufficiently flexible to take into account the changing circumstances.

2. **Governance and strategic leadership:** The transition from offline to online services often required a reorganization of administrative practices within government. E-government tended to promote greater interaction and cooperation between government departments and the “silo” approach was gradually breaking down.
3. **Developing the business model:** That was critical, as e-government offered an opportunity to refine and enhance the existing offline procedures. The focus should not be on the demand for an online service, but for the potential demand generated.
4. **Working with the private sector and intermediaries:** E-government was seen as a convergence between public and private sector processes. To achieve the real benefits from e-government there needed to be a commitment to developing ICT infrastructure by the private and public sectors.

5. **Replicating, not reinventing or working across jurisdictions:** Even though different government agencies had different services and client groups, many of the technological back-end processes were the same. E-government was about learning from others' experiences, replicating and improving processes, since the costs associated with the development of online services were too high to reinvent. Therefore it was necessary to look for opportunities to take a quantum leap and learn from others. Lastly, the business case needed to identify replication opportunities.
6. **Understanding business processes – value proposition:** Dealing with government was part of the business process. The government needed to take the time to understand key business processes to ensure that e-government or online services were relevant and effective, to identify opportunities for new ways of delivering e-government services to understand the everyday challenges faced by business and market dynamics, that might affect the uptake of e-government services.
7. **Underpinning technology:** Technology should be used to address the business problem and should be realistic about the technological capabilities of the infrastructure and client group. Opportunities existed to build strategic alliances with technology providers that could add value across a broad range of services and create sustainable long-term models.
8. **Measures of success – strategic and operational:** That depended on the problem and the planned objective. It was important to get the measurement indicators right. Both quantitative and qualitative information should be measured in order to delve deeper into who and what they were using it for. The quantitative data should be: (a) numbers of users/repeat use, (b) Range of information and transactions and (c) availability/accessibility. The qualitative data could be: (a) was the information meeting the business needs, (b) was it meeting objectives of saving time, reducing cost, more accessible, (c) was it scalable and sustainable and (d) is it consistent with national and international trends.
9. **Identifying barriers:** There were a number of barriers to implementing e-government. Some of those identified in the Australian case were:
 - Unreal expectations

- Public sector administrative arrangements or constraints
 - High-level government support including resources
 - Inter-jurisdictional and inter-agency issues
 - Privacy
 - What information needed to be protected - Australia's privacy laws and Thailand's data protection law sought to provide solutions
 - Authentication
 - Technology/cultural barriers
 - Cost
 - Other legislation
 - Both Australia and Thailand had an Electronic Transactions Act
 - The 'Why bother?' factor
 - Do not be limited by perceived lack of demand
 - That did not indicate that there was no need
10. **Lessons:** The government of Australia had learned some lessons from its e-government programmes.
- Businesses did not go online for government processes unless there was a value proposition
 - Fully understand the current system before promoting change
 - Start small think big
 - Do not do it all at once
 - Look at certain sectors and practices to focus on first
 - BEP was working to affect the supply and demand of online services
 - It can not operate in isolation
 - It was essential to measure the return on investment

- Innovation should be based on a sound business case
- Investment from government was essential
- Content syndication was the next wave of online innovation
- Syndication and Transaction Manager moved us closer to machine-to-machine communication
- The roles of intermediaries would be increasingly important
- Not just the web but B2B and B2G communications
- Continuous development of business models and partnerships between stakeholders essential

During the plenary, Ms. Johnson was asked whether businesses in Australia still had to fill out all the compliance forms once many compliance services became available online. She explained that the number of forms had not been reduced and would only be reduced when governments made a policy decision to lessen the compliance requirements on businesses. Instead, the transaction manager of the BEP made it easier to meet compliance and reduced the time it took to fill in forms, but it did not reduce the number of forms.

The issue of integration and whether it had increased since the development of BEP was raised. Ms. Johnson said she believed it was more a question of “what” and “when” rather than “how much”. She said not all forms were filled out all the time, and each form was there for a purpose, therefore, it was not easy to integrate them.

The question of the divide between the public and private sectors and how it might be bridged was also discussed. Ms. Johnson said that in the case of the public and private sectors, integration in e-government needed a proper strategy and attitude.

E. Reinventing (re-engineering) government

In his presentation, Mr. Kuk-Hwan Jeong, Ministry of Government Administration and Home Affairs, Republic of Korea, briefed the Workshop on his Government’s most popular e-government initiative, the G4C (government-for-citizens) project. The Government of the Republic of Korea was among the most aggressive users of e-government. Of a total population of about 48 million, the Internet reach was 28 million, and 11 million households subscribed to high-speed broadband Internet. That demonstrated that

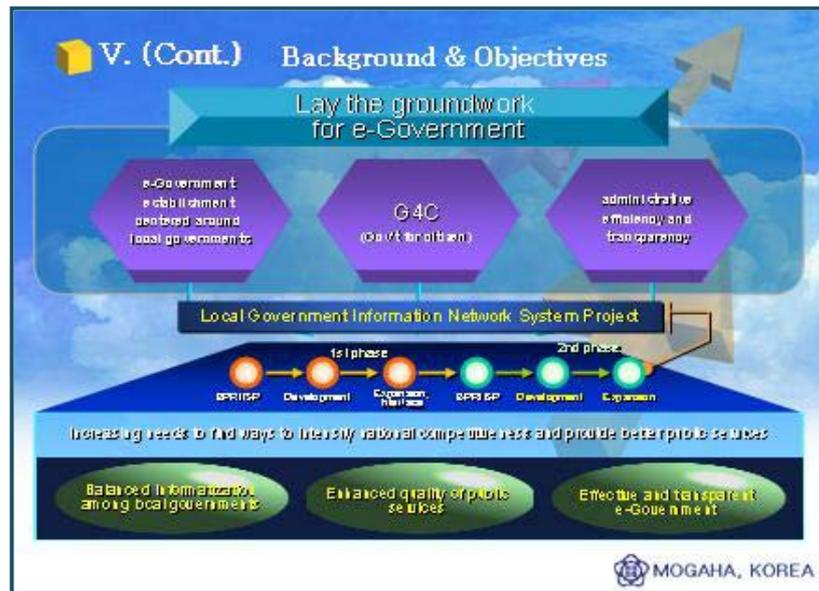


Figure 5. E-government framework

there were already enough users and potential demand for government online services. Based on that, the Government of the Republic of Korea created the G4C programme. That initiative represented the current e-government focus of the Government. The Internet provided a powerful tool for transparency and clear administration, reducing the probability of corruption, and through the G4C project, electronic democracy was possible, as interactions between the government and citizens were frequent (figure 5).

The Government portal site was www.egov.go.kr. Users of the portal included central government, local government, citizens and entrepreneurs. It was used for information sharing, electronic document interchange and so on. Users were often connected to the portal through high-speed networks.

Information sharing (citizenship, land, vehicle, businesses, taxes) was one of the key goals and measures for the success of e-government. Other goals were the development and implementation of infrastructure (electronic authentication, e-documents, e-payments) and improving the legal system. One of the most problematic programmes was electronic service delivery.

There were many reasons for pursuing e-government. Those included as a means to overcome inconveniences in government services and information delivery. Also, it helped to overcome the size and complexity of government, which were major barriers to citizens wishing to access government services and information. In the Republic of Korea, there were more than 50 min-

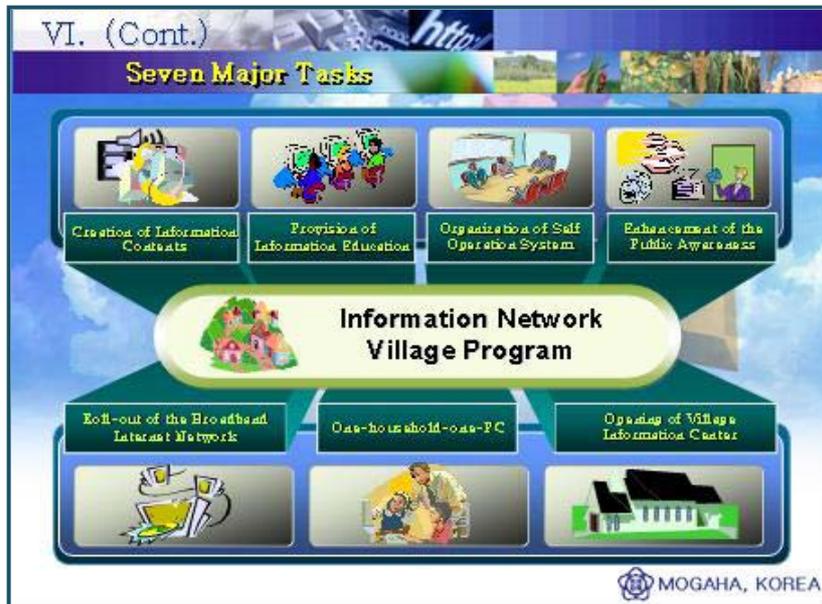


Figure 6. Information network village program

istries and agencies, revealing the necessity of e-government and information sharing online. Further, e-government helped to:

- (a) Identify which official in which department at which level for which programme; and
- (b) Enable citizens to become active players, with government services and information provided when, where and how they wanted those provided.

The information sharing system enabled the Government to be accessed online as one entity. Further, it reduced the number of trips citizens had to make to government offices, and the number of documents required for verification (citizenship, ownership of land, vehicle registration could be provided online). Those were all key benefits to citizens.

Another e-government project was the e-village project. The e-village project aimed to reduce the digital divide by providing services to rural communities, boost regional economies and establish the foundation for e-government services (figure 6). The e-village project operated in 103 remote villages across the Republic of Korea and was soon to be expanded to 191 villages. On-going funding of the project had not yet been finalized. Initially, it had been centrally funded, but currently funding was split to a 7 to 3 ratio between the Government and the village. The future success of the project re-

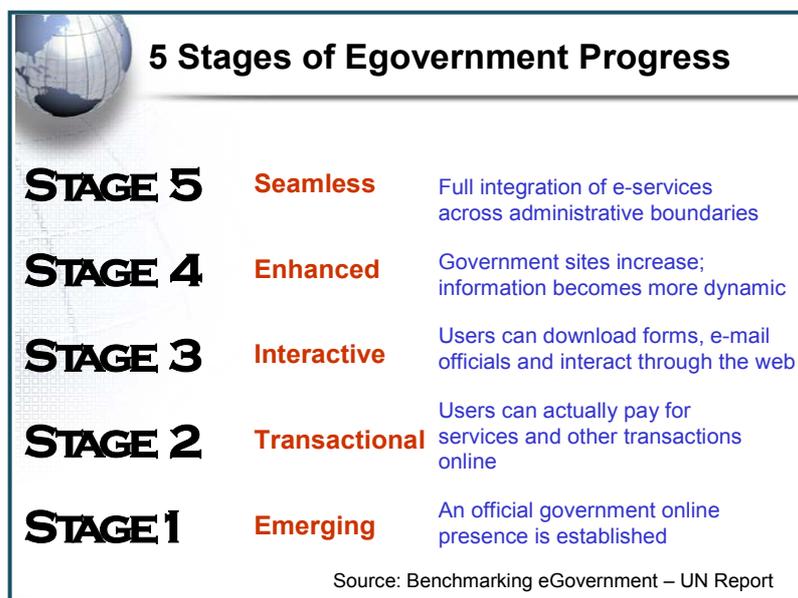


Figure 7. Five stages of e-government progress

quired private sector involvement, either in the provision of equipment or funding.

The e-village project was the main focus of the plenary session, as many participating countries faced a similar challenge. Much of the discussion focused on the funding arrangements for the project and its financial sustainability. Mr. Jeong said that the future financing model for the project was currently the most important issue. The Government was trying to attract private sector support. He said that the Government had taken measures to improve the funding mechanism, but ultimately that was a public support programme designed to reduce the gap between information “haves” and “have-nots”, and therefore the ultimate responsibility for its support rested with the Government. As time went on, that was becoming more difficult to maintain, so a funding mechanism for the future was needed and models were being developed for that purpose.

F. Turning objectives into actions

The presentation by Mr. Prasanna Meduri, the Public Sector Business Development Division of Microsoft Asia Pacific and Greater China, focused on building a roadmap for e-government. Mr. Meduri said there were many stages involved in implementing e-government, with the complexity often much greater than it appeared (figure 7). The levers for change were public

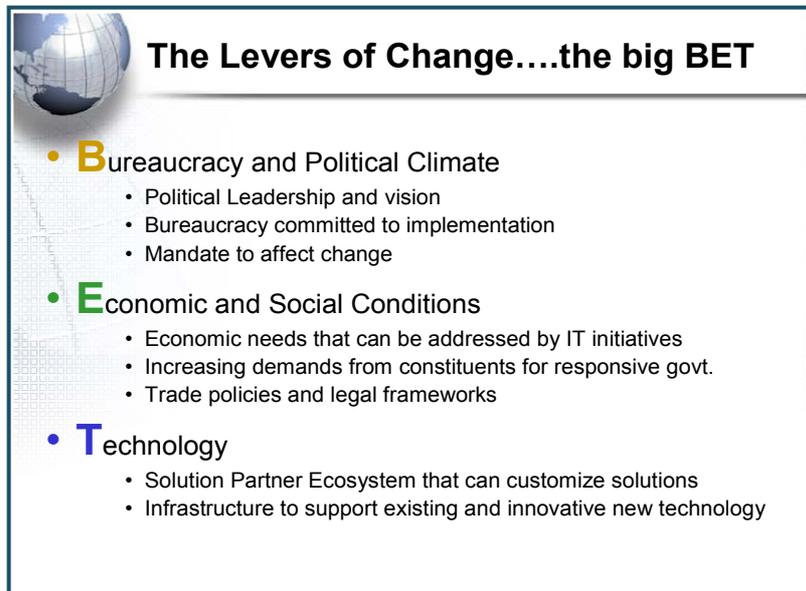


Figure 8. Levers of change – the big BET

service and technology. He stated that those levers were a big BET (figure 8). Much of the technology was already in place, and what was often lacking was a partner ecosystem – it was not building new systems but making effective use of what was already there that was most important. The political climate was also critical to making e-government happen, as were the economic and social conditions. He stated that to transform ideas into action required addressing issues such as: digital inclusion, integrating e-government to core government missions, interoperability frameworks, indigenous innovation, improving internal efficiencies, public-private partnerships, outreach and re-sorting models.

Lessons learned thus far include:

- It was important to integrate e-government into core government missions such as rural participation and education
- Interoperability frameworks and mechanisms should adopt a common standard for technology to allow them to work together
- Improving internal efficiencies might enrich the work of employees
- Indigenous innovation
- Public-private partnerships

- Digital inclusion
- Outreach and resourcing models (helping communicate the message)

Several challenges for the establishment of a roadmap for implementation existed. Those included the following:

- Establishing the value within the context of all the other things that government was tasked to do
- Blending new and existing technology
- Limited resources
- Internal technical expertise
- Citizen access and participation
- Adoption and sustainability
- Localization

Mr. Meduri said that addressing those challenges assisted smooth transformation. An example of that in action was the Open for Business Project in the United States of America which was a portal designed to attract small businesses to Pennsylvania and encourage local citizens to pursue entrepreneurship. Mr. Meduri presented it as a case study. He said its goal was to ensure SMEs had access to information and the burden of doing business with government was removed. The portal provided business information, yellow pages and online auctions where businesses could see how government worked for them. The Project also established a small business committee and developed a series of government services online. In addition, there was a concentrated outreach programme to communicate the effectiveness of what it was doing and how it was working to save citizens money and increase transparency.

Mr. Meduri next raised the issue of interoperability and gave several reasons for pursuing it, including:

- Improved citizen services
- Improved government internal efficiency
- Enhanced international collaboration

Mr. Meduri said that interoperability frameworks had been initiated by the Governments of the United Kingdom of Great Britain and Northern Ireland and Australia, while New Zealand and Hong Kong, China were undertaking similar efforts. The framework was called the Electronic Government Interop-

erability Framework (e-GIF). Such frameworks were useful because often individual government agencies ran their own business and technical systems. The e-GIF provided an agreed standard way of joining those systems together, a framework for ongoing collaboration of data.

In Singapore, community XML (extensible mark-up language) web services provided community portals where citizens could access services from business. The government-provided service was the backbone for the way business and citizens interacted online.

Mr. Meduri listed the three main ways to fund such portals:

- Business provided services
- Citizens paid for services they wanted
- Services were important from social aims of government, therefore government provided those services

Lastly, Mr. Meduri, provided guiding principles for successful e-government. He listed the following 12 key ideas:

1. Priority development needs that require government involvement
2. ICT infrastructure
3. Efficiency and effectiveness as key success criteria of government involvement
4. Political leadership
5. Availability of funding
6. Public engagement
7. Skills and culture of the civil service
8. Plans for the development of human capital and technical infrastructure
9. Coordination
10. Partnerships
11. Legal framework
12. Monitoring and evaluation

G. Designing e-government for the poor

The presentation by Mr. Madaswamy Moni, the Deputy Director General, National Informatics Centre, Department of Information Technology,

Ministry of Communications and Information Technology, Government of India, focused on the Government of India's digital initiatives and agenda for small and marginalized farmers. Mr. Moni said efforts to reduce poverty were stalling, and the gap between the rich and the poor was widening. Further, international efforts to improve information flows and communication services could help to eliminate poverty, but it alone would not solve the problem.

Models of e-government were continuously evolving and improvising to harness the potential offered by ICT and deal with new realities in the area of governance. In the design of e-government, ESCAP's Committee on Poverty Reduction emphasized 'fostering the development of sustainable and affordable information and communication technology focused on the needs of the poor'. Agriculture, medicine and ICT were three fields where the diffusion of technology held particular promise for the poor. Such fusion of technology for stimulating growth in rural areas was needed. So too was a location-specific e-government model, which could reach the rural poor.

Mr. Moni said the rural poor were not a homogeneous group. Poverty had multiple and complex causes, which were mutually reinforcing. If poverty was to be reduced, a flourishing agricultural sector was essential. Reaching the rural poor made broad-based economic growth its primary objective, and treated agriculture as the leading productive sector within the rural economy and closely linked to non-farm activities. Non-farm activities, often with linkages to agriculture and natural resources, had important multiplier effects. Rural poverty reduction required multi-faceted policy efforts that recognized the linkages among household asset access portfolios, household income strategies and macrostructural changes.

There have been both national and international efforts, including the ESCAP Committee on Poverty Reduction, the Millennium Development Goals and the World Bank's PovertyNet to improve information flows and communication services to eliminate poverty, which were necessary, but not sufficient conditions. In poor rural areas, where agricultural productivity was low and unreliable and there was food insecurity, better information and knowledge-exchange was important in reducing poverty. India's e-government agenda was to set up agriculture information centres in every village. That would encourage interactive exchange of information for planning and day-to-day operations of farmers. As part of its digital agenda, the Government had a number of initiatives. Those included the following:

- AGMARKNET, a road map to network 7,000 agricultural produce wholesale markets and 32,000 rural markets
- AGRISNET (Agricultural Resources Information System) which would use an optical fibre network to provide agricultural extension services and agribusiness activities

For the introduction of “agricultural governance” in the country, the establishment of AGRISNET as the national information infrastructure was emerging as a prerequisite. AGRISNET would provide content on water, soil, climate and capital resources, land records, environmental data, and plant, animal and fisheries resources, as well as remote sensing data, socio-economic and statistic data, and infrastructure data. The information would be location specific.

AGMARKNET, on the other hand, could assist in developing synergistic collaborations among cooperatives, agricultural produce markets, agri-clinics, and agri-business centres, creating “pathways” to rural prosperity.

In the Indian context, the emergence of an e-farmer is needed. It is a farmer who knows the worldwide market situation, has unhindered access to the markets and technology, possesses access to meteorological information, and extension advice can be considered as adequately equipped to enter the world of global partnership.

Digital development in rural areas, through various government programmes, was providing a broad base for uplifting the rural poor in India. That was a step towards establishing a location-specific e-government model for the poor in India, at the grass-roots level. However, one major problem that had an impacting on ICT usage by and for the poor was the language barrier. E-government for the poor had two basic needs: networking of people and networking of information. Both were essential. Development and use of ICT in agriculture assisted agricultural growth. The digital agenda was a positive force for fostering agricultural growth, poverty reduction and sustainable resource use in India. What was a “technology push” in 1990s was now taking the shape of “consumer pull” at the grass-roots level in India to usher in agricultural governance in the country. Digital initiatives provided resources for people and organizations working to understand and alleviate poverty.

The plenary focused on access to information provided through the digital networks the Indian Government was creating. Mr. Moni, when asked about the mechanisms in place to assist farmers to access information online and how many villages had information centres, replied that agricultural colleges and their trainees were the intermediaries who would take IT to the village level. Networks at district levels provided local language interfaces and training of trainers. Further channels of information were already created through cyber cafés and home connections, but those channels needed to be enhanced.

H. E-training of government officials and citizens

Mr. Kyosuke Yoshimura, from the Learning Solution Division, IBM Global Services, gave a presentation on the importance of e-training to effec-

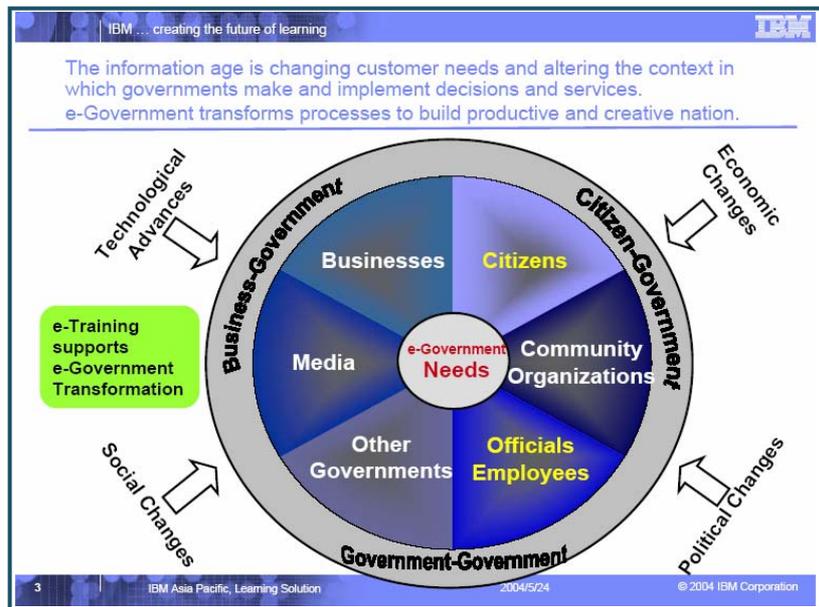


Figure 9. E-government needs

tively implement e-government. In his presentation he discussed training needs in e-government projects; e-training organizations; user training planning to implement e-government; and gave some examples of successful e-training.

Mr. Yoshimura said the Information Age had changed customer needs, and altered the context in which governments made and implemented decisions and services. E-government had transformed processes to build productive and creative nations. e-training supported e-government transformation, but e-government needed to have an integrated management system to form communities of interest to address key issues across the government and private sectors. e-training was a common infrastructure which could assist in the implementation of each e-government project. e-government needs included businesses, citizens, media, other governments, community organizations, officials and employees. The impact and benefits for those other groups included technical advances and economic, political and social changes. E-government was about transforming the organizational and technological aspects of a government organization to appropriately leverage the knowledge and information needed to best support all of its customers (figure 9). Governments needed to communicate policies and provide training on new processes and procedures and IT skills that were critical to the success of e-government.

IT skills and application training that emphasized transforming technology for e-governance and demonstrated how it could be applied was needed to communicate what it meant to go “e”. Education (teaching and

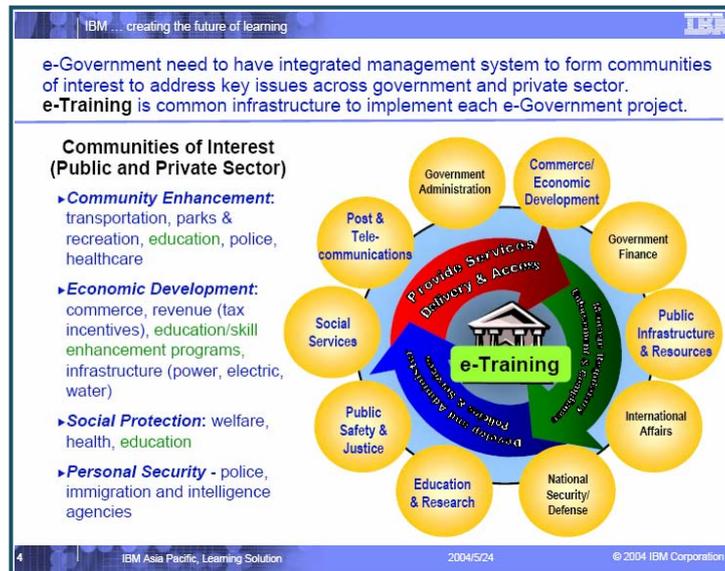


Figure 10. Key elements of e-training for e-government

learning) methods were also changing and learners' active participation was becoming more important for the training result. E-training was required to successfully implement e-government projects (figure 10). E-training assisted implementation by providing access to e-learning technology. E-learning technology was interactive and included e-mail, CD satellite and TV/LAN Internet. There were several ways to develop training content using e-Learning technology.

The four-tiered E-learning approach was effective for education and training. E-training used chiefly Tiers 1 and 2 and government officials and citizens learned from information and interaction:

- Tier 1 Learn from information
- Tier 2 Learn from interaction
- Tier 3 Learn from collaboration
- Tier 4 Learn for colocation

Governments faced many challenges in the development of human resources. IT skills training accelerated industry development and employment. However, e-government projects needed to have IT professionals to implement the system and to train officials and citizens to use the system. IT literacy training consisted of the seven skills category/model, each of which were necessary to reach the next category (figure 11).

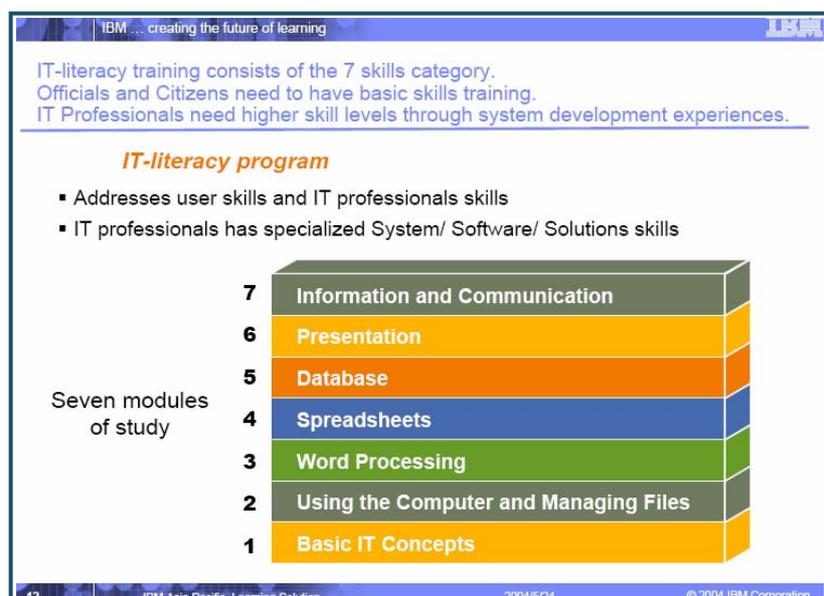


Figure 11. Seven modules of IT literacy programme

E-training provided flexibility and was useful for training both officials and citizens. A well developed training strategy was a key to success for project implementation. Therefore, e-training was discussed as the common infrastructure of any e-government project. The scope of e-training planning focused on user education and training strategy, specifically: (a) organization: new roles, responsibilities and competencies; (b) process: business practices and associated operating principles; and (c) IT: understanding of and facility with any new package or system. The scope needed to be the development of training material, e-training user documentation, change communication, delivery of training, assessment of training, documentation of maintenance and post implementation support. The key concerns of the e-training programme were identified according to the needs of the e-government project master plan, with e-training considered as a common e-government application.

Mr. Yoshimura gave as an example the Venezuela Ministry of Science and Technology. The Ministry established and developed a software workforce to improve its global competitiveness and encourage productivity with the use of e-business. Its training partner's experiences in the software industry, e-business technology and IT training services provided a complete solution for the government's objectives. The Ministry quickly and cost-effectively started the training element of the software industry development plan and enabled the Government to address its employment, economic and technology issues earlier. High-level professionals from the first class of graduates were

now in the market with only one year of time invested. Training costs per student and student dropout rates were both lower than the industry standard.

Another example given was the Japan Institute of Workers' Evolution (JIWE) which provided a job search web site for citizens, which also supported skills assessment and e-training. The mission of the JIWE was to support citizen reemployment and to provide classroom seminars and information materials to help citizens find jobs. The challenge was in how to provide support services to women who could not visit the training centre because of child care or aged family care responsibility. JIWE therefore, wanted to provide employment information and e-Learning services anytime, anywhere, to a wide range of people and help "Mothers back to work!" The solution was to use a prototype approach to capture the clients' requirements and to shorten the development cycle. JIWE provided e-learning curriculum design consultation and e-learning contents development, and developed and provided an e-learning 24-hour hosting service called "Hurray Hurray Net" (URL: <http://www.jiwe.or.jp/english/evolution/index.html>). The system had e-learning standard compliance as well as a flexible and rich courseware selection. The on-demand hosting system services made it possible to implement the system quickly and reduce maintenance costs and provide 24-hour operation. User-friendly web-based e-training content motivated users who were not familiar with personal computer operation. Users could join the virtual community from home and exchange their experiences with each other.

In the plenary discussion, Mr. Yoshimura was asked to define e-learning, and how its success and quality could be measured. He explained that e-learning was a blended solution, not only IT-based. It could involve mentoring or discussion in addition to the use of IT. That combination approach resulted in a higher productivity in general than classroom education. One characteristic of e-learning was the increased students' learning time, because less time was given over to presentation of course content and more time was made available for individual learning. Another important factor was learners' attitudes, as positive attitudes were very important.

I. Implementation and private sector participation

In his presentation, Mr. Ardaman Singh Kohli, Business Segment Manager, Asia-Pacific Axalto, discussed the private sector contribution to the implementation of e-government. Mr. Kohli explained that GIXEL was the smart card industry association. Its combined membership shipped more than 70 per cent of the world's smart card volume in 2003. The smart card provided security and savings for e-government services. Smart cards were a non-forgeable, physical and logical way to identify citizens offline and online. They simplified access to e-government services and reduced the total cost by providing multiple functions in one card.

Mr. Kohli stated that the potential role of the private sector in e-government included providing information, contributing to the establishment of a standardization framework and elaborating on technical answers to legal and social issues. The greatest contribution the private sector could make was at the pre-implementation stage, when government was not always certain about what path to take and of the available options. The private sector could work with the government through consultants, system integrators or specific technology vendors. Industry associations could advise the government on its options, as they were vendor neutral, with technical capacity and in-depth expertise. When reaching the implementation stage, the involvement of the private sector was also necessary and there were various business and funding models for at approach. Involvement of the private sector allowed the government to focus on governance issues, while operations were managed by the private sector. At that stage, privacy and reliability became critical, as did long-term support for such initiatives.

The role of smart cards in e-government was fundamentally to cover the last mile in the security chain, up to the citizen. Smart cards enabled secure and efficient e-government services. Typical smart card applications included:

- National health cards
- Driver's licence
- Electronic identification cards

Smart card solutions gave Governments the ability to apply offline and remote e-government applications so that a network connection or Internet point at every border or every village was not necessary. They also helped to address some of the connectivity challenges faced by countries in the region. Smart cards could enhance privacy protection of personal data in the card, and reduced outsider and insider fraud.

Mr. Kohli provided a case study of one of the oldest and most successful smart card projects, the French Sesame Vitale health and social security scheme. In the previous paper-based system, the Government took up to two months to reimburse citizens their health care costs. The French Government was the second largest health care spender in the world at the time, but citizens were frustrated and unhappy with long waits for returns. Even though the Government was spending a great deal on the health care system it was not popular with the public. They needed to change their approach and develop a more efficient, cost-effective system. The resulting smart card system was developed with a public-private partnership. The results were striking: more than one billion euros per year in savings, transactions became largely digital, confidence in the system and its privacy increased, and faster claims were able to be made (money back in five days). In addition, the Government was able to build up statistics on pathologies, now that the data were signed at the source.

The goals of identification smart cards were to empower citizens and to provide a non-contestable identity document to limit fraud. Further, once a direct link to each citizen existed, the cost of delivering services was dramatically reduced owing to the elimination of the need for an employee to verify identity – a major cost component of traditional systems. It also increased national security and created a “feedback” loop with citizens.

Mr. Kohli concluded that the launch of new e-government applications often went through a long and uncertain decision process, which did little to motivate industrials in the early phases. However, in those non-competitive phases, an industry or an association of industrials with large coverage could provide valuable guidance to the administration with the proper level of challenge.

J. Legal aspects of e-government

Mr. Roland Amoussou-Guenou, Regional Expert on Legal Cooperation in the Association of Southeast Asian Nations (ASEAN), Embassy of France in Thailand, gave a presentation on the legal aspects of e-government. He said the potential for e-government to modernize, transform and improve States’ management was widely acknowledged but it was also a vast and ambitious challenge.

He drew attention to the similarities between e-commerce and e-government. Both used Internet-based technology for the benefit of the information society. According to some schools of thought, e-government was a form of e-commerce where the “service provider” was a Government, and the “clients” were the citizens and the private operators. However, he warned that the parallel should not be carried too far and the two were, ultimately, fundamentally different. e-commerce was business driven, while e-government was, or should be, citizen- or people-centred. The basic idea of “public service” or “public administration” was central to e-government. Further, there was already a plethora of norms and legal instruments at the international, regional and national levels that regulated e-commerce, while e-government legal frameworks per se were still in their infancy. E-commerce had reached a critical mass¹ as opposed to e-government which was still in the starting blocks.²

E-government had emerged as an important challenge for the information society. As a tool to achieve better government, e-government offered potential solutions to leaders to better assume their responsibilities and also:

¹ *The Economist*, May 2004 “E-Commerce Takes Off”, 14-Page Special Report, May 15-21 2004.

² *World Public Sector Report 2003: E-government at the Crossroads* (United Nations publication, Sales No. E.03.II.H.3).

- (a) Helped achieve specific policy outcomes (stakeholders could share information and ideas and contribute to specific policy outcomes, such as educational or training programmes, information sharing in the health sector, patient care);
- (b) Could contribute to economic policy objectives (reduction of corruption, increased openness and trust in government, reduced government spending);
- (c) Could be a major contributor to reforms; and
- (d) Helped trust-building between governments and citizens.

However, the challenges faced by e-government could be summed up as information infrastructure, efficiency, quality of service, citizen participation, governance and public administration.

It was not easy to define e-government because of its multidimensional aspects. Many organizations such as the World Bank, ADB and the OECD had attempted to define it and there were many different approaches. Some referred to the functions of e-government by underlying the governance aspects (“functional” definition), others presented e-government through its different processes (“descriptive” definition), a few propositions tried to capture its essence (“conceptual” definition), others attempted to define e-government by reference to e-commerce (definition by reference) and still others combined all of those elements together (“complex” definition). The main concept behind those definitions, however, was that e-government was more about “government” than about “e”.

Identifying its legal aspects, therefore, required an understanding of “Government”. Government could be defined as a series of acts of authoritative and administrative nature performed by the State, State-entities or administrations and which were interrelated with other administrations and affected a citizen’s life. Government was also about governance.³ It was the process by which power was exercised or shared by a public authority in a country.

E-government made it possible to establish a more open, inclusive and productive public sector, in line with good governance. In the sense of e-government, good governance could be achieved by the proper combination of information and communication technologies, organizational innovation and

³ European Union, *European Governance: A White Paper*, <http://europa.eu.int/comm/governance/index_en.htm>

improved skills.⁴ To that end, many legal obstacles needed to be overcome. The three main categories of legal issues were e-government legal validity, e-government trust and confidence, and remedies available in e-government.

E-government implied dematerialization by electronic medium, open network communication and migration of paper-based documents to electronic documents in government activities. Examples of legal validity issues were law enforcement and the establishment of rights and titles. The first step in the process was the adoption of laws recognizing the legal validity of e-government acts. ASEAN countries such as, in order of interest, Singapore, Thailand, Brunei Darussalam, Malaysia and the Philippines resolved the problem of the legal validity of e-government acts in their current e-commerce or e-transaction acts. There was a similarity in the drafting of the different provisions between the countries.

It was not enough to declare the legal validity of e-government acts. Trust and public service must be secured in providing public services. Those requirements consisted of protection of personal data, authentication, identity management, privacy and data protection, network and information security and the fight against cybercrime. Most of those issues were already covered in provisions made to current laws and regulations in Asia and the Pacific.

International and regional conventions on human rights as well as national constitutions placed an obligation to Governments to their citizens, access to State justice and to effective remedies. There were many initiatives worldwide to set up online dispute resolution mechanisms, but the decisions might not be enforceable like a judgment or binding like an arbitral award. In spite of provisions on the legal validity of e-government acts, no current e-commerce laws provided for an “e-State justice scheme”. That was why adjudicative as well as non-adjudicative systems needed to be made available.

Mr. Amoussou-Guenou presented the French experience in implementing e-government as a case study, to illustrate the achievement of the European Union Member States according to the European Regional Strategies and Plan of Action. According to the latest global survey conducted by the United Nations,⁵ France was ranked seventh among e-administration effective countries worldwide. In the previous e-readiness survey (2003), France

⁴ European Union, Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions: The Role of eGovernment for Europe's Future, <http://europa.eu.int/information_society/eeurope/2005/doc/all_about_egov_communication_en.pdf>.

⁵ World Public Sector Report 2003: E-government at the Crossroads (United Nations publication, Sales No. E.03.II.H.3); C. Guillemin, “E-administration: la France au septième rang mondial selon l'ONU”, ZDNet France, 5 November 2003, <<http://www.zdnet.fr/actualites/internet/0,39020774,39128877,00.htm>>.

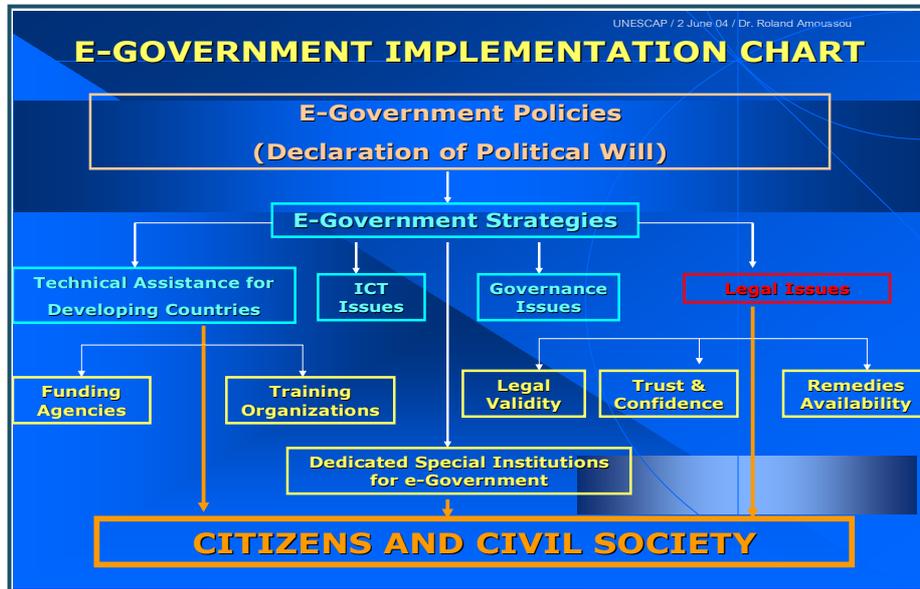


Figure 12. E-government implementation chart

was ranked at 19.⁶ France’s successful implementation of e-government was a good example of compliance by an individual country with a regional political initiative supported by a visionary plan of action. The French legal framework for e-administration was both general and specific, and monitored and managed by dedicated administrative bodies. The experience of the French he said, showed, that the most important lesson learned was that in addition to a strong political will, the legal and regulatory frameworks as well as dedicated institutions were necessary elements for a successful e-government strategy.

There was an international consensus that e-government had become an important challenge for the information society. According to numerous studies, surveys and research, e-government offered potential solutions to leaders to better assume their responsibilities by providing efficiency, quality of services, citizen participation, good governance and enhanced public administration. The most important lesson learned was that in addition to a strong political will, the legal and regulatory frameworks as well as dedicated institutions were necessary elements for a successful e-government strategy. The implementation chart (figure 12) provides an overview of the different key aspects of implementing e-government.

⁶ See, Economist Intelligence Unit, “The 2003 e-readiness ranking”, written in cooperation with IBM ; also, Darrel M. West, “Global E-Government, 2003, Center for Public Policy, Brown University, Providence, Rhode Island, <<http://www.insidepolitics.org/egovt03int.html>>.

K. Measuring the success of e-government

Three background papers were presented during the session, the purpose of which was to facilitate discussions among participants. The first ESCAP paper examined the various ways of measuring e-government performance mirroring those used for traditional public programmes. The second ESCAP paper reviewed the status, harmonization proposals and national good practices of measuring e-Government success from the point of view of national statistical systems. The final paper by an Economic Affairs Officer from the United Nations Department of Economic and Social Affairs presented the United Nations *Global e-Government Survey 2003*.

Food for thought on measuring e-government performance

An Economic Affairs Officer of ESCAP said measurement issues were closely tied to marketing e-government success. He explored the commonalities and possible differences between e-government and traditional public programmes, in terms of their performance measurement aspects.

In particular, a case was made for the use of financial and related metrics for quantitatively assessing e-government programmes and projects. While those metrics were routinely used by most Governments and the private sector as objective tools to prioritize *traditional* programmes and projects, e.g., for infrastructure projects, they were rarely used by governments in Asia and the Pacific for performance measurement of e-government.

He stated that through the measurement of e-government, an indispensable management tool was provided, especially for resource allocation decisions and to communicate results. In addition it would allow Governments to identify constraints and barriers and also have a prerequisite for constituent-centric e-government.

E-government could be measured based on a hierarchical or logical framework or by process or attribute. Issues such as interoperability (national, international) and privacy also needed to be considered when measuring e-government. Some methods discussed were:

- Financial metrics (“value”)
- Risk measurement of the Institute for Development Policy and Management’s (IDPM) eGov4Dev study
- National Office of the Information Economy (NOIE)⁷ Australia benefit/risk

⁷ As of 2004 the name has been changed to Australian Government Information Management Office (AGIMO).

- Internal Change Management

Data to measure e-government could be collected through traditional methods such as:

- Random telephone surveys
- Cost-benefit analysis
- Basic data gathering
- Web-based pop-up or clickable ‘opt-in’ surveys
- e-government specific web tracking

The representative of ESCAP made the following recommendations on measuring e-government performance:

1. *Constituent-centric, knowledge management*: implement a user and constituent-centric measurement system, in terms of objective, workflows and the underlying ICT architecture, making full use of modern knowledge management and expertise location management processes and technologies.
2. *Financial metrics*: include financial metrics such as cost-benefit, Return on Investment (ROI), for e-government performance measurement, for improved decision-making and communication of programme and project priorities.
3. *Privacy*: allow sufficient time and resources for a public debate on privacy and security policies for all e-government measurement activities.
4. *Mass-customization*: track the degree to which personalized services are provided to the individual citizen.
5. *Compulsory performance standards*: measurable performance standards need to be compulsory for all e-government programmes to ensure accountability.
6. *Reach, inclusion*: include performance standards that measure the impact of e-government initiatives on government operations as well as on citizens, including measures of user coverage and inclusion.
7. *Risk*: integrate risk assessments into the performance measurement and planning process.
8. *Interoperability*: include and monitor measures of the interoperability (G2G) of processes and tools.

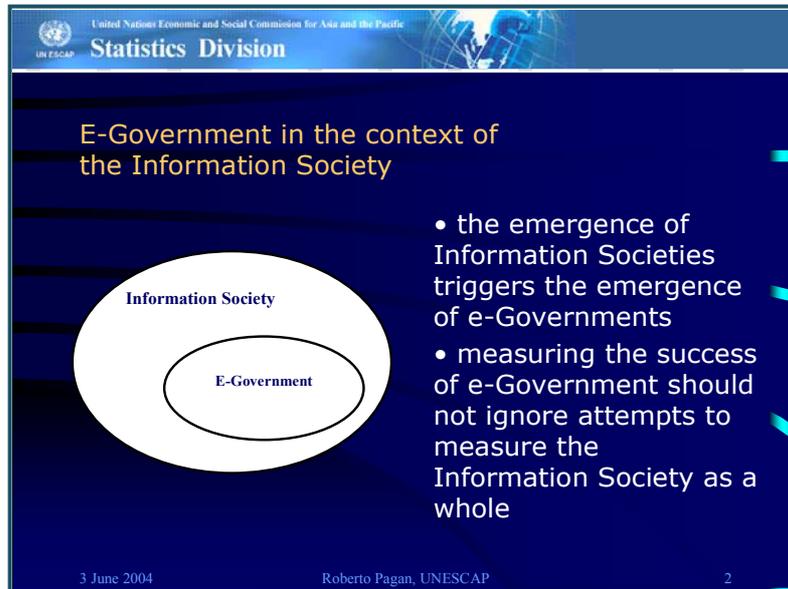


Figure 13. E-government in the context of the information society

9. *Technology-neutral, open-source tools*: metrics and processes to be preferably technology-neutral.
10. Ensure maximum flexibility, adaptability and full coverage of alternative communication channels.
11. Use open-source software and tools, particularly for knowledge management.

Experiences and trends in official and less official statistics

The presentation by a Statistician of the Statistics Division of ESCAP reviewed significant experiences in measuring the “success” of e-Government. He said the development of e-government should be seen in the context of the information society as a whole (figure 13). Measuring the success of e-government was a topic that had not yet received adequate attention by policy-makers, researchers, practitioners, statisticians and other stakeholders. The term “e-government” itself had been defined in a variety of ways, leading to some confusion about its real meaning and the underlying concept.

He defined e-government as enhanced government interaction at all levels using ICT. Interactions included all traditional interactions of government, plus those interactions that had become possible by virtue of technology advances.

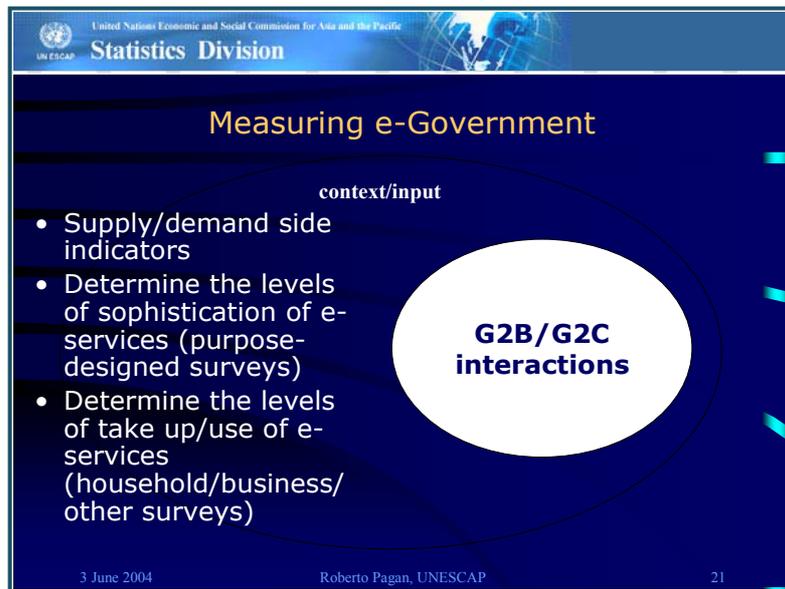


Figure 14. Measuring e-government G2B/G2C interactions

Good examples in measuring e-government included Japan, Canada, Hong Kong, China and Australia. In Hong Kong, China, in order to measure the demand side, the e-government coordinating office commissioned an opinion survey to obtain users feedback on the design of government web sites and the provision of e-services. In Australia, the Australian Bureau of Statistics designed surveys to measure adoption of ICT in society as a whole, but some of the questions in surveys were directed to measuring use of government online services, enabling them to measure the demand side for government. The examples all had common elements in defining terms for measuring the success of e-government. A common factor was that public administrations fashioned implementation of e-government through plans and strategies they established for themselves, by setting principles and then more measurable targets for G2G and G2C/G2B interactions (figures 14). However, there appeared to be different approaches in determining success, and thus, measuring those categories of interactions.

Success of G2G interactions could be measured in terms of *costs/benefits analysis*. Such analysis required an initial benchmarking of all costs of doing business in the traditional way, in addition to estimating costs related to transforming the way business was done. The convenience of implementing new technologies was then measured through a comparison of traditional business costs and additional costs incurred by conducting business in the new

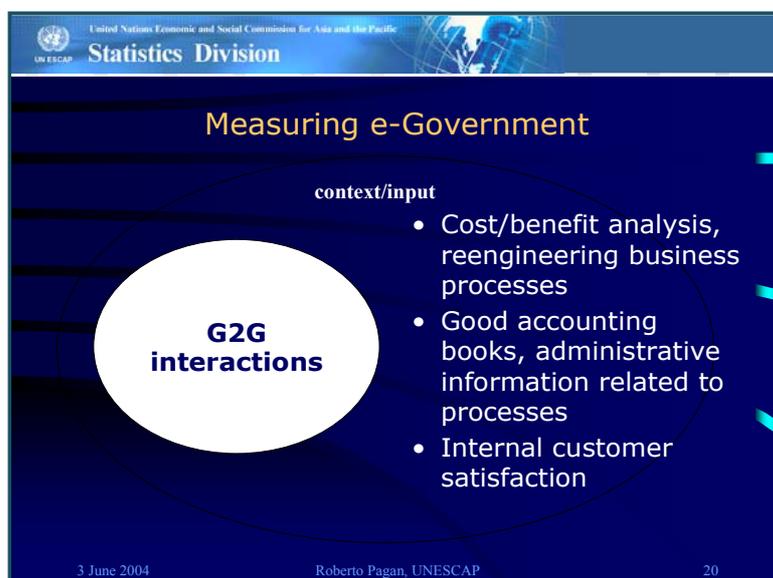


Figure 15. Measuring e-government G2G interaction

way. The level of satisfaction reported could also measure the success of G2G interactions: *internal customer satisfaction* was a key concept that might help in measuring the level of success with regard to G2G interactions (figure 15). Fully integrated transactions measured the *supply side* of e-government (provision of electronic public services): plans and strategies were identified and lists compiled of all services to be provided to the public in electronic format and availability and what degree of sophistication and interactivity was reported. A number of data capture techniques such as opinion surveys or ICT-use surveys also provided useful insights into the success of e-government G2C/G2B interactions from the *demand side*. Further, some *context or input indicators*, such as the number of skilled staff in the public administration, might help in providing a quantitative description of the institutional context where e-government developed. Generally, the periodicity of data collection was annual. It was recommended that countries that had not yet started programmes for measuring e-government should do so.

The United Nations Global e-Government Survey 2003

The final presentation by an Economic Affairs Officer, of the United Nations Department of Economic and Social Affairs, explained why the United Nations *Global e-Government Survey 2003* was conducted and reported on its results. She said ICT and e-government measurement was required to:

- Track national progress
- Identify disparities in access to ICT
- Move towards an inclusive information society
- International comparison

The survey was primarily issues-based and provided a measure of e-government initiatives within a long-term development setting. The conceptual framework of the Survey stemmed from the Millennium Development Goals in which there was a specific recommendation that ICT benefits be available to all. Therefore, the Survey followed the Goals, in particular those that referred to information technology.

The survey focused on the issue of how *willing* and *ready* were Governments to employ the vast opportunities offered by e-government to improve the access and quality of basic economic and social services to the people and involve them in public policy-making via e-participation. Within that framework, the Survey contributed to the development efforts of the member States by focusing on the question: is e-government contributing to the socio-economic uplift of the people? The Survey provided a benchmark to gauge member States' comparative state of e-government readiness. The objectives of the Survey were to provide an appraisal of the use of e-government *as a tool* in the delivery of social services to the consumer and to provide a comparative assessment of the willingness and ability of governments to involve citizens in e-participation.

The *Global e-Government Survey 2003* presented a comparative ranking of the countries of the world according to two primary indicators, (a) the state of e-readiness and (b) the extent of e-participation worldwide. The 2003 Survey showed that Governments had made rapid progress worldwide in embracing ICT technologies for e-government in the past years. In 2001, the Survey listed 143 member States as using the Internet in some capacity. By 2003, 91 per cent had a web site presence. According to the Survey's e-Government Readiness Index, North America (0.867) and Europe (0.558) led, followed by South and Central America (0.442), South and Eastern Asia (0.437), Western Asia (0.410), the Caribbean (0.401) and Oceania (0.351). South Central Asia (0.292) and Africa (0.241) had the lowest average e-government readiness reflecting a low telecommunication index and a relatively low human capital index. The United States (0.927) was the world leader in e-global readiness. Among the developing countries, Singapore (0.746) led, followed by the Republic of Korea (0.744), Estonia (0.697) and Chile (0.671).

The Survey concluded that there were wide disparities between the "e-haves" and "e-have-nots". There was no standard formula for effective e-government. However, the basic message of the Survey was that despite chal-

allenges, e-government as a tool, if applied correctly, held the promise of delivering, where many other innovative approaches had not in the past. However, it required a revisitation of global and national frameworks that presently guided the political, economic, social and technological strategies underpinning e-government programmes worldwide.

During the discussion that followed, the importance of allowing countries to develop their own measures of e-readiness was emphasized. Lessons and experiences of developed countries were not comparable to those of developing countries and developing countries should not be expected to achieve the same level of optimal achievement on e-government. What was most important was willingness and ability.

The analysis of national level web sites used as an indicator of e-readiness was also questioned as it was not considered to fully represent e-government activities. There were a number of reasons, including that businesses did not interact with national level web sites. Further, national level web sites only represented a very small percentage of web traffic, about 30 per cent, and many interactions were between businesses and intermediaries rather than between government and businesses. She said the Survey methodology did reach deeper than the national level, but agreed that the Survey had not focused on business delivery of services, and needed to also provide information on sectoral level interactions. She explained that the Survey had not focused exclusively on business interactions as other existing surveys did so. The Survey was designed to focus on a basic needs approach: were citizen getting education, health, finance, employment and social welfare that were included in the Millennium Development Goals. These were considered to be the basic needs for information from Governments.

It was also suggested that measuring e-government performance should be broadened from e-readiness to also include e-maturity, that is, how to measure the outcome of e-government performance. Further, it was suggested that the Survey should be divided between developing and developed countries, with different methodology and criteria developed to make a fairer comparison as that might help to encourage countries in developing their e-government projects more effectively. Development of a regional e-government performance measurement system suitable for developing countries was suggested. That was supported by the meeting, with agreement that it would be useful to bifurcate some aspects of the measurements.

The common message from the participants was that there was a need to look at all the different aspects including impact. Difference in government structure was very much linked to the question of how countries with insufficient resources could set up e-government initiatives. Looking at the impact level could help to answer that question by providing guidance on how to set up partnerships, how to guard against too high expectations, and even estab-



Figure 16. Microsoft and government working together

lishing possible arrangements to share resources both at the national and regional levels.

L. ICT policies and strategies

Mr. Peter Moore, Regional General Manager, Public Sector and Chief Technology Officer, Microsoft Asia Pacific, provided an overview of the main business, technology and policy issues in e-government. Mr. Moore said that connectivity was the key to successful e-government implementation. Other concerns of government included digital inclusiveness, security and privacy, all of which were associated with connectivity, with a focus on local economic development. Access and education were important to meet those goals, while a policy such as digital literacy for all would create an educated, competitive workforce. The overall goal should be to improve the quality of life for all people.

In education, the focus should be on more than just providing access to technology. It was also about ensuring that there was a place for people to learn, teachers had the skills and individuals had the means to achieve their potential. An enabling environment to create a technology economy included hardware, software and services (figure 16). The role of Microsoft was in the provision of people, training tools, programmes, worldwide reach and research. The role of government was to provide leadership, a research base, an

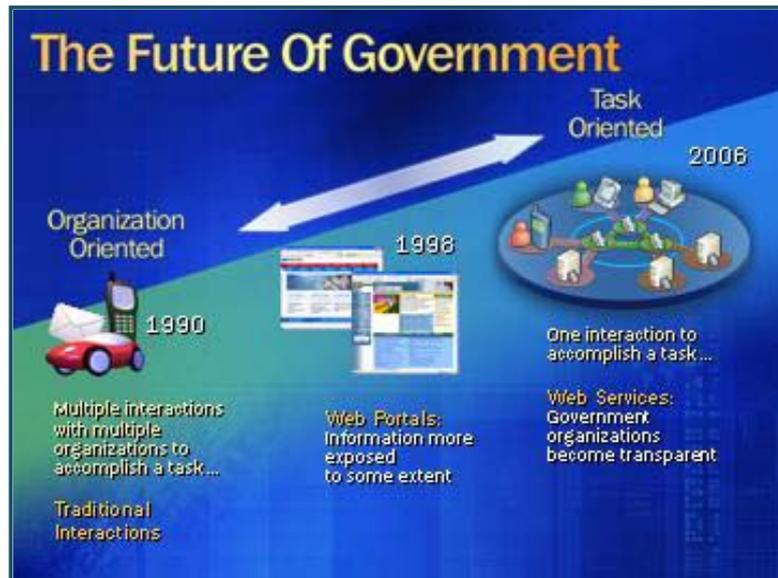


Figure 17. Future of government

education system, an appropriate business/regulatory climate to foster innovation and trade sharing of ideas across borders.

Mr. Moore described government as a series of disconnected islands and said that was one of the challenges in leveraging technology in government. At each layer of government, different tasks were assigned, but the responsibility to talk to other layers of governments was often not recognized. If government were to leverage IT, it had to reach from national to local levels of government and across the islands. In connecting Governments and constituents, recognizing the needs of constituents was very important. However, in developing countries in Asia and the Pacific, alternative and innovative solutions were needed. For example, was it necessary to provide a government portal when there were more mobile telephones than land lines in a country? Perhaps Governments needed to think about messaging and texting and other alternatives for community access. It was important hence, to look at constituents and how they accessed services.

In the late 1990s, the impetus was to create a government portal, but in many cases the portals were only one-way and limited to pushing information out without allowing interaction. The future of e-government should be task-oriented, with web services where government agencies became transparent to citizens and solved the problem of the complexity of the infrastructure themselves, rather than leaving it to citizens. Examples of good practice in that area included the Australian business register system, which provided one place for government (figure 17).

Mr. Moore noted that when planning changed, finding matching technology to that change was easy. However, finding the right people and skills was the challenge. He encouraged participants to think about taking smaller steps, rather than formulating one all-encompassing plan that had a high risk of failure. Technology was an enabler, but not the answer. For example, if people had no landlines or electricity, creating a strategy on how citizens could access government through a web site was not going to work. Governments should focus on meeting citizens' needs. He emphasized that sustainability was also important. Too often projects were undertaken without thinking about sustainability. That was where most of government's resources should be. Governments needed to learn how to market their online capacities and services. Activities had to be end-to-end to realize cost savings, and service improvements had to be delivered. Mr. Moore said that it was "80/20" – 20 per cent of inputs produced 80 per cent of results. That 20 per cent included:

- National vision and leadership
- Enabling policy
- Clear goals and implementation plans
- Partnership and collaboration
- Peopleware – citizen-centric mindset
- Localization – breach access barriers

Microsoft's vision was to enable people and businesses throughout the world to realize their full potential. Specifically, Microsoft aimed to deliver more value through innovation, trustworthiness, partnership and delivering choice, and integrated innovation and customer responsiveness. Mr. Moore said there were lessons for government as well. Further, more time was needed to think about education and lifelong learning. An educated workforce and citizenry were needed if e-government was to work. A trustworthy system was needed. Security, privacy, reliability and business intelligence were needed for trustworthy computing. A responsible leadership on public policy issues was required and an openness of the system was also needed.

He concluded by emphasizing that vision drove success, Governments must adapt, localize and leapfrog, and that change management was key.

M. Conducive environments for e-government

The presentation by Mr. Johnathan Kushner, Law and Corporate Affairs Department, Microsoft Asia Limited, provided an understanding of the policy issues which had an impact on e-government and explored the optimal environment for e-government.

Mr. Kushner said there were a number of surveys that had assessed the environments and readiness for e-government. Two of them that received a great deal of attention were the Networked Readiness Index of the World Economic Forum (WEF) which measured the readiness of preparation of nations and communities to participate in and benefit from ICT development, and the United Nations survey discussed in the previous presentation. The two surveys provided a snapshot of where Governments were in terms of readiness. The WEF Survey provided an Environment Component Index (ECI) and also had sub-indexes for government readiness and usage. In the ECI, the United States topped the list, with Singapore and Taiwan Province of China in the top ten. In terms of government readiness, Singapore, Malaysia and the Republic of Korea of the ESCAP region were listed in the top ten, ranking first, sixth and ninth respectively, with similar results for government usage. Those ratings demonstrated that some Asian economies had made great progress in preparing for e-government.

Mr. Kushner said that conducive environments for e-government could be broken down into the following:

- Investment environment
- Social environment
- Business/tax environment
- Technology and policy environment
- Security and online safety
- Network security
- E-commerce
- Intellectual property
- Encryption, authentication and contracting
- Protection of personal information/privacy

Hand-in-hand with the above categories, interoperability was a key component of e-government initiatives. It enabled important social and policy solutions such as accessibility, user identification, privacy and security. Further, it promoted choice, competition and innovation as well as access to information, while reducing costs and addressing compatibility issues. It also increased efficiency, flexibility and value of the system. Some of the challenges faced were multiple technology platforms, productivity and efficiency demands, information access, agency integration, digital divide and security.

Mr. Kushner encouraged Governments to promote the use and voluntary development of open standards. Those, he said, allowed Governments to

take advantage of innovations and the diversity of choice. Open standards supported in all types of software were necessary for Governments wanting interoperable products and services and multiple sources for products and services. He also stressed the difference between open source and open standards; open source did not necessarily embrace open standards more than any other type of software. He stated that if Governments demanded interoperable products and services and multiple sources for products and services, then open standards needed to be supported in all types of software.

The defining characteristics of open standards were as follows:

- Transparent development and maintenance processes
- Publicly available specifications
- Objective criteria for conformance and testing
- Documented rules of membership
- Reasonable and non-discriminatory licensing

Mr. Kushner also emphasized the importance of an enabling environment to encourage private-public partnerships at multiple levels, including policy, technology and society. An example given of successful partnership was in the area of network security. Network security facilitated dialogue among industry leaders and Governments to increase cross-border cooperation to address computer crime. Public-private partnerships were also evident in the areas of e-commerce and intellectual property.

Open source and standards featured prominently in the discussion following the presentation. Mr. Kushner said that Governments should consider all options available to them, whether open source or commercial software, and select software based on its merits. Open source software would be appropriate in some cases, whereas commercial software would be more appropriate in others. For emerging countries focused on building their own IT industry, intellectual property rights protection was very important. Open source and commercial software had a variety of licensing models that should be studied and understood as they had an impact on the ability to build a vibrant business or software industry.

During the plenary, training issues were also discussed. A question was raised on whether it was possible to develop a standardized curriculum to reduce the amount of time needed to train national or local trainers on new technology. Mr. Kushner said the concept of training and curriculum was very broad and there was a need to be specific about the desired result. He agreed that in terms of skills, that could be an expensive process. He said Microsoft was currently designing an open application sharing portal which could be

used and hosted by Governments and across borders. The facility would enable Governments and international organizations to share and learn from their collective knowledge base.

N. Perspectives on e-government and streamlining IT system procurement

Mr. Shuhei Kishimoto of Toyota Motor Corporation gave a presentation on Japan's experience in implementing e-government. He said, according to the 5th Annual Global e-Government Study 2004, Japan was 11th among the 22 developed countries in terms of advancement of e-government. Japan's ranking of 17th in 2002 and 15th in 2003 suggested that its progress in establishing e-government had been gradual. One of the key steps in the process had been the adoption in 2003 of an e-Government Construction Plan which documented strategic priorities and action plans until the end of 2005. The plan was built on fundamental principles of high performing e-government programmes: citizen-oriented services, simple and cost-effective government, administration reform to reflect digitization and building an environment that made e-government a reality. However, Mr. Kishimoto said, too much emphasis had been placed on the computerization of administrative procedures without a consensus on the target or mission for developing e-government.

Until the mid-1990s, acquisition of IT systems by the Government had centred on the computerization of formulaic activities such as statistical work or data-processing work. Since the Basic Plan for Promotion of Computerization of Government Affairs was initiated in 1994, the IT system had been introduced widely in administrative fields. Further, since the initiation of the Millennium Project in 2000, investment had increasingly been aimed at building up e-government. The scale of e-government investment was expected to continue to increase. Therefore, it was essential to ensure that the budget for such investments was used efficiently, without undue risk to public funds.

There were some challenges yet to be met, however, such as the impact of change on the bureaucratic structure and the lack of experts to support the acquisition of IT systems in the government sector. Concern as a result of those institutional challenges had resulted in the formation of the Interagency Liaison Conference Concerning the Government Procurement on IT Systems in 2002. The Liaison Conference announced measurements to be taken to improve government procurement, the substance of which was reflected in the national budget for fiscal year 2002. Measures included developing a method to evaluate the value based on the life cycle cost corresponding to the number of years required for an actual project to be implemented. In addition, the method to determine the successful bidder by comprehensive evaluation, which was the cause of extremely low contract prices, was reviewed. Further,

it was decided to make information on the result of a bid public by the bidder, the quoted price, etc. after a contract was awarded. Despite those reforms, however, there were still many unsolved issues. To address that, Mr. Kishimoto said the following were needed:

- Changed awareness of IT in the public sector
- Establishment of a CIO (Chief Information Officer) position
- Improved capabilities of staff and in making use of external experts
- Transparent customary practice on contracts
- Project management
- Disclosure of information

The future challenges were to integrate systems and enhance the core competencies of the Government by making use of IT. As was reported at the opening of the presentation, in Japan there was no consensus among the parties concerned on the mission to strengthen e-government capacity. Moreover, in the field where e-government related systems had been developed, such as the certificate authority, e-application and e-bidding, the system had been developed independently by respective ministries and agencies. In the future, activities and systems that crossed ministries and agencies needed to be integrated. That would require the current process to be streamlined and simplified, which required vision. Integration of business operations and systems had to be carried out so as to build a customer-oriented administrative process.

In addition, it was necessary to create a concept of e-government based on enterprise architecture (a strategy to integrate/rationalize the business operations/systems), which was aligned with the target and the mission of the organization.

The importance of visionary leadership was remarked upon during the plenary, with agreement that it was essential. A second important component of e-government development was up-to-date technology. It was noted that the Government of Japan's computer systems had previously been very advanced, but poor management decisions resulting in expensive leasing arrangements and outsourcing of technology and support had resulted in those systems failing to keep pace. Politicians and their advisers had not recognized the importance of introducing the open network system. The outsourcing situation was good but expensive, because of the monopoly system, and that had had an impact on the IT systems of government offices in Japan.



PART TWO

**Summary of
Country Reports**



SUMMARY OF COUNTRY REPORTS

A. Bangladesh

In order to incorporate ICT in governance, Bangladesh created a national ICT task force headed by the Prime Minister and members from the government, industry and academia. The Government's National ICT Policy aims to build an ICT-driven nation and a knowledge-based society by the year 2006. A country-wide ICT infrastructure will be developed to ensure access to information for all citizens to facilitate their empowerment and enhance democratic values and norms for sustainable economic development by using the infrastructure for human resources development, governance, e-commerce, banking, public utility services and other online ICT-enabled services. The realization of e-government is heavily dependent on cost-effective and widespread ICT infrastructure without which online services will not be able to reach the desired targets. Bangladesh has begun to prepare for gradual proliferation of e-government services throughout the country. For example, since 1998 it has accorded duty-free status to the import of computers, software and accessories to encourage the ICT industry through software development and the launching of a new data processing industry. The Ministry of Science and ICT of Bangladesh has not yet been able to achieve the goals set out for e-government in the National ICT Policy in 2002. Furthermore, strategic ICT planning skills are in short supply within the Government. Young graduates from computer science and engineering are not willing to join the government service because of the low salary structure and other reasons. Moreover, the SICT study listed the constraints for e-government, including lack of adequate training (69 per cent), hardware (59 per cent), telecom facilities (37 per cent), ICT awareness (22 per cent) and legal infrastructure (22 per cent).

B. China

In the past two decades, China's overall economic strength has improved dramatically in terms of GDP volume. For nearly 20 years, the economy has grown at about 10 per cent per year. Despite such remarkable progress, China is still in the midst of two major transformations. The first transformation is changing the nation from an overwhelmingly agricultural economy to an industrial economy and thus from a rural society to an urban society. Second, China is moving from a highly central-planned economy to a well-operated market economy. In this context, the government system is faced with some challenges, the key challenge being how to transform the

Government so that it will be more effective, efficient and transparent. The use of ICT in the governance system can help to facilitate these transformations. The vision of e-government in China is, “enabling governmental function transformation by informationization”. Some encouraging gains have been made in the area of e-government in China, for example its number of Internet users is second only to the United States and all central and local government portals have their own web pages. However, it is necessary to formulate a new e-government strategy in order to achieve overall economic and social goals in the next national development planning stage. The Government has begun to draft a new development plan, (its 11th Five-year Economic and Social Development Plan) and a long-term development strategy up to 2020 and beyond, and opportunities exist in these processes for further incorporating e-government into the development process.

C. Fiji

The Asian Development Bank (ADB) is providing Technical Assistance (TA) to support the Government of Fiji to develop and implement a national ICT strategy focusing on e-Government. Within the national context, the overall framework of the ICT strategy is defined by the Government’s Strategic Development Plan 2003-2005. One of the strategic priorities expressed in the Plan (section 7.9) is “universal access to internationally competitive ICT services”. The definition of a national ICT strategy is the responsibility of the Information Technology Advisory Council, which comprised representatives from government institutions, academia, and the private sector. It formulated the latest draft National ICT Strategy Plan, which was released in September 2003, and outlined three main strategic outcomes: government online (combining e-government and national information infrastructure); community e-empowered; and business e-enabled. e-government is still in its infancy in Fiji and is seeking to emulate international best practices whilst remaining geared towards the particular needs of the country. The ADB TA, with its findings and outcomes, is expected to provide the direction and thrust for this. The expectations of the public, as voiced through private sector leaders regarding Government and ICT development, are to promote its pervasiveness, geographic dispersion and, importantly, efficiency and affordability. The issue of affordability is a critical one as the Internet and international access services are controlled by monopolies, which is restricting its growth. Comparing Fiji’s situation with various international benchmarks, the ADB TA found it at the lowest “plateau” of development – that of having an “online presence”. By 2005, the country wishes to propel itself up two levels, to achieve “basic capability” followed by “service availability” online.

D. India (State of Uttaranchal)

E-governance was a major initiative for the government of Uttaranchal, India and it was committed to the programme management approach to implement e-governance. The deployment of e-government on such a large scale, was envisaged by the Government required trained human resources. Thus, the Government launched a human resources development programme to build capacities commensurate with its needs. The government of Uttaranchal also wants universal computer literacy. To achieve this, it will establish computer labs in all 1,623 government-aided Inter-colleges and high schools in the state. Thus far, hardware, including Pentium 4 machines, has already been installed in 1,139 colleges and 9,000 teachers and over 100,000 students have been trained in basic computer skills. A Wide Area Network is proposed to be established to enhance connectivity across the state. Given the difficult terrain of the state, the network would be a hybrid, primarily based on VSAT technology supported by Optical Fiber Cable and Wireless Local Loop. To ensure that all citizens have access to government offices and relevant information, the establishment of community information centres is also proposed in villages with a population of over 1,000; a pilot project is already under way.

One of the major challenges in implementing e-governance was the identity management of citizens to ensure the legality of electronic transactions. The Government was working on a smart card based common multipurpose citizen identification system, but was constrained due to lack of locally available expertise and coordination. Another major challenge was that of “expectation management”. That IT is not a solution to all problems is a truism; at best it can be used as a tool to improve the efficiency in the delivery of services to the citizens. Lastly, the inadequate connectivity infrastructure, particularly in the rural and topographically difficult areas, presents a difficult choice for the Government. Should it invest in infrastructure and accept the consequence of a longer gestation period for delivery of projects, or should it implement e-Government initiatives in areas that were comparatively better equipped in terms of connectivity infrastructure? This would demonstrate the efficacy of e-governance, however it would also largely address the needs of only the more affluent sections, thereby creating another divide in the society.

E. Indonesia

The Indonesian Ministry of Communication and Information has conducted a study on the readiness of e-government implementation in Indonesia. The results revealed that much needed to be done to enhance Indonesia's e-

readiness. For example, telecommunication infrastructure was an important utility where the community could access e-government services. However, currently only 4 per cent of Indonesians have a fixed telephone line and mobile phones are included, it still only reached nine per cent. Computer penetration in Indonesia is also very low. At only 1.7 per cent, it is the lowest in the Asian and Pacific region. In total, there are only 1 million Internet subscribers or 0.5 per cent of the population. Further, the implementation of e-government did not yet have legislation regulating e-commerce or e-government. A law on information and electronic transactions is currently being drafted and a special task force involving key ministries have been set up to pursue e-government. To overcome its low level of e-readiness, strong leadership from the Government was required. Presidential Decree No. 3 (2003) focusing on national policies and strategies of e-government development was a move in that direction. However, solutions for financing the setting up of IT infrastructure needed to be found before implementing e-government comprehensively. Through e-government implementation, Indonesia seeks to increase its role and competitiveness in the international economy.

F. Kazakhstan

The construction of a national information infrastructure is one of the development goals of Kazakhstan. Such infrastructure would enable the introduction of new information technologies in all spheres of governing and the economy. Development of an information sphere in Kazakhstan arose within the framework of the State Programme on Formation and Development of the National Information Infrastructure. The programme aimed to use innovation technologies and digital communications in economic, governance, cultural and social spheres. A number of State initiatives have already been undertaken, including the drafting of new laws for electronic documentation and signing; development and piloting of a uniform system of electronic document circulation between the state bodies; development of the Government of Kazakhstan web site; and the introduction of an electronic archives system. Kazakhstan is in the process of designing and introducing a national master plan on e-government implementation. Working groups have been formed to define and plan the national strategy and conceptual approaches to promote this project.

G. Mongolia

The Government of Mongolia has made considerable advancements in ICT by focusing on the development of information infrastructure and implementation of other programmes and projects with foreign credit and assistance.

All provinces are connected to the capital city by digital technology and high-speed fiber-optic transmission. Since 1994, Mongolia has had an international Internet network gateway, which has resulted in the rapid increase of Internet and wireless phone users. Every state agency and all city and provincial administrations have their own web sites. The Government and Parliament of Mongolia also included chapters on e-government in ICT development policy documents and, in 2003, a national project team was created to conduct research work related to building e-government. Enabling the most effective use of state management information resources and the least expensive, yet highest quality state service to citizens, based on their demands, are the main strategy of e-government. However, preparing the legal environment for e-government has not yet been fully completed. Several laws are being drafted with the Prime Minister's initiation and support. In addition to preparing the legal environment, the training of state official employees in IT is also needed. Challenges expected with the implementation of e-government in Mongolia include legalization of the term "e-government", which has not yet been done, and raising public awareness of the term. Further, state services and state officers are still using traditional methods for processing data, and the source of funding for IT implementation is unknown.

H. Nepal

Recent advances in ICT offer new opportunities for Nepal to achieve and sustain economic and social development. Ever-evolving telecommunication and computing technologies are converging to provide unprecedented opportunities for developing education, health, agriculture, tourism, trade and various other sectors. Presently, the IT sector provides Nepal with the potential to overcome its geographical and economic challenges. This opportunity has been identified by the Government, which formulated the IT Policy 2000, the vision of which was "to place Nepal on the global map of information technology within the next five years." Private banks and financial institutions have been the leaders in implementing ICT. They are also the largest consumers of Nepalese ICT products such as software and services, contributing to the development of an indigenous industry. Computerization in manufacturing and other sectors range from 100 per cent in multinational companies to 10 per cent in state managed enterprises. Content service providers have emerged on the Internet to provide information in the shape of brochure-ware. Awareness of ICT has been growing rapidly, especially in urban areas. In addition, a sizeable human resource of different standards and base has been developed. However, the deployment of ICT in Nepal remains uneven, limited to selected urban areas, connectivity costs remains high for the majority of the population and other requisite infrastructure is not in place. Against this backdrop, focused government initiatives aimed at promoting e-governance have started.

Development of a roadmap to provide direction and substance to initiatives to augment effectiveness and efficiency of government at all levels is now needed. Stable government, consistency in policy, and leadership and security are the biggest challenges for the development of ICT in Nepal. In addition to these challenges, mindset change is the key element.

I. Pakistan

In 2002, the Electronic Government Directorate (EGD) was established. The EGD is a dedicated cell of the Ministry of Information Technology. It was established to plan, prepare and implement e-government projects; provide technical advice and guidelines for implementation of e-government at the federal, provincial and district levels; and provide standards for software and infrastructure in the field of e-government. The Government's goal is to use ICT to facilitate more convenient government services, allow greater public access to information and make government more accountable to citizens. E-government initiatives include the launching of a Government of Pakistan citizen-information portal and web sites for all 35 ministries; and IT skills programme for government functionaries by establishment of IT labs at 12 academies of the civil services; and pilot projects for IT infrastructure within the Federal Government by establishment of LANs; and requisite IT infrastructure at Prime Minister's Secretariat and eight ministries. However, a change from traditional office practices to an electronic office environment has meant that the Government experienced some challenges in business process reengineering, including limited capacity for use of ICT at federal, provincial and district levels, and resistance to change from a traditional office environment to an electronic office culture. To address the issue of staff capacity, training programmes are being introduced and EGD is in the process of hiring IT experts who will be deployed in various provinces. Standardization procedures of procurement and outsourcing procedures at government departments are also being developed. Plans for the next three years include automating citizen-centric services; completion of IT infrastructure and electronic communications enablement through the establishment of a Federal Government Data Centre; implementation of common applications within Ministries to be housed at the secure Federal Government Data Centre; and institutional strengthening of agencies implementing e-government projects.

J. Papua New Guinea

E-government has not been implemented in Papua New Guinea. The Government WAN (GovNet) serves National Departments located only within

Port Moresby, the capital city. The network is comprised of both point-to-point copper links, and wireless spread spectrum links, leased telecom data lines and a microwave link. The main use of this network is for e-mail and limited Internet access. However, recently, technical discussions have been initiated and are ongoing between the Deputy Head of the Department of National Planning and the Government of the Republic of Korea, which proposed to assist Papua New Guinea in implementing e-government. The goals of e-government are to improve services to citizens; improve the productivity of government agencies; improve the quality of life for the disadvantaged; strengthen and maintain good governance; and broaden public participation. The foremost aim of e-government is to link all sectors within the country so as to promote effective communication among all, for a better Government. Future plans for e-government include building political support for e-government; implementing the Government of the Republic of Korea-Papua New Guinea e-government project; and finalizing the country's ICT policy which is currently in its draft stage.

K. Philippines

The number of Internet users in the Philippines increased from 1.1 million in 1999 to 1.54 million in 2000. The number of Internet users increased with the presence of more value added services (VAS) providers. With this growth, many local Internet service providers expanded their services to include not only access but also content provision and upgrading of facilities. Several laws, regulations and policies exist which spurred the further development of the ICT infrastructure, particularly the telecommunications sector. These include the Telecommunications Policy Act of 1995, the Satellite Communication Policy (Executive Order 467, s. 1998) and the Electronic Commerce Act or Republic Act 8792. The Information Technology and Electronic Commerce Council (ITECC) was formed in 2000 as the ICT policy-making body of the Government of the Philippines. It brought together government and private sector efforts in the development of ICT. One of its goals is the implementation of e-government. Based on the United Nations *World Public Sector Report 2003: e-Government at the Crossroads*, the Philippines was ranked seventh in the global web-quality index. This index indicated the degree to which the country's e-government potential was utilized, as determined by their telecommunications and human capital resources. The index also determined the level of maturity or sophistication of e-government services provided. Specifically, the Report indicated that the Philippines and others had made, "much faster and more effective progress in their e-Government programmes than some of the industrialized countries". However, despite that good result, much still needs to be done to implement e-government in the

Philippines. One challenge to this is budgetary constraints. While government spending on ICT is rising, the amount is not enough for the ICT improvements required. Further, there is a need to expand the capacity of consumers to use ICT in dealing with the Government. Although efforts are being made to strengthen the telecommunications sector, the number of telephone subscribers is still low and telephone distribution is strongly tilted towards urban centres. Another challenge is the proliferation of government ICT committees and tasks which could lead to confused and overlapping policy decisions. The Philippines future plans include: the enactment of e-government legislation; the creation of a Department of Information and Communications Technology; institutionalization of the e-government fund; pursuit of government process re-engineering initiatives; and enhancements of a fiscal incentive package to match that being offered by competing investment sites abroad.

L. Sri Lanka

The Government of Sri Lanka initiated the promotion of e-governance in 2002. The private sector had started pursuing e-commerce even earlier. At present, e-banking is very popular. All commercial banks have transformed their transactions through electronic forms. However, state-owned banks still conduct their business transactions manually. To promote and accelerate e-government in Sri Lanka, an Information and Communication Technology Agency was established in 2003, under the Information and Communication Technology Act, No. 27 of 2003. The Agency is given full autonomous status to implement an e-government programme, which is known as the e-Sri Lanka programme. The Agency is funded by the Government and managed by a Governing Council appointed by the Secretary to the Treasury. The e-Sri Lanka ICT road map was developed by ICT experts. Its vision is that, “by the Year 2007, e-Sri Lanka will be better known as the e-Sri Lanka miracle – a model achievement drawing global recognition, in the development of ICT towards the achievement of social and economic development.” Through this initiative, the Government aims to deliver public goods and services electronically. The Population Registry, issuing of passports, expansion of activities of the National Operation Room for the monitoring of development projects and electronically storing criminal records are planned as pilot activities. Development of education programmes through the Internet is also planned under the project. There are, however, some constraints and issues that requires special attention, such as the gap between urban and rural areas. More than 70 per cent of Sri Lankans currently live in rural areas and their economic structure is based on agriculture, plantation or agriculture-related products. Although telecommunications and electricity facilities have been expanded significantly in recent times, there are still areas without telecommunications or electricity

facilities. Further, cyber cafes, generally established by the private sector, are concentrated only in big cities and are provided at a cost. Although urban schools have modern electronic facilities, schools in rural areas often lack basic facilities, such as blackboards, desks and chairs. Some schools in remote areas do not have electricity or telecommunications facilities, hence school dropout rates are very high in those areas. Resource limitation is another issue, as a substantial proportion of available resources are consumed by urban centres, hence the rural sector suffers due to the lack of availability of resources. Perceptions and cultural barriers are another challenge. For this reason, the future plans for e-government in Sri Lanka place a high priority on increasing access to ICT in rural areas.

M. Uzbekistan

Uzbekistan is a post-Soviet country in transition. It achieved independence in 1991. Since that time it has made a gradual transition from a centrally planned economy to a market-oriented economy. At the end of 2003, the Government of Uzbekistan initiated a major administrative reform effort to decrease the functions of the Government in order to increase efficiency and transparency. The implementation of e-government was one of the tools to achieve this reform. ICT was declared as a main priority in the further development of Uzbekistan in 2002 by Presidential Decree. The implementation of ICT in government was identified as one of the priority directions of ICT development. The Government of Uzbekistan drafted a Programme of Introduction of Electronic Technologies into Governance for the Period of 2003-2010, which provides effective interventions related to a broad introduction of the electronic document circulation in governance, improvement of services provided to individuals and openness of government decision-making. The Government of Uzbekistan also passed a number of policies on the further development of the ICTs, for example, according to the policies, all public administration and government bodies are required to design their own active web sites, set up local computer networks and train their senior staff in ICT. Despite this, the development of the e-government is still in its initial phase. Compared to the development of e-commerce, the development of e-government is at the stage of disseminating government information, and has not yet achieved interactivity, transaction completion and delivery. Further, on average, there are approximately 300 civil servants per computer. Overall, in state agencies there are approximately 2.5 per 100 staff members with access to the Internet from their computer, 2.8 with access to the Internet from other computers and 3.2 with an e-mail address. Therefore, major challenges to e-government implementation in Uzbekistan include: the lack of access of many state agencies, and their staff, to the Internet; insufficient levels of ICT training

of managers; insufficient development of databases in government departments; and lack of clear procedures and regulations for staff supporting e-government applications. There are some positive developments, however, such as the existence of strong political commitment to e-government. Further, a State programme for ICT development and a Steering Committee are reviewing issues of ICT development.

N. Viet Nam

In October 2000, the Politburo of the Communist Party of Viet Nam issued Directive No. 58 CT/TW on Accelerating the Use and Development of Information Technology for the Cause of Industrialization and Modernization. The Directive put forth the goal of developing IT in Viet Nam to an advanced stage by 2010. IT application in Viet Nam is growing. More than 80 per cent of banking operations and 85 per cent of banking transactions are implemented electronically. More than 70 per cent of key professional units in the Finance Ministry apply IT in areas such as revenue, state property and state budget activities. About 50 per cent of enterprises use IT applications in business operations. Over ten per cent of enterprises, more than half of the government ministries and a third of the provincial governments have their own web site. IT is an official subject in all secondary schools and all of the 246 universities and colleges and 617 professional or technical secondary schools, and 1,923 secondary schools have Internet connection and use. However, the quality of training courses in general is not very high and training content on IT is, in general, not standardized.



ANNEXES



ANNEX I

WORKSHOP AGENDA

<u>Monday, 31 May 2004</u>	<i>[Conference Room A]</i>
08:30 – 09:00	Registration
09:00 – 09:30	Opening Ceremony
	Welcome Remarks by: Ms. Keiko Okaido, Deputy Executive Secretary and Officer-in-Charge, a.i. of the secretariat, UNESCAP
	Opening Remarks by: Mr. Peter McCawley, Dean, ADBI
	Election of Officers
	Group Photo Session
09:30 – 10:00	Coffee break
10:00 – 10:40	Introduction to the Workshop by Mr. Jeoung-Keun Lee, Senior Capacity Building Specialist, ADBI
	Introduction of the Participants and Resource Persons
10:40 – 12:00	Current Status and Trends of Implementing e-Government (Mr. Stephen Braim, Government Programs Executive, IBM Asia Pacific, Australia)
12:00 – 13:00	Lunch
13:00 – 14:30	Country Reports: Bangladesh, China, Fiji, India, Indonesia, Kazakhstan, Lao People's Democratic Republic, Mongolia
14:30 – 15:00	Coffee break

15:00 – 16:30 Country Reports: Myanmar, Nepal, Pakistan, Papua New Guinea, the Philippines, Sri Lanka, Thailand, Uzbekistan, Viet Nam

18:00 – 20:00 Welcome Dinner at Royal Princess Hotel

Tuesday, 1 June 2004 [*Conference Room A*]

08:30 – 10:00 Integrating Government Services
(Mr. Stephen Braim, Government Programs Executive, IBM Asia Pacific, Australia)

10:00 – 10:30 Coffee break

10:30 – 12:00 Benefits and Issues of Implementing e-Government
(Ms. Caroline Fan, Information Technology Services Department, Hong Kong, China)

12:00 – 13:00 Lunch

13:00 – 14:30 Digital Inclusion to Foster Rural Enterprise
(Mr. Madaswamy Moni, Deputy Director General, National Informatics Center, Department of Information Technology, India)

14:30 – 15:00 Coffee break

15:00 – 16:30 Factors and Procedures to be Considered in Improving e-Government
(Ms. Marie Johnson, Department of Industry, Australia)

Wednesday, 2 June 2004 [*Larn Luang Room, Royal Princess Hotel*]

08:30 – 10:00 Reinventing (Reengineering) Government
(Mr. Kuk-Hwan Jeong, Ministry of Government Administration and Home Affairs, Republic of Korea)

10:00 – 10:30 Coffee break

10:30 – 12:00 Turning Objectives into Actions
(Mr. Prasanna Meduri, Microsoft Asia Limited, Japan)

12:00 – 13:00	Lunch
13:00 – 13:45	Designing e-Government for the Poor (Mr. Madaswamy Moni, Deputy Director General, National Informatics Center, Department of Information Technology, India)
13:45 – 14:30	e-Training of Government Officials and Citizens (Mr. Kyohsuke Yoshimura, IBM Asia Pacific)
14:30 – 15:00	Coffee break
15:00 – 15:45	E-Government Implementation and Private Sector Participation (Mr. Ardaman Singh Kohli, Asia-Pacific AXALTO, Kowloon, Hong Kong, China)
15:45-16:30	Legal Aspects of e-Government (Dr. Roland Amoussou-Guenou, Regional Expert on Legal Cooperation in the ASEAN, The Embassy of France in Thailand)

Thursday, 3 June 2004 [*Conference Room A*]

08:30 – 10:00	Measuring Success of e-Government (Mr. Richard Alexander Roehrl, Economic Affairs Officer, Transport and Tourism Division, UNESCAP; Ms. Seema Hafeez, Economic Affairs Officer, Knowledge Management Branch, DPADM/DESA, United Nation, New York; Mr. Roberto Pagan, Statistics Division, UNESCAP)
10:00 – 10:30	Coffee break
10:30 – 12:00	ICT Policies and Strategies (Mr. Peter Moore, Microsoft Asia Limited)
12:00 – 13:00	Lunch
13:00 – 14:30	Conducive Environments for e-Government (Mr. Jonathan Kushner and Mr. Christopher Austin, Microsoft Asia Limited)
14:30 – 15:00	Coffee break
15:00 – 15:45	e-Government and e-Procurement (Mr. Shuhei Kishimoto, General Manager, Government & Industrial Affairs Division, Toyota Motor Corporation, Tokyo)

Friday, 4 June 2004

[Conference Room A]

08:30 – 10:00	Drafting/Presentation of Action Plans
10:00 – 10:30	Coffee break
10:30 – 12:00	Presentation of Action Plans
12:00 – 13:00	Lunch
13:00 – 14:30	Finalization of the Action Plans (Mr. Jeoung-Keun Lee, ADBI)
	Workshop Evaluation
14:30 – 15:00	Coffee break
15:00 – 16:00	Closing Ceremony
	Closing Remarks by Mr. Jeoung-Keun Lee, ADBI
	Closing Remarks by Mr. Xuan Zengpei, Chief, Information, Communication and Space Technology Division, UNESCAP
	Handing Out Certificates
	Vote of Thanks by Participants

ANNEX II

LIST OF PARTICIPANTS

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ANNEX III

PROJECT PROPOSALS

SUMMARY OF COUNTRY PROJECT PROPOSALS			
Country	Project title	Proposer	Budget (US\$ million)
Bangladesh	Comprehensive study of existing ICT facilities and formulation of sustainable planning to implement e-government	Md. Nazrul Islam, Senior Assistant Chief Ministry of Science and ICT	18.6
Fiji	E-government action plan for Fiji	Sailosi Kepa, Ministry of Finance and National Planning	2
Lao People's Democratic Republic	E-Pakxong	Keonakhone Saysouliane, Science and Technology for Development Center	0.18
Lao People's Democratic Republic	ICT training for government employees in provinces	Somlouay Kitignavong, Department of Science and Technology	0.9
Mongolia	E-government development in Mongolia	Chuluunjav Enkhzaya, Cabinet Secretariat of Government of Mongolia	22.61
Myanmar	Rural telecommunity centre for e-government (pilot project)	Mr. Tint Lwin, Myanmar Posts and Telecommunications	0.067
Nepal	E-land management	Anandaram Regmi, Ministry of Finance	89.98
Papua New Guinea	Papua New Guinea e-government action plan	Maria-Louise Wau, Department of National Planning and Rural Development	3.09
Philippines	BoC single door entry system	Dennis C. Pantastico, Chief, Planning and Management Information Division	6
Philippines	FINLINK (financial linkages)	Claricel Yuvienco-Mulato, Department of Finance	30.3
Thailand	Capacity-building through e-learning along the Thailand-Laos-Viet Nam ICT corridor		1.25
Thailand	Development of a CIO peer review financing model for e-government		0.7
Viet Nam	E-portal for the Government of Viet Nam	Do Van Thanh, IT Center, Ministry of Foreign Affairs	10.4

Title: Comprehensive study of existing ICT facilities and formulation of sustainable planning to implementing e-government

Proposer: Md. Nazrul Islam, Senior Assistant Chief Ministry of Science and ICT

Country: Bangladesh

Date: June 2004

I. INTRODUCTION

Information and communication technology can play a critical role in helping countries to better confront development challenges and to compete more effectively in the global economy, enhance social inclusion and gender equity, expand economic opportunities for the poor, lower the cost of public and private goods and services; and improve democratic governance. The Government of Bangladesh, in order to realize this vision, has taken measures to incorporate ICT into governance. The Government has created a national ICT task force headed by the Prime Minister and members from government, industry and academia.

The vision of e-government is to shape the framework. ICT will be the key factor in successful transition to a clear, transparency and efficient government.

II. ISSUES

In Bangladesh, the use of ICT in government, especially those applications related to the Internet, is still underdeveloped. The Ministry of Science and ICT of Bangladesh has not yet been able to achieve the goals set out for e-government in the National ICT Policy (2002). The Government does not have enough capacity and infrastructure to harness the benefits of ICT in improving the public sector management and process. Further, strategic ICT planning skills are lacking within the Government. There is no central database system of existing ICT facilities in different ministries or divisions. Therefore, at present it is not possible to analyse or develop an e-government system. In addition, due to inadequate e-training, hardware, telecommunication facilities and legal infrastructure, e-government services have not been planned and fully formulated properly.

A fully operational e-government system has not been established in Bangladesh. The needs of the different ministries or divisions with ICT facilities should be analysed and their applications used to assist in the formulation of a national e-government model.

III. PROPOSED PROJECT

A. Purpose and output

The Government will introduce and promote ICT-based services such as G2G (Government-to-Government), G2E (Government-to-Employee) and G2C (Government-to-Customer), etc. The Government shall use ICT systems within the public administration to improve efficiency, reduce wastage of resources, enhance planning and raise the quality of services.

All government offices will be networked to the National Data Resource Centre. The centre will be a system of national databases with the capacity to store and supply rapidly all necessary information on the economic, cultural and social situation of Bangladesh. Each ministry, division and government body shall create an ICT cell, to be managed and run by well-trained ICT professionals to plan, coordinate and implement ICT projects and services.

B. Methodology and key activities

The Ministry of Science and ICT will execute the e-government strategy and roadmap and will introduce and promote ICT-based services. It will collaborate with all ministries or divisions, including banks and insurance companies, to promote and use ICT in their respective areas of operation.

Project framework

Design	Performance	Monitoring	Assumptions
Goals	Transparency and efficient service Good governance Citizen empowerment and economic development	Central Monitoring Division's reports Annual statistical report	
Purpose	Introduce and Promote G2G, G2E, G2B, G2C E-government policy E-government strategy and model	Ministry's report Donors' reports Central monitoring Division's reports	Ministry of Science and ICT will implement the relationship, policy and strategy for e-government.

Design summary	Performance indicators/targets	Monitoring mechanism	Assumptions and risks
Outputs	Trained personnel Requirements for e-government National database E-government strategy and roadmap LAN and internet within the concerned	Ministry's report Donors' reports Central monitoring Division's reports	Project personnel will be trained Ministry of Science and ITC will set up database system, LAN and Internet
Activities	Prepare work plan Training of project personnel and concerned Prepare questionnaire Survey on existing ICT facilities and their needs Analysis, seminar, workshop	Quarterly/biannual reports Ministry's report	Cooperation among ministries and divisions Ministry of Science and ITC will arrange proper training
Inputs	Recruitment project personnel Establishing project office Recruitment local and foreign consultant Procurement of IT equipments and software	Inception report Monthly report	Availability of funds Infrastructure set up in time Recruitment and procurement will be done in time

C Cost estimate and financing plan

The implementation period of the project is two years. The proposed cost of this project is estimated in US\$ million.

COST ESTIMATES AND FINANCING PLAN (US\$ million)

Item	Government	Donors	Total cost
1. Consultants			
a. International consultants	–	3.25	3.25
b. Domestic consultants	2.75	–	2.75
2. Equipment and software			
a. Equipment	0.50	3.50	4.00
b. Software	0.25	0.75	1.00

	Item	Government	Donors	Total cost
3.	Building and furniture			
	a. Building	0.25	0.50	0.75
	b. Furniture	0.20	–	0.20
4.	Training, seminars and conferences	0.25	1.50	1.75
5.	Research, development and survey	0.25	2.25	2.50
6.	Miscellaneous administration and support costs	0.15	0.25	0.40
7.	Contingencies	0.25	1.75	2.00
	Total	4.85	13.75	18.60

D. Implementation arrangement(s)

The Ministry of Science and ICT has already formulated an ICT policy which covers the vision and targets of e-government activities. It is now at the preliminary stage of implementing e-government. The Ministry will be the executing/implementing agency of this project. The implementation period will be three years.

Local and foreign IT specialists will play a vital role in formulating the e-government policy, strategy and model. Five to six international consultants will be engaged for a duration of 36 months.

IV. BENEFITS OF THE PROJECT

The ministries or divisions shall establish e-government systems. As a result, other departments will be better informed and more willing to participate in e-government. All policy documents, e-forms, circulars, orders, notifications, e-procurements and e-results will be available on the web sites of the ministries and divisions.

The Government has realized that the key to moving forward in applying ICT for development is through strategic partnerships. With this belief, the Government has undertaken projects in this sector supported by international development agencies such as UNDP, the World Bank, ADB, USAID, JICA, KOICA CIDA, SIDA, etc.

Title: E-government action plan for Fiji

Proposer: Sailosi Kepa, National Planning Office, Ministry of Finance and National Planning

Country: Fiji

Date: June 2004

I. INTRODUCTION

Currently, Fiji has a Technical Assistance Programme with the Asian Development Bank (ADB) to provide support for the development and implementation of a national ICT strategy focusing on e-government.

The ADB, in focusing on the above policy objective, has two key performance indicators:

- Integrated e-government development plan adopted by 2003
- Suitable government services available through the Internet by 2005

The main focus of the technical assistance is the e-Government component, comprising the four following strategies:

- Encourage the delivery of online public services (G2C)
- Promote e-government growth via online government procurement (G2B)
- Improve productivity-efficiency in Government (G2G)
- Creation of a National Information Infrastructure

The definition of National ICT Strategy is the responsibility of the Information Technology Advisory Council (ITAC) comprised of representatives from Government institutions, academia, and the private sector. ITAC formulated the latest draft National ICT Strategy Plan, which was released in September 2003. It outlines the three main Strategic Outcomes:

1. **e-Government online:** Government providing services online to improve uptake and access to services, create efficiencies and cost-savings, shift emphasis from process to quality of service and to enhance government policies and initiatives.

2. **Community e-empowered:** Community groups and not-for-profit organizations understand the Internet and are able to use it to access information, government services and business products and services and to create dialogue and enhance civic awareness and action.
3. **Business e-enabled:** Businesses using the Internet to open new markets, drive efficiencies and reduce costs, meet customer expectations and create a competitive advantage.

II. ISSUES

- Expensive connection to the Internet which is currently locked in monopoly
- Connection to the Internet or the government Intranet is confined to urban areas
- Not everyone is proficient with ICT in Fiji

III. PROPOSED PROJECT

A. Purpose and output

The proposed project is for funding of 10 separate IT-enabled applications for 9 government departments. These applications are for a wide selection of departments with widely varying purposes. The project applications are as follows: (i) Job-matching application in the Ministry of Youth, Sports and Employment Opportunities, (ii) Family Assistance Scheme application in the Social Welfare Department, (iii) Patient Information system in the Ministry of Health, (iv) Fisheries Resources MIS in the Fisheries Department, (v) Forest Export Monitoring system in the Forestry Department, (vi) Disaster Management Operations application in the Regional Development, (vii) Financial Information database in the Ministry of Public Enterprises, (viii) Fiji Topographical Database in the Lands Department, (ix) CLICOM, which is a climatological database application, in the Meteorological Department, and (x) the Fiji Meteorological Services Rainfall Model in the Meteorological Department.

B. Methodology and key activities

The key assumptions for the proposed project of increasing the number of agencies with services online, that is, increasing government presence online, are having sufficient funding and qualified ICT personnel. This is important for the initial establishment of an online presence. Also important is the maintenance of the agencies/department's online presence and any modifi-

cation requirements that may arise in the use and operation of department web sites. In-house qualified personnel is important for maintaining the department web sites and web pages, tending to any needs that may arise, outlining the technical requirements of the department and assessing the effectiveness of software and hardware in addressing the department's ICT needs to achieve its key result areas or outputs. Department or ITC personnel must monitor the development of software, for example web site, database, license processing, whether it is done internally or externally, to ensure quality.

Project framework

Design summary	Performance indicators/targets	Monitoring mechanism	Assumptions and risks
Goals	To increase Government presence and services online	ITC (Government IT services agency) records the number of agencies with online presence	Commitment by Government stakeholders especially budgetary, qualified personnel
Purpose	To make Government services more accessible to the public	The number of "hits" by the public on the agency's web site (counter); also, agencies utilizing other agencies' services Inventory of agencies offering service or presence online	Sufficient funding for setting up and maintaining, improving or modifying the project Sufficient qualified personnel (both quality and quantity)
Outputs	Variety of Government services or agencies with an online presence	Public has better understanding of government agencies' service, purpose, location, etc.	Agencies should have sufficient in-house capacity to maintain the day-to-day services and functions of their web site and webpage
Activities	Creation of an agencies' web site or, initially, presence on the Government Intranet Acquisition and design of relevant software Processing of requests and response Monitoring of responses and feedback	Internal monitoring by ITC Compare work progress with work schedule, financial projections	Appropriately qualified personnel to both develop and monitor the software with regards to compliance with required standards Transparent selection of designs and award of contracts
Inputs	Location on Government Intranet (server, terminals, qualified technicians) Software design, modification or enhancement by qualified technicians	Internal monitoring by ITC, quality control checks	Sufficient budget funding and qualified personnel (quality and quantity), both at ITC and with the agencies themselves

C. Cost estimate and financing plan

A total of US\$ 2 million is proposed for the funding of 10 government departmental web sites and internal IT needs, e.g. database or inventory.

D. Implementation arrangement

It is proposed that the department or government institution, together with ITC, the Government's IT agency, access the IT needs of the department, develop the options and define the technical requirements. Development of the IT proposal should occur, whether it is a web site or an internal data processor, for instance, within Government or externally by consultants as necessary. Assuming that this is done externally, the project will be tendered accordingly and selection of the successful tender according to a clear set of criteria, i.e. which best matches the points of reference within a reasonable cost range. The duration of the above process must be timed for completion before the beginning of the next budget year. The proposal must be ready for submission to the Ministry of Finance and National Planning in the development of the next years' budget.

Once the project is funded, the necessary instalment is carried out and the systems check is completed, it will be handed over to the department to utilize and maintain on a day-to-day basis. ITC will be requested to assist with major modifications to the project.

IV. BENEFITS OF THE PROJECT

As discussed earlier, the project involves 10 separate applications for 9 government institutions. This project will significantly enhance the delivery of their individual services in their key result areas, ranging from employment facilitation to weather monitoring. This will benefit Fiji in a wide variety of areas that are crucial to Fiji's social and economic development.

Title: E-Pakxong
Proposer: Keonakhone Saysouliane, Science and Technology for Development Study Centre
Country: Lao People's Democratic Republic
Date: June 2004

I. PROPOSED PROJECT

A. Purpose and output

The overall project objective is to contribute to the process of bridging the digital divide by strengthening the capacities of the people in the Pakxong area, in central Lao People's Democratic Republic, to manage and apply ICT, particularly for conducting business on the Internet, improving their education environment through e-learning and improving their standard of living through access to both local and international information.

The major objectives are as follows:

- To create a better environment for using ICT as an important tool for socio-economic development in the Pakxong area;
- To realize the National Poverty Eradication Plan;
- To provide community information, particularly information for the coffee sector (pricing, marketing, forecasting, technology, etc.);
- To use ICT equipment and Internet resources as a new way of learning for the community; and
- To assist citizens to do business through the Internet.

The scope of the project:

- Establish a community centre;
- Install and configurate of computer hardware and software;
- Establish an Internet connection in Pakxong;
- Develop the Pakxong web site;
- Provide training to the community on how to use ICTs and the Internet; and

- Assist citizens to realize and deliver their business goals through the Internet.

B. Methodology and key activities

Activities:

- Construction of e-Pakxong centre;
- Install equipment;
- Installation and configurate computer network and Internet access to an Internet service provider;
- Conduct community training;
- Assist communities to engage in e-business;
- Develop and launch the community web site; and
- Update and disseminate information relating to the Pakxong community.

Outputs:

- Increase international sale of coffee from the Pakxong community;
- Improvement of the standard of living of people in Pakxong district and reduction of the digital divide;
- Increased productivity of the coffee industry in Pakxong; and
- Improvement in learning and teaching through the use of ICT tools.

The project will be nationally executed by the Science and Technology for Development Study Centre, under Science Technology and Environment Agency (STEA) of the Government of the Lao People's Democratic Republic. Partnerships will also be sought with key government, research institutes, coffee association groups as well as private sector organizations as donors associated with this project.

C. Cost estimate and financing plan

Proposed donors:	ADB, UNDP, ESCAP – 85 per cent
Government agencies:	STEA, Committee for Planning and Cooperation (CPC), Lao People's Revolutionary Party (PRP) – 15 per cent

COST ESTIMATES AND FINANCING PLAN
(US\$ million)

Item	Government	Donors	Total cost
1. Consultants			
a. International consultants	0.00	0.00	0.03
b. National consultants	0.00	0.00	0.015
2. Equipment and software			
a. Hardware and software	0.00	0.00	0.02
b. Internet connection and telecommunication devices	0.00	0.00	0.02
3. Buildings and furniture			
a. Buildings (e-Pakxong centre)	0.00	0.00	0.05
b. Furniture	0.00	0.00	
4. Training, seminars and conferences	0.00	0.00	0.015
5. Research, development and surveys	0.00	0.00	
6. Miscellaneous administration and support costs	0.00	0.00	0.02
7. Contingencies	0.00	0.00	0.01
Total	0.00	0.00	0.18

D. Implementation arrangements

The executing and implementing agencies will be the Science and Technology for Development Study Centre, STEA, PMO of LAO People's Democratic Republic.

Implementations arrangements:

- a. Submit the project proposal for approval
- b. Sign the project contract or memorandum of understanding
- c. Form the project committee and project teams
- d. Mobilize resources
- e. Begin implementation

Time frame:

- a. End of 2004 get project approval and funding
- b. Begin implementation by the start of 2005
- c. Duration – one and a half years

IV. BENEFITS OF THE PROJECT

The citizens of Pakxong district, located in the central area of the country, are the main beneficiaries of this project. Up to 500 households will receive direct benefit from the project, which will contribute to economic growth in the district by assisting coffee growers and others in the coffee industry in Pakxong to access global markets. Further, it will enable the assessment and dissemination of information more effectively, both locally and internationally. Lastly, it will increase learning opportunities in the community and enable e-learning and training on ICT in the community.

Title: ICT training for government employees in provinces
Proposer: Somlouay Kittignavong, Deputy Director General,
Department of Science and Technology
Country: Lao People Democratic Republic
Date: June 2004

I. PROPOSED PROJECT

A. Purpose and output

IT literacy is very low in the Lao People's Democratic Republic, as is Internet penetration, especially in the rural areas, however, awareness of ICT is high. This project aims to narrow the digital divide between urban and rural areas by promoting the use of ICT by government employees working with rural communities and developing the skills required in these state employees and rural communities to support e-government initiatives.

As a result of this project, government employees in the selected provinces will have basic ICT application skills and some will become ICT trainers in their province.

B. Methodology and key activities

ICT training will be provided for government employees in 17 provinces. Officials in these provinces will receive basic skills training and approximately 15 computers per province will be provided. This will assist in the creation of jobs in these areas.

Key activities include:

- Development of curriculum
- Training of trainers in Vientiane
- Awareness raising and promotion of the programme
- Provision of hardware
- Selection of candidates
- Training for government employees

Strategies and methodologies:

1. Training of trainers in the capital city

- Participants – 12 trainers
- Duration of three months
- 2. Promotion of the programme
 - Organize a one-day workshop
 - Participants – two participants from each province
- 3. Selecting candidates
 - Provide training for employees
 - Participants – three participants from different government offices in each province
 - Duration – one month (two months for ICT trainers). Each course trains 60 officials, with three training sessions per province

C. Cost estimate and financing plan

Cost estimates (in US\$ million):

Year 1	0.3
Year 2	0.3
Year 3	0.3
Total:	0.9

Financing plan:

ADB, UNDP, ESCAP, Korean International Cooperation Agency (KOICA) and Japan International Cooperation Agency (JICA)

D. Implementation arrangement

The project will be implemented by the Science Technology and Environment Agency.

The duration of the project is three years.

The start date is the first quarter of 2005.

II. BENEFITS OF THE PROJECT

In the first stage, 3,060 government employees in 17 provinces will gain ICT basic and application skills. Each province will gain three ICT trainers as a result, who are able to undertake these training activities in their province.

Title: E-government development in Mongolia
Proposer: Chuluunjav Enkhzaya, IT Expert, Cabinet Secretariat of the Government of Mongolia
Country: Mongolia
Date: June 2004

I. INTRODUCTION

The Government of Mongolia has made considerable advances in ICT by developing information infrastructure and implementing ICT-focused programmes and projects with foreign credit and assistance. All provinces are now connected to the capital, Ulaanbaatar, by digital technology and high-speed fiber-optic transmission and since 1994 Mongolia has had an international Internet network gateway which has led to the rapid increase of Internet and wireless phone users. Therefore, a favourable environment for developing e-government is present.

In 2003, a national project team was formed to conduct research related to the development of e-government. The team prepared reports on e-government environment evaluation, present status, statistical information, the legal environment and policies for implementation. Further, the experiences of other countries have been studied, introduction trips have been conducted and international ICT advisors have been invited to Mongolia. These activities have had a great impact on policy formation, the creation of the legal environment and the development of an activity plan for building e-government in Mongolia.

The implementation of the “Mongolian e-government” project will enable the worldwide promotion of Mongolia and assist in its development as a democratic country.

II. ISSUES

Difficulties expected with implementation of e-government in Mongolia:

- Term “e-government” has not been legalized and public awareness and understand of the concept is low
- State service and state officers still use traditional methods for processing information

- Methods for implementation and the source of financing are unclear
- IT requirements cannot be fulfilled

Analysing the current situation:

- Large territory, low population
- Lack of broadband information infrastructure
- Lack of legislative framework for ICT development
- No unified standard for e-document interchange
- Many projects are implemented without a centralized policy
- Low level of IT literacy in the rural population
- Lack of financial resources

Rationale for the project:

- Determine and prepare the goals, legal environment and activities necessary for establishing e-government in Mongolia
- Prepare and implement planned projects and programmes
- Create open e-government that is effective, reliable and fast

III. PROPOSED PROJECT

A. Purpose and output

GOAL:

To use information technology effectively in the government policy determination process and provide citizens with a fast and effective public service.

PURPOSE:

- To provide equal access to information regardless of location and time by effectively using IT in state activities
- To organize cabinet meetings electronically

- To create an integrated database for government law, resolution and information, and develop appropriate software
- To create an integrated portal for state organizations, enabling the efficient provision of state service to citizens without any unnecessary bureaucracy and procedures
- To create an IT training centre for state officers
- To build a conference hall with up-to-date IT facilities to raise awareness of government programmes and to host local and international meetings and seminars

OUTCOME:

- State officers receive information quickly, regardless of file size and location
- Government meetings are better informed and more open and conducted in a efficient manner
- Integrated database of government laws, resolutions and information created
- Integrated state organizations portal will provide state services to citizens efficiently and without unnecessary bureaucracy and procedures
- Cabinet Secretariat of government, ministries, agencies, central and local administrative organization's officers receive basic training in IT, document drafting, network usage and information researching skills
- IT training centre for state officers created providing certification on e-government application training
- Electronic meeting and video conferencing possible
- Comprehensive database on the government action plan and the implementation of other programmes created

B. Methodology and key activities

The proposed methodology would include:

- Information database formation

- Support and distribute citizen information service through the Internet
- Formulate a government requirement standard for electronic information exchange
- State information service provided through the Internet
- Create and develop a state information service centre and an Internet centre for citizens
- Monitor and evaluate existing citizens' information service centre, Internet centre and cyber province

Project framework

Design summary	Performance indicators/targets	Monitoring mechanisms	Assumptions and risks
<p>Goals</p> <p>To use IT effectively in government policy determination and provide citizens with fast and effective public service</p>	Government of Mongolia and citizens	Project coordinator Research team User	<p>Financing</p> <p>Threat of Internet network computer viruses, worms and hackers</p> <p>Network performance and reliability</p>
<p>Purpose</p> <p>To provide equal access to information</p> <p>To conduct cabinet meetings electronically</p> <p>To create an integrated database for government law, resolution and information</p> <p>To create an integrated portal for state organizations</p> <p>To create an IT training centre for state officers</p> <p>To build a conference hall with up-to-date IT facilities</p>	<p>Efficient provision of information</p> <p>Government meetings are better informed and more open</p> <p>Integrated database of government laws, resolutions and information created</p> <p>Integrated state organizations portal created</p> <p>Government employees trained</p> <p>IT training centre created</p> <p>Electronic meeting and video conferencing possible</p> <p>Database created</p>	Project coordinator Research team Executive	Financing

Design summary	Performance indicators/targets	Monitoring mechanisms	Assumptions and risks
<p>Outputs</p> <p>Analysis of other countries' experiences</p> <p>System and user software and LAN/WAN networks created</p> <p>Hardware and software purchased and customized</p> <p>Information collected</p> <p>Systems converted to international official standards</p> <p>Training conducted</p> <p>System evaluated and project report prepared</p>	<p>Process system analysis and model developed</p>	<p>Project coordinator</p> <p>User</p>	<p>Financing</p> <p>Project quality, result</p>
<p>Activities</p> <p>Information database formation</p> <p>Support and distribute citizen information service through the Internet</p> <p>Formulate a government requirement standard for electronic information exchange</p> <p>State information service provided through the Internet</p> <p>Create and develop state information service centre and Internet centre for citizens</p> <p>Monitor and evaluate existing citizens' information service centre, Internet centre and cyber province</p>	<p>Information processing potential increase</p> <p>Politicians and policy makers able to have online conversation, respond to questions and answers from citizens</p>	<p>Project coordinator</p>	<p>Employee work experience and knowledge</p>
<p>Inputs</p>	<p>Project implementation team</p>	<p>Project coordinator</p> <p>Executive</p>	<p>Information collection, hardware and software supply, employee experience and knowledge</p>

C. Cost estimate and financing plan

COST ESTIMATES (US\$ million)

Item	Government	Donors	Total cost
1. Consultants			
a. International Consultants	0.01	0.2	0.21
b. National Consultants	0.01	0.08	0.09
2. Equipment and software			
a. Equipment	0.2	2.5	2.7
b. Software		5	5
3. Buildings and furniture			
a. Building	0.2	3	3.2
b. Furniture	0.1	1.2	1.3
4. Training, seminars and conferences	0.01	2.5	2.51
5. Research, development and surveys	0.05	2	2.05
6. Miscellaneous administration and support costs	0.05	3	3.05
7. Contingencies	0.5	2	2.5
Total	1.13	21.48	22.61

Financing Plan

- Proposed donors: ADB, Microsoft, IBM, Governments of Japan, Republic of Korea and Australia
- Government agency: Government of Mongolia

D. Implementation arrangement

The project coordinator will be the Cabinet Secretariat, with the Ministry of Infrastructure providing strategy administration support. The State Communication Agency will provide transmission services and an Internet service provider company will provide Internet services.

The project duration will be one year. A consultant with strong experience in e-government and e-governance will provide recommendations and technical assistance during the implementation of the project.

The expected outputs and outcome evaluation will be disseminated via workshops, the press and public media. Further, a public survey will be conducted and public feedback integrated in the process classroom, e-learning, ICT courses will be held for the public and government workers.

IV. BENEFITS OF THE PROJECT

- State service will become more accessible to citizens
- State and government agencies' activity results and accountability will increase
- State and administrative agencies' paper-based information flow will decrease, thus money, labour and time will be saved
- State and government agencies will be connected with one another and their activities will become integrated
- Eliminate officialdom and bribes

Beneficiaries will be cabinet members, state and local administration's officers and citizens.

Title: Rural telecommunity centre for e-government (G2E)
(Pilot Project)

Proposer: Mr. Tint Lwin, Deputy General Manager, Myanmar
Posts and Telecommunications, Ministry of
Communications, Posts and Telegraphs

Country: Myanmar

Date: June 2004

I. INTRODUCTION

Myanmar Posts and Telecoms (MPT) is the sole provider of telecommunication services of Myanmar. Current telephone density of Myanmar is extremely low. Nationally, most of the country is covered by a digital microwave system, with some townships using a fibre optic link. For international telecommunications, there is a *sa-me-ew* three submarine cable system. Thus, national and international connectivity has a good foundation and with some improvements could have the capacity to carry out e-government services.

The current status of e-government in Myanmar is in its infancy, but plans have been developed to have fibre networks within ministries and their offices in Yangon, to be financed by loan assistance. For that purpose, this proposal is for a pilot project for a rural telecommunications centre for e-government, especially for remote areas where there are currently no communication facilities.

II. ISSUES

The main constraint on initiating e-government in Myanmar is financial. Investing in the equipment is expensive, as is ensuring that there is an ICT focal point within every ministry. Myanmar has already launched some pilot projects, such as e-procurement, e-visa, e-passport, smart school and e-learning centre.

This proposal focuses on the administration system within ministries, as well as remote village administration groups. Access and efficiency will be improved by developing a network infrastructure within government offices.

III. PROPOSED PROJECT

A pilot project for satellite Internet connection between one government or administrative office in Yangon and three remote villages.

A. Purpose and output

The purpose of this proposal is to narrow the digital divide between urban and rural areas, bringing home to rural communities the sound of a dial tone and the world of the Internet. Increased connectivity will increase their opportunities, improving their knowledge, as well as assisting the implementation of e-government.

Installation of a broadband network in poor rural areas will allow them to access e-libraries, e-farmer information, tele-medicine, and e-learning. This will result in improved education, health, administration, and business in rural areas.

B. Methodology and key activities

The geography of Myanmar may prove difficult for installation of the telecommunication infrastructure due the presence of many mountains and rivers. Installation of microwave towers and fiber optic cables will not be possible. Therefore, a satellite system may be an easier and less expensive option.

The objective of the technical assistance is to connect government ministries with rural areas via high speed Internet, and computerize basic government administration processes, in order to promote transparent and efficient government administrative process, prompt decision-making and increased national competitiveness.

Basic e-government G2E application

- Document exchange function between government and remote offices
- Document storage and searching
- Electronic approval function

Training administrative staff from the rural villages

- Increase IT capacity of government employees in rural areas
- Increase end user computer usability

C. Cost estimate and financing plan

COST ESTIMATES AND FINANCING PLAN (US\$ million)

Item	Government	Donors	Total cost
1. Consultants			
a. International consultants	0.00	0.003	0.00
b. Domestic consultants	0.0015	0.00	0.00
2. Equipment and Software			
a. iPstar Terminal (2 set)	0.00	0.00	0.01
b. WLL (ip) 3 set	0.00	0.00	0.0135
c. Computer and Network			0.02
d. Power System			0.008
3. Buildings and furniture	0.003		
4. Training, seminars, and conferences	0.0005	0.00	0.00
5. Research, development, and surveys	0.00	0.00	0.00
6. Miscellaneous administration and support costs	0.0005	0.0005	0.00
7. Contingencies	0.001	0.001	0.00
Total	0.007	0.06	0.067

D. Implementation arrangements

The Myanmar Government has already started preparation for implementation of an e-government project, focusing on the links between Yangon and between ministries. This pilot project for rural areas will further raise awareness of the administrative process in rural areas. In the longer term, either through government funding or G2G loan, this project will cover the whole country. The scope of the project grow further once a network infrastructure is in place. Myanmar Posts and Telecommunications (MPT) will be the Project Executing Agency. The project proposal has endeavoured to set realistic goals budget. It is hoped the project would launched quickly.

IV. BENEFITS OF THE PROJECT

- More efficient and convenient administrative procedures available in remote areas
- Flow on benefits to other government departments of voice, broadband access and Internet facilities for the e-Government applications
- Will assist to demonstrate the benefits of e-government, hopefully leading to a national project

Title: E-land management
Proposer: Anandaram Regmi, Under Secretary, Ministry of Finance
Country: Nepal
Date: June 2004

I. INTRODUCTION

In Nepal, Government ministries and departments have developed their web sites. Policy papers, acts and regulations as well as related documents are accessible online. Telephone subscribers' bills, driving licenses forms and similar other services can be downloaded online by users. Bills of lading can be found online through designated terminals within the custom houses.

The present National Development Plan, which is also known as the Poverty Reduction Strategy Plan, has set the following goals to be achieved during 2002-2007:

1. To provide 40 telephone service facilities for every thousand people.
2. To provide telephone services to every Village Development Committee (VCD)
3. To develop sustainable and competitive information technology by using modern technology in rural areas.
4. To introduce new development programmes in IT for socio-economic development.
5. To encourage the private sector to be involved in providing services related to information and communication.

The Government has prioritized its activities as per the above plan. In line with the fourth priority as indicated above, the development of an e-land management programme is proposed. It is hoped that such a programme will directly benefit the rural poor.

II. ISSUES

1. Government ministries and departments have yet to be networked.

2. Information channels are one-way, and citizens are able to access information but cannot submit applications or other communications to their government online.
3. The public offices of Land Revenue and Management have limited ICT accessibility and capacity. They lack responsiveness and suitable programmes. They need strengthening of internal capacity to enable them to better provide effective services to the mass public.
4. House and land taxes are collected by municipalities and village development committees. Property registration and transfers are being carried out by Land Revenue Offices. All of these services are being provided to the public manually.
5. Transparency International's survey has revealed a high level of corruption in the Land Revenue offices.
6. The use of ICTs in these government departments can serve as a pilot for wider application of ICT in the future, helping to raise awareness, in the preparedness and readiness for implementing e-government.

III. PROPOSED PROJECT

A. Purpose and output

The purpose of implementing an e-land management project is to provide direct and effective service delivery with the use of ICT. Land records also help resolve issues related to land use and management. ICT applications on poverty alleviation programmes and computerization of land records in 75 districts of Nepal are steps towards "reaching the unreached" and achieving sustainable agriculture and rural development. The objective of this project is to introduce ICT services and ICT-enabled services: G2G, G2B, G2C and C2C in the economic activity of the land market of Nepal. People will be able to transfer and register their land and houses ownership more easily and within the stipulated time, at no extra cost.

The Government will have computerized land records requiring the use of a limited number staff. Successful implementation will enable the Government to reduce its overhead costs and provide improved services to the public.

B. Methodology and key activities

The project will be implemented as a pilot programme in 19 districts in the central region development zone of Nepal, which also includes the Kathmandu valley.

Its activities will be replicated in other development regions after completion of the implementation phase. The project will be implemented within a period of three years, and will have the following activities:

1. Computerized land records in 19 districts for use by six million people.
2. Online distribution and submission of forms and necessary documents.
3. Online procedures, checklists, revenue rates to be visible.
4. Privacy to be maintained.
5. Customers must complete all formalities online and deposit funds at a bank or by providing their account number.
6. Customers will need to go to public offices only when they require the certified documents.

Project framework

Design summary	Performance indicators/targets	Monitoring mechanisms	Assumptions and risks
Goals Preparing of computerized land records in 19 districts	Records are updated	Central coordination system	Sometimes system does not work
Purpose Use of ICT for effective service delivery	Public is satisfied with the services provided	Central coordination system	Sometimes system does not work
Outputs Online submission of documents Online deposit of revenue Availability of data Growing real estate businesses Less overhead costs Corruption abolished	Records are updated Growing volume of revenue Peaceful service delivery	Central coordination system	Sometimes system does not work

Design summary	Performance indicators/targets	Monitoring mechanisms	Assumptions and risks
Activities As above		Central coordination system	Sometimes system does not work
Inputs Staff Equipment Office space	To be deputed To be purchased To be provided		

C. Cost estimate and financing plan

COST ESTIMATES AND FINANCING PLAN

(US\$ million)

Item	Government	Donors	Total cost
1. Consultants			
a. International consultants	0.00	0.00	0.03
b. Domestic consultants	0.00	0.00	0.02
2. Equipment and software			
a. ICT Framework	0.00	0.00	1.25
b. Capacity-building	0.00	0.00	0.50
c. Content building and management	0.00	0.00	80.00
3. Buildings and furniture			
a. Building	0.00	0.00	0.00
b. Furniture	0.00	0.00	0.00
4. Training, seminars and conferences	0.00	0.00	0.02
5. Research, development and surveys	0.00	0.00	0.10
6. Miscellaneous administration and support costs	0.00	0.00	8.00
7. Contingencies	0.00	0.00	0.06
Total	0.00	0.00	0.18

D. Implementation arrangements

The Ministry of Land Reform and Management will be the executing agency of this project. A project steering committee chaired by the Secretary

of the Ministry will be formed to centrally coordinate the activities. This committee will have the following members:

1. Chief technical advisor
2. Joint Secretary, Planning Division, Ministry of Land Reform and Management
3. Representative, Ministry of Science and Technology
4. Representative, National Planning Commission
5. Representative, Ministry of Finance
6. Representative, Computer Association of Nepal
7. Project director, member secretary

A project director (Gazette Class I Officer) will be appointed to run the project. The project director will be supported by technical and administrative staff.

A district level coordination committee will also be formed to monitor the activities of the project. The committee will be chaired by the Chief Land Revenue Officer with representatives from the concerned authorities.

IV. BENEFITS OF THE PROJECT

The project will directly benefit approximately six million citizens in 19 districts. The system will be computerized. Service will be effective and put an end to corruption.

Title: PNG's e-government action plan
Proposer: Maria-Louise Wau, Department of National Planning and Rural Development
Country: Papua New Guinea
Date: June 2004

I. INTRODUCTION

The current status of e-government in Papua New Guinea, unlike most other countries in the Asian and Pacific region, is very much in its initiation stages and has yet to reach its full potential. At present, the Government of Papua New Guinea maintains a wide area network (WAN) only within the confines of the national capital district of Port Moresby. This is made up of a copper-based campus network using privately-owned copper within the Wai-gani area and a wireless network utilizing the free-to-air band. Just over a third of national government departments have access to this government network.

The contemporary expansion of the network using wireless was an initiative of the Information Technology Division (ITD), Department of Finance, and was intended as a means of accessing remote Provincial Government Accounting System (PGAS) sites located within the departments, and a means to distribute information from core government systems to interested parties within the Government.

In the early 1980s, the forerunner to ITD, the National Computer Centre (NCC) maintained a WAN using dedicated data lines from Telikom. This network was supported by a number of network engineers located within the NCC. This network slowly deteriorated as funds to maintain and transport provincially located equipment became scarce. Telikom was unable to maintain the data lines and lost the NCC expertise that was not replaced.

This deterioration continued throughout the late 1980s and into the 1990s with less than 10 per cent of the network available by mid-1990. By this stage, the NCC was renamed the Information Technology Division and its focus shifted to maintaining core government systems and supporting the finance local area network (LAN). Technical development of ITD was not as successful as was first envisaged, with a continued decline in service levels due to lack of funding and a loss of skilled staff. The government network then focused on providing access to government core systems and e-mail services and providing a link to the Internet via Datec. Since then, the government WAN (known as GovNet) has been used for only limited applications such as e-mail and Internet services.

To date, the Government of Papua New Guinea has not launched any associated e-government programmes, projects or proposals, however, the concept has been identified. Thus, at present, the Department of National Planning and the Ministry of State Enterprises and Information are in the process of coordinating, in collaboration with relevant stakeholders within Papua New Guinea, the necessary undertakings (plans/strategies) involved, and considering possible technical assistance and funding for the implementation of e-government in Papua New Guinea.

Sustainability, ownership and legal aspects are issues of concern to the national government in order to ensure consistency and guaranteed maintenance in these areas when considering related project proposals.

II. ISSUES

Issues or problems in the context of the country (rationale):

- No ICT policy (vital for any ICT implementation)
- Lack of e-government awareness (for acceptance and adaptability)
- No specific e-government strategy or plan in place (for consistency)
- Nationally standardized IT infrastructure (for basic establishment and maintenance)
- Expertise and capacity-building (for sustainability and maintenance)
- Internet access (for maximum utilization and benefit)

Analysis of issues or problems:

- ICT policy still in draft form
- Collaboration of relevant agencies to promote maximum awareness
- To be jointly coordinated by appropriate government lead agencies
- Funding
- Acquired skills and capacity
- Narrow bandwidth in association with the country's complex geographical nature

Rationale for the project:

- To produce realistic strategies and plans to promote a conducive project environment for implementation
- To outline the objectives, goals and expected outcomes of the project
- To coordinate and promote effective communication among all government sectors and non-governmental organizations across the country

III. THE PROPOSED PROJECT

A. Purpose and output

The purpose of this project is to create effective communication among all government agencies. The goal of this project is to implement e-governance in Papua New Guinea. The expected outputs would be effective e-government implementation nationwide.

The expected outputs would be to allow greater public access to Government information; facilitate more accessible government services; make Government more accountable to citizens and to improve the productivity of government services.

B. Methodology and key activities

The expected outputs or deliverables can be achieved if leaders and decision makers in Government lead the way by making a commitment to support the establishment of e-governance. Following that, the launching of a strategically planned and clearly defined project process can proceed. In the course of this process, there should be a fallback plan in specific phases of the project in order to overcome risks. For example, risk management programmes will have to be identified and incorporated as part of this project.

Project framework

Design summary	Performance indicators/targets	Monitoring mechanisms	Assumptions and risks
Goals To implement e-government in Papua New Guinea	Increase in current number of government agencies' electronic link or network development of departmental web sites	Research surveys/questionnaires Search engines of Papua New Guinea government departmental web sites	Political support Adequate funding, maintenance and network dependability Consistent coordination

Design summary	Performance indicators/targets	Monitoring mechanisms	Assumptions and risks
Purpose Effective communication among all government agencies	Improved productivity of Government agencies (efficiency and effectiveness)	Records of Government agency Quarterly reports E-government monitoring and evaluation committee	Network security, viability and authentication Inconsistency in report collation and record keeping and general commitment to coordination
Outputs Effective e-government implementation nationwide	Improved services to citizens Improved productivity of government agencies Improved quality of life for the disadvantaged Broader public participation strengthening and maintaining good governance	IT surveys, progressive human development reports and Government agency reports E-government monitoring and evaluation committee	Network security, viability and authentication Inconsistency in report collation and record keeping
Activities Identify central coordinating location of server equipment, skills transfer and capacity strengthening for general maintenance	Profound establishment location, number of well trained personnel and general operation of entire network	Track records and capacity testing of know-how and skills E-government monitoring and evaluation committee	Biases, validity and default
Inputs IT infrastructure, trainers, transport and other utilities	Compatibility of equipment, qualification of trainers and utility worthiness	Worthiness check, track and asset tracking records	Viability and validity

C. Cost estimate and financing plan

The proposed budget is US\$ 3.09 million

Proposed donors: ADB, UNDP, EU, Japan International Cooperation Agency (JICA) and the Government of the Republic of Korea.

COST ESTIMATES AND FINANCING PLAN
(US\$ million)

Item	Government	Donors	Total cost
1. Consultants			
a. International consultants	0.00	0.00	0.31
b. Domestic consultants	0.00	0.00	0.06
2. Equipment and software			
a. Equipment	0.00	0.00	0.92
b. Software	0.00	0.00	0.40
3. Buildings and furniture			
a. Building	0.00	0.00	0.42
b. Furniture	0.00	0.00	0.12
4. Training, seminars and conferences	0.00	0.00	0.40
5. Research, development and surveys	0.00	0.00	0.24
6. Miscellaneous administration and support costs	0.00	0.00	0.12
7. Contingencies	0.00	0.00	0.10
Total	0.00	0.00	3.09

Government of Papua New Guinea: 10%

Donors: 90%

D. Implementation arrangements

According to the substantive roles of government institutions within the country, the most appropriate institutions to implement the project would be the Office of Information, under the Ministry of State Enterprises and Information. Relevant stakeholders who should also collaborate include the National Statistical Office and the Departments of National Planning and Finance (ITD).

Upon requirement of consultant inputs the principal areas of expertise would be the legal aspects, network security and validity, and crucial best and worst practices. The duration of the project was anticipated to be at least two years and the expected results are a broader Internet bandwidth with developed WAN and web sites and maximum accessibility to Government information and public feedback (general flow of information).

The plan for disseminating the expected outputs and outcome evaluation would be top-down.

IV. BENEFITS OF THE PROJECT

The expected benefits of the project are to improve the current operation of information and data flow within the government system. With e-governance, the flow of required information and correspondence would be fast-tracked. Efficiency and effectiveness will be promoted and time will be saved in accessing, processing or managing data online for socio-economic development.

Title: BOC single door entry system

Proposer: Dennis C. Pantastico, Chief, Planning and Management Information Division

Country: Philippines

Date: June 2004

I. INTRODUCTION

This proposal hopes to contribute to the achievement of a fully electronically enabled society, where citizens live in an environment that promotes access to technologies providing efficient government services and, ultimately, a better way of life. This proposed project is also relevant to the national leadership goals of trade liberalization and sound economic growth. In both developed and developing countries, efficient customs procedures and effective communications with both domestic and foreign partners are major factors in the acceleration of economic activities.

The Bureau of Commerce (BoC) accounts for 18 per cent of the total revenues of the national government. As such, it is imperative for the Bureau to embark on a modernization programme through the wise use of technology. Additional revenues that can be generated by BoC can be channeled by the national government towards poverty alleviation and development of infrastructure in the rural areas.

II. ISSUES

- The basic hardware, network and software environment of the BoC is reaching the end of its useful life. It was implemented in 1995.
- Minimal capital expenditure (US\$ 1 million for three years) was provided by the national government from the year 2000 to the year 2003.
- Current BoC operations marginally meet current mission requirements.
- Transaction processing time is slow.
- There is still a high level of reliance on paper forms.
- There is no credible measure for tracking actual daily revenue collection.

- Smugglers are using the access or control number (piggybacking) of legitimate importers in the declaration/ lodgment process owing to the absence of identification card system.

External issues include: the requirement for manual processing of licenses and permits by other government agencies, and that it takes at least four hours for the concerned government agency to transmit a license or permit required by BoC.

National issues includes the fact that the implementation of the national ID system is behind schedule (6 years now). Therefore, there is a need to educate government officials of the benefits of the national ID system. Without the system it is difficult to cross-reference/validate information with other government agency databases.

III. PROPOSED PROJECT

This project would create a customs service more responsive to clients' needs and supportive of government goals, adhering to world's best practices.

A. Purpose and output

The proposed project would provide BoC with a click-through dynamic end-to-end cargo clearance process that will enable a turnaround time of less than 30 minutes. It would also provide an enabling virtual environment that would support a one-stop-shop/one single-door entry for BoC transactions with the public, creating greater transparency in customs processes, providing up-to-the minute value information, as well as stopping revenue leakages and putting in place a stable working environment and ICT infrastructure.

Outputs would include:

- BoC single-door entry system
- Client identification system using smart cards
- BoC inter-agency information data exchange system
- BoC data centre

Note: All hardware and software would be installed between January and June 2006 by the winning contractor. This will be supported by the issuance of customs memorandum orders specifying the live implementation of the said project.

B. Methodology and activities

This proposed project will be limited to the implementation of a single-door entry system through the use of smart cards for a client identification system. The System would be used by the BoC and other government agencies for the issuance of licenses and permits required in the cargo clearance process. The client identification system will be limited to business enterprises dealing with BoC.

It will include the creation of an integrated network infrastructure for an inter-agency information data exchange between BoC and other government agencies.

The planned implementation date would be the third quarter of 2006, after the completion of the ongoing upgrade of the BoC backend systems.

Project framework

Strategies	Performance indicators/targets	Monitoring mechanisms	Assumptions and risks
Facilitation of trade	Faster turnaround of the delivery of goods. Quality service means more revenues for the Government and the private sector	Can be gauged through the publication of annual report	E-readiness of clients
Increase in revenue	Annual revenue target is surpassed	Can be gauged through the publication of annual report	Realistic revenue target set by the Department of Finance
To improve integrity in BOC	Public image of BOC is improved	Reliable surveys by the private sector	Support from the national leadership
Development of the project Definition should be done internally	Approved project Definition by the Commissioner and the National Economic Development Board (NEDA)	Approval by the NEDA Board	Funding is available
Funding requirement should be approved by a foreign donor	Money is available	Disbursement of funds from the foreign donor	Approval of the financial strategy by a foreign donor

Strategies	Performance indicators/targets	Monitoring mechanisms	Assumptions and risks
Counterpart fund should be included in the fiscal year covering the approval of the proposed project.	Counterpart fund is allocated by Congress	Disbursement of funds from the foreign donor	Support from the national leadership
Implementation of the project should be through outsourcing	Delivery of hardware and software by the winning contractor	The project is being used by the transacting public	Compliance of the winning contractor to the approved contract of services

C. Cost estimate and financing plan

COST ESTIMATES AND FINANCING PLAN (US\$ million)

Component/item	Foreign fund component (US\$)	Agency counterpart component (US\$)	Total cost
Servers	1.5		1.5
Workstations	0.5		0.5
Peripherals	0.05		0.05
Network devices	0.05		0.05
Software licenses	0.5		0.5
Application development	0.75		0.75
Civic works	1	0.3	1.3
Set up of utilities	0.1		0.1
Training	0.1		0.1
Materials/supplies	0.05	0.15	0.2
Consultancy	0.5		0.5
Administrative	0.2	0.2	0.4
Contingency	0.05		0.05
Total	5.35	0.65	6

D. Implementation arrangement

Task	Start date	End date	Responsible
Development of project definition	June 2004	December 2004	BoC
Approval of project definition	December 2004	December 2004	BoC
Approved funding by foreign donor	March 2005	April 2005	Foreign Donor
Approved counterpart fund of BoC	March 2005	April 2005	Department of Budget and Management
Development of request for proposal	May 2005	July 2005	BoC
Bid management plan	August 2005	December 2005	BoC
Project execution management plan	January 2006	June 2006	All
Live implementation	July 2006	July 2006	All

E. Sustainability

Assumptions:

The Bureau of Customs will charge its client a transaction fee for electronic submission of the electronic documents.

Type	Daily trans	Target (%)	Fee (P)	Revenue
Consumption	2,500	80	100	50,000,000
Informal	2,000	100	50	25,000,000
Warehousing	1,500	80	100	30,000,000
Transshipment	200	100	100	5,000,000
Payment	6,200	100	50	77,500,000
Export	2,000	80	100	40,000,000
Charging	1,700	100	100	42,500,000
RMLS	1,500	100	50	18,750,000
OLRS	8,000	100	20	40,000,000
Licenses and permits	400	100	200	20,000,000
On-Line Tracking	2000	100	10	5,000,000
Subscription and ads				11,750,000
Total				365,000,000
Total in \$US				6,500,000
ROI				3 years

Legend:

Type:	Type of transactions
Daily Transactions:	Daily transactions nationwide
Target:	The percentage of targeted number of transactions less the transactions being serviced by existing value added service provider.
Fee:	In pesos
Revenue:	Per annum

IV. BENEFITS OF THE PROJECT

- The entire Bureau of Customs organization
- The employees of the unit/division of the other government agencies involved in the project
- The transacting public

Title: FINLINK (financial linkages)
Proposer: Claricel Yuvienco-Mulato, Division Chief, Department of Finance
Country: Philippines
Date: June 2004

I. INTRODUCTION

The Department of Finance (DOF) takes the lead in providing a solid foundation in the creation of a sound economic environment conducive to business, savings, exports and capital inflows. The critical tasks of revenue generation, resource mobilization and fiscal financial management rest with the Department. These tasks are conducted with the support of the Department of Finance's attached bureaus and agencies. These include the Bureau of Customs, Bureau of Internal Revenue, Bureau of Treasury, Bureau of Local Government Finance, and the Municipal Development Fund Office. Hence, the integration of policies, information and efforts is a necessary activity to undertake to ensure that all efforts are implemented in line with the overall objective of the Department.

II. ISSUES

DOF recognizes that ICT is a tool towards ensuring a sturdy economic house. In line with this, many automated systems are being implemented within the Department. Among the automated systems are the following:

- Bureau of Customs
- Automatic systems for customs data
- Bureau of Internal Revenue
- E-filing of taxes
- Bureau of Treasury
- Debt monitoring financial automated systems
- Municipal Development Fund Office
- Local government unit financing database

These systems are data-rich but information-poor due to lack of an aggregate picture. Furthermore, these systems are beyond reach of the mother agency, the DOF, causing delays in access to information necessary for decision-making and policy formulation by the Department. This proposed project

therefore aims to improve the integration and access to information within the Department and also by the public.

The proposal, financial linkages (FINLINK), intends to provide an initial thin network for interconnection within the DOF and its attached bureaus and agencies and all government financial institutions thereafter.

The two primary objectives of the project are to:

- To establish a nationwide electronic linkage among the financial sector, starting with the DOF and its attached bureaus, for optimum resource and revenue information sharing and to serve as a model for government-wide networking;
- To deliver a more responsive, efficient and effective service to the Filipino people, while streamlining government functioning and improving economic performance.

The scope of this project is inspired by the statement made by Mr. Peter Moore of Microsoft Technology, “Smaller steps rather than one big plan”. Hence, this project is limited to the Department of Finance and its attached bureaus and agencies. It will cover the following:

- DOF network backbone
- Integrated infrastructure of the DOF and its attached bureaus and agencies
- FINLINK Portal

III. PROPOSED PROJECT

A. Purpose and outputs

Improved interconnection and integration will provide a single window or one-stop-shop for all financial-related government activities and information. This will allow the public to register-in-one using online forms, among many others. Further, an executive information system will be created, allowing DOF’s decision-makers to access all necessary information individually and collectively.

B. Methodology and activities

Further, three major activities would be undertaken to ensure success of the project. First, a needs analysis would be conducted to provide a detailed

project plan on the current requirements given the existing resources. Technical proposals from the private sector will also be solicited to ensure that needs analysis will be made based on the best interest of the Government.

Second, a policy framework would be developed and used as a blueprint for the implementation of the project. This would include policy on security, privacy, interoperability and interconnection.

Lastly, the contents that will pass through the network to provide immediate access to information would be defined. Below is a project framework table outlining indicators, monitoring mechanism and assumed risks.

Project framework

Strategies	Performance indicators	Monitoring mechanisms	Assumptions and risks
<p>Goals: To provide an initial thin network for interconnection of DOF and all government financial institutions thereafter</p>	Integrated system Interconnection	Inter-agency meetings and establishment of a memorandum of understanding	Political will to implement and cooperate
<p>Purpose: Establish a nationwide electronic linkage among financial sector, starting with DOF Deliver a more responsive, efficient and effective service to the Filipino people, while streamlining government functioning and improving economic performance</p>	Optimum resource and revenue information-sharing to serve as a model for government-wide networking Increased confidence of the public on the use of ICT	Frequency of access being made by the public	Technology should provide a 24/7 service
<p>Outputs: Encourage private participation particularly in assessment of technology requirements</p>	Increased coordination between government and private entity Increased private investment	Consultative meetings	Confidence of private entity and capacity of government entity
Encourage sharing of information among the Department and its attached bureaus and agencies	Effective and efficient flow of information	Timely reports	Timing and reliability of information particularly during the initial phase of exchange of information

Strategies	Performance indicators	Monitoring mechanisms	Assumptions and risks
Provide information campaign to set the minds of the public on the use of technology	Public awareness	Surveys	Cooperation of citizens
Provide capacity building to IT personnel	Increased technical capacity to administer system	Establishment of R&D	Turn-over of IT professionals
Review and update laws and legislation to ensure smooth implementation	Conducive environment to ICT sector		Can be apolitical

C. Cost estimate and financing plan

COST ESTIMATES AND FINANCING PLAN

(US\$ million)

Domestic/item	Foreign fund component (US\$)	Agency counterpart component (US\$) ^a	Total cost
Consultancy to conduct needs analysis			
International	0.03		0.03
Domestic	0.03		0.02
Backbone infrastructure	30		30
Development portals (system development and other related software)	0.15		0.15
Trainings	0.05		0.05
Contingencies	0.05		0.05
Total	30.3		30.3

^a will provide necessary workspace, necessary administrative and technical support staffs and necessary maintenance and operating expenses.

D. Implementation arrangements

The DOF will take a lead role in the implementation of the project. Its members include the Bureaus of Customs, Internal Revenue, Treasury, Local Government and Finance, Municipal Development Fund Office.

Other critical issues to be addressed are the review and updating of laws and legislation that might impede the implementation of this project. As a ministerial level department, DOF would be expected to be able to campaign effectively for the necessary laws, rules, regulations and legislations to be formulated and passed, in favor of implementing e-government, particularly in the government financial sector.

As previously mentioned, the project hopes to encourage private-sector participation, not only in providing financial support, but also in the provision of technical support. The important role of private sector in the implementation of e-government is recognized. In order to ensure private sector participation, the Government will continue to ensure an environment conducive to business. Particularly, DOF will enhance its incentive programmes to the private sector, in coordination and cooperation with government policy.

IV. BENEFITS OF THE PROJECT

While the coverage of this project is limited only to DOF, its attached bureaus, and citizens and businesses using or providing its services, the foreseen benefits are much broader. This project hopes to increase the confidence of the public in Government by strengthening the DOF's capacity in managing the country's financial resources. This will not only minimize revenue shortfalls but will ensure the integrity of the flow of resources, by limiting opportunities for graft and corruption from within the Department and its attached bureaus and agencies.

Title: Capacity-building through e-learning along the Thailand-Laos-Viet Nam ICT corridor

Country: Thailand

Date: June 2004

I. INTRODUCTION

International assessments of Thailand's international competitiveness ratings, from such institutions as the World Economic Forum, have improved slightly over the past several years but are consistently suppressed by low innovative capacity, weak public institutions, lack of human capital, poor secondary/tertiary enrolment, and relatively low ICT diffusion. The World Economic Forum, in its 2003/4 *Global Competitiveness Report*, ranked Thailand 32 out of 102 countries overall, but 37th in innovation and 45th in ICT diffusion. The Government has responded by establishing institutions and specific programmes to address these weaknesses. The National Competitiveness Commission (NCC) was launched in May 2002 to benchmark sectoral competitiveness and identify and prioritize policy measures to promote productivity growth, and the Ministry of Information and Communication Technology (MICT) was established in November 2002.

Nowhere are these gaps more acute than in Northeast Thailand (Isaan). Of Thailand's 76 provinces, 17 account for 70 per cent of Thailand's poor, of which 15 are in Isaan. The Thai Government has focused particular attention on improving the competitiveness of the Northeast due to this high concentration of poverty. The sources of poverty in Isaan, as described in the World Bank's *Social Monitor*, are low productivity of agriculture due to a combination of suboptimal landholdings and natural resource endowment, a lack of off-farm employment opportunities and a relative lack of human capital.

The Thai Government's strategy to address the competitiveness gap in the Northeast rests on building skills to increase the quality of human resources, regional economic integration, both of the local economy and with neighbouring countries in the region, natural resources management and creating opportunities for the poor. This proposed project utilizes ICT as an enabler to achieve these poverty-reduction objectives.

II. ISSUES

- The ADB has shown extensive interest and support in e-education and the knowledge society. Furthermore, in the

context of e-government, capacity building through e-education is key to achieving the goals of e-government, not just in Thailand, but indeed through Thailand-Lao People's Democratic Republic-Viet Nam (the three countries which would form the ICT corridor proposed in this project). Much of knowledge and experience gained can be applied further through the Greater Mekong Subregion.

- The Thai Government, through the MICT, has already initiated a limited-scale roll-out of a similar project focusing on 200 schools in the Northeast Thailand. Furthermore, the Government has given the Lao People's Democratic Republic over US\$ 1 million of aid in the form of Internet connectivity and hardware in each of the country's 18 provinces, providing it with a basic IP infrastructure. This is the first part of the massive infrastructure investment needed for that country's component of the TLV ICT corridor.
- This is consistent with the ADB long-term goal of providing Technical Assistance (TA) with a view of providing the groundwork for large-scale infrastructure investment. Upgrading and installing the IP infrastructure in the Lao People's Democratic Republic and Viet Nam are prime targets for ADB funding.

What is missing from this effort is an efficient, information-based tool to link the providers of tertiary education and skills – public and private universities and colleges, vocational training institutes – to the specific outcomes demanded by firms and communities as consumers and a regional approach. The proposed technical assistance helps to integrate the skills and technology agenda, and provides a platform for Thailand to lead Viet Nam and the Lao People's Democratic Republic in the use of ICT for skill development and poverty reduction.

III. PROPOSED PROJECT

Building skills

The project will take a unique approach by developing a measurement instrument akin to productivity and investment instruments commonly used by economists. However the instrument would need to be adapted considerably to address questions of relevance to educational institutions. The core methodology would seek to understand what influences the productivity of educational institutions. This treats skill or education providers as “firms” that convert a

set of input variables, such as staff size, location, governance, curricula, facility, administrative budget, teachers and teacher wages, to output variables, such as graduation, placement and wage premium. This will allow key stakeholders, including firms that hire graduates, local communities and policy makers, to understand which institutions have been most efficient in producing graduates, which have had the most effective performance in placement and to compare/benchmark specific variables, such as curricula or local teacher wages, with those of other institutions. This, in turn, will stimulate a market-based growth of more successful institutions, thereby ultimately increasing the quality of output. The data could also be used by policy makers and managers to design interventions that improve the effectiveness of institutions along the ICT corridor.

Economic integration and opportunity

Khon Kaen, the commercial and political capital of the Northeast region, was recently recognized as one of Thailand's three ICT cities. This has brought with it a new era of hope and the prospect of exciting new projects to help uplift the quality of life, create opportunities for the people and to give them a glimpse of the knowledge-based society.

To enable regional integration with the Lao People's Democratic Republic and Viet Nam, it has launched the TLV ICT Corridor. This information superhighway through the three countries connects the Northeast of Thailand to Vientiane in the Lao People's Democratic Republic and Hanoi in Viet Nam. It will explore the circumstances through which development will flow along the path of data and development in the hubs of ICT cities, which can be transferred to smaller nodes down the line. It is part of a larger push to create new economic opportunities through broadening exchange and market integration in the Greater Mekong Subregion.

There will be three ICT institutes set up under a "federation of universities" – the Mekong Institute of Technology in Nongkhai (Thailand), Vientiane and Hanoi. Capacity-building will take place in the form of hiring and training of professors, researchers, students and knowledge workers. Other components include information sharing through ICT and the establishment of a virtual university offering both broadcast distance-learning courses and a learning knowledge base. The TLV ICT Corridor project will help establish standards and software and business incubators shared among the three member nations. As such, it is intended to itself become a source of significant new job creation.

A. Purpose and output

The proposed technical assistance has three components:

1. **Productivity analysis of skill delivery institutions.** Skill delivery will be enhanced through undertaking a productivity analysis of institutions that provide skilled personnel, focusing on Northeast Thailand, the Lao People's Democratic Republic and Viet Nam. The grant resources will be used to execute a detailed survey of 90 per cent of the educational and vocational training institutions and deliver cleaned, coded survey results. An academic institution analysis tool will be developed in consultation with NESDB, the Ministry of Education and the National Competitiveness Commission. Working in conjunction with MICT, the grant will also focus on the effective use of ICT in education. ADB and the Government would jointly interpret the survey results. A substantial database of institutional performance will be developed.
2. **Benchmarking portal of skill delivery institutions.** The portal is designed to enable transparency, accountability and competition among institutions that educate and train personnel. The portal will enable firms – as customers of the tertiary/vocational educational system – to compare alternative sources of obtaining skilled personnel, evaluate the quality of output from the institutions, as measured by placement, retention and wage premium, and understand the productivity of different institutions in the utilization of educational inputs – faculty wages, facility curricula. The portal will allow users to rank institutions according to relevant criteria – most effective in delivering particular skills, highest placement rates, etc. This tool is designed to leverage the increasing decentralization of educational policy, through which secondary and tertiary institutions will increasingly be held accountable to local communities. The launch of the portal will need to be supported with awareness raising activities at the user and community level. This will be done through identification of civil society and private sector partner organizations. Once the site has established a reputation as an objective and useful tool, there are a number of possible options for cost-sharing with the private sector in design and delivery of the portal, including issuance of specialized reports on a fee basis, contributions of underlying hardware and software and, possibly a public relations programme. It is recommended that this be minimized in the early stages.

3. **Capacity-building using e-learning.** The final component will build capacity of service providers along the ICT corridor (educational institutions), users (through business associations and non-governmental organizations) and policy makers to utilize the proposed ICT solutions and to utilize e-learning as a method to promote regional integration. A project coordinator will be deployed to oversee the effort to address these two gaps identified in Thailand's competitiveness ratings, which are particularly acute in North-east Thailand. It is anticipated that the e-learning curriculum would be based on needs from investment climate surveys and the parallel survey of benchmarking and analysing institutions.

B. Methodology and key activities

The development objective of the technical assistance is to reduce poverty along the TLV ICT corridor by:

1. Increasing the productivity of skill and educational institutes.
2. Analysing the factors that influence the productivity of educational and training institutions along the corridor.
3. Facilitating competition and transparency among skill providing institutions.
4. Strengthening the region's capacity for technological innovation.
5. Promoting efficient use of public and private resources for ICT education.

Expected outputs:

- Component 1: A completed survey of 90 per cent of the educational and training institutions, analytical report of findings, and a relational database containing the survey findings.
- Component 2: An Internet-based portal linked dynamically to a database containing the survey results.
- Component 3: Training of stakeholders in e-learning and in the development of an e-learning curriculum to support the region covered by the TLV ICT Corridor.

Monitoring indicators:

- Survey instrument designed
- Survey firm indentified
- Sample frame and sample of designed (skill, education and vocational training institutions)
- Survey executed
- Data cleaned and coded
- Web and DBMS firm identified
- Awareness building
- Portal launch
- Web site “hits” using tracker software
- Training programmes delivered for (a) policy makers, (b) educational institutions; (c) users (firms, CSOs).

C. Cost estimate and financing plan

ADB: US\$ 1,250,000
 Government (in-kind and/or cash): US\$ 50,000 (in-kind)
 Other (state which): US\$ 50,000 (ADB administrative budget, in-kind)

COST ESTIMATES AND FINANCING PLAN
 (US\$ million)

Item		Government	Donors	Total cost
1.	Consultants			
	a. International consultants (capacity-building e-learning specialist)	0.00	0.00	0.02
	b. National consultants (project manager)	0.00	0.00	0.05
2.	Equipment and software			
	a. Equipment	0.00	0.00	0.00
	b. Software	0.00	0.00	0.00

	Item	Government	Donors	Total cost
3.	Buildings and furniture			
	a. Building	0.00	0.00	0.00
	b. Furniture	0.00	0.00	0.00
4.	Training, seminars and conferences (Training workshop x 30)	0.00	0.00	0.06
5.	Research, development and surveys	0.00	0.00	0.00
	a. Productivity tool development			0.15
	b. Benchmarking database portal			0.05
	c. Tool deployment (3 countries)			0.15
6.	Miscellaneous administration and support costs	0.00	0.00	0.05
7.	Contingencies	0.00	0.00	0.00
	Total	0.00	0.00	1.25

D. Implementation arrangements

The executing agency for the Government will be the Ministry of Information and Communication Technology, which will liaise closely with the Ministry of Education, Ministry of Foreign Affairs, NESDB, the Lao People's Democratic Republic, Viet Nam and the regional government in Northeast Thailand.

The duration of the technical assistance is intended to be 18 months.

The proposed project makes use of Thai consultants for all components except the e-learning component which will employ consultants according to prevailing ADB guidelines.

Title: Development of a CIO peer review financing model for e-government

Country: Thailand

Date: June 2004

I. INTRODUCTION

Thailand is in the midst of a highly aggressive government restructuring programme which started in 2002. One of the first fruits of this restructuring was the establishment of the Ministry of Information and Communication Technology (MICT) in October 2002. One of the mandates of the MICT is to enable e-government throughout Thailand.

The state of e-government in Thailand has been challenged by the data silo effect. Each Ministry still controls its own IT budget and the level of co-operation between ministries is lower than expected.

One of the key developments in the bureaucratic reform process is the creation of the CIO function. This position is held by the number two in each ministry or department – i.e. Deputy Permanent Secretary or Deputy Director General or University Vice-President. The CIO function has unfortunately remained rather ceremonial and cooperation on IT projects remains led by the bureaucracy and not the technocracy.

II. ISSUES

Since its establishment, the Bureau of the Budget has transferred the function of budget approval from the Bureau to MICT. The Ministry has veto rights over all projects, and has to formally review any project over 5 million Baht. However, thus far this has not become as powerful a tool as was expected and has instead become an added layer of red tape. By the time the proposals get reviewed, the work has already been done – often separately and without integration with other ministries or projects. The CIO review function is only to check against technical criteria. What is missing is a level of inter-organizational cooperation at an early stage to create synergies of scale and of thought.

MICT's own experience in budgeting has also revealed problems in the budget process. IT infrastructure is, by nature, a long-term goal, often incompatible with the short-term political and annual budget cycle goals. Yet,

the benefits that stand to be gained from e-government can be experienced not only in the organization that initiated the project, but throughout government.

During the present ADBI/ESCAP Regional Workshop, Stephen Braim of IBM Australia made a presentation that explored how the state government of Victoria had established a virtual fund for central e-government. The Fund is an aggregation of individual department-level funds. Funds are accessed through a business proposal format. For each IT project funded, each department is required to defend their budget against a peer review. They must justify how much worth, be it through increased revenue or reduced costs, their investment would bring to the state of Victoria. The average over five years was reported to be 1:1.35 (for every \$ 1 invested in IT project, a realisation of \$ 1.35 resulted in the form of either savings or increased revenue). This model also frees Governments from the usual budgeting process.

This concept of a peer review could be useful in Thailand if applied to the CIO function. If Thailand implemented a similar CIO-based peer review, this would compel CIOs to cooperate and to pursue more synergistic activities in order to increase the value of their proposals. This would also alleviate the bureaucratic burden on the ICT ministry, enhance the CIO function, and encourage Departments and Ministries to cooperate and integrate.

Given the severe limitations on foreign loans from the current Government, any project directly aimed at an ADB macro-loan is currently not up for consideration.

However, technical assistance would greatly enhance the capacity of the Thai Government in expediting procurement. Government efficiency will have an immediate effect on the IT industry and will have an effect in enhancing overall economic growth, thus meeting the ADB's more general goals for development in the region.

III. PROPOSED PROJECT

A. Purpose and output

The project seeks technical assistance to conduct a study of best practices of e-government funding and cooperation in countries with more than six million citizens. This study will evaluate the above-mentioned State of Victoria model and compare it to a selected number of other successful models. From this, a definitive, distributed, CIO-centric funding model will be developed in the context of Thailand. Technical assistance would be required for creating the guidelines for MICT control over the fund and the framework within which the peer review would be conducted. Finally, the Ministry would

send the proposal to the Cabinet of Ministers for approval of the establishment of the fund and the legislative requirements needed to empower such a major change in function. Such a process would be greatly expedited by ADB/ADBI assistance, as the earliest this project could start with local funding would be the 2006 fiscal year, as such activities have not been budgeted for the 2005 fiscal year.

B. Methodology and key activities

Since the Workshop, the Permanent Secretary and senior officials at the Ministry have met with the IBM representative. The Ministry is eager to build on the awareness and goodwill that the Workshop has generated and move forward with implementation, possibly with the same IBM team. This aggressive time frame should allow for funding mechanisms to come online as of the 2005/2006 fiscal year starting in October 2005.

Objectives:

- To conduct a study of best practices in e-government funding.
- To evaluate successful practices with identified quantitative tools.
- To develop a CIO-centric e-government procurement funding model for Thailand.
- To create synergy between government agencies with a peer review approach.

Expected outputs:

- Study and ranking of leading e-government funding proposals.
- Detailed technical and social framework for CIO-based peer review.
- Details on fund and legal tools thereof.
- CIO conference, workshop and awareness programme.

C. Cost estimate and financing plan

ADB	700,000
Government (in-kind)	50,000

ADB / ADBI (in-kind)	50,000
Total	800,000

COST ESTIMATES AND FINANCING PLAN

(US\$ million)

Item	Government	Donors	Total cost
1. Consultants			
a. Project manager	0.00	0.00	0.05
2. Equipment and software			
a. Equipment	0.00	0.00	0.00
b. Software ³	0.00	0.00	0.00
3. Buildings and furniture			
a. Building	0.00	0.00	0.00
b. Furniture	0.00	0.00	0.00
4. Training, seminars and conferences	0.00	0.00	0.05
5. Research, development and surveys	0.00	0.00	
a. Paper on e-government studies			0.2
b. Paper on funding/review framework			0.2
c. Legal framework development			0.2
6. Miscellaneous administration and support costs	0.00	0.00	0.00
7. Contingencies	0.00	0.00	
Total	0.00	0.00	0.7

D. Implementation arrangements

Execution would be through MICT in conjunction with non-ministerial entities including, but not limited to, the National Economic and Social Development Board and the National Information Technology Centre, National Science and Technology Development Agency.

The timetable would be a period of nine months starting in August 2004. A rapid roll-out is necessary in the light of fiscal year budgetary constraints which would otherwise add one more year to the time frame.

Title: E-portal for the Government of Viet Nam
Proposer: Do Van Thanh, IT Center, Ministry of Foreign Affairs of Viet Nam
Country: Viet Nam
Date: June 2004

I. INTRODUCTION

Currently, Viet Nam does not have a government web site for providing official information on government policies and activities for the public. However, the Vietnamese Government considers state industrialization and modernization some of the most important measures of economic growth, poverty reduction, sustainable development, political stability and national security.

The Government has advocated accelerating the use and development of ICTs. ICTs should be widely used in all sectors and are one of the most important factors for socio-economic development and national defense and security. As a result, the Government has drafted an action plan and a master plan on ICT, which defines the key IT applications which should be sustained or developed and implemented to accelerate the use and development of ICTs in Viet Nam.

Viet Nam has applied for WTO membership. In an agreement signed between Viet Nam and the United States in 2002, the Government committed itself to the transparent provision of government policies. The Viet Nam government web site is now one of the main vehicles for the quick, accurate and efficient dissemination of government policies.

II. ISSUES

In Viet Nam at present currently, most state administrative organizations at the central and provincial levels and about 50 per cent of enterprises use IT applications in state management activities and business operations. Furthermore than 10 per cent of enterprises, over half of the ministries and a third of the provincial governments have their own web sites. Some of the larger cities have also developed their own city e-portal. There are about 300 web sites providing information on education, e-learning, online examinations, new student procurement and so on. All 246 universities and colleges, 617 of 622 professional or technique secondary schools, and 1,923 of 2,044 the secondary schools have Internet connection and use. About 20 universities have their

own web sites. However, most web sites are not interactive and in many cases the information on these web sites is not unified with the policies and activities of the Government. Therefore, developing an one-stop e-portal for government may help to unify and improve the provision of government information and activities over the Internet.

The portal would link not only to the existing ministry, provincial and enterprise web sites, but it could also integrate information and data from these web sites and other management information systems.

The WAN network for state administrative organizations was built in 1997 (government WAN or CPnet). This network connected the Office of Government central LAN with all other ministerial and provincial LANs. The WAN was used to transfer administrative documents, acquire information and data via administrative reports and for the project on developing an e-portal for the Vietnamese Government. This WAN will provide the technique infrastructure for the government e-portal, therefore the project must begin by upgrading and improving the current government WAN network.

III. PROPOSED PROJECT

A. Purpose and output

The project would use ICT to:

- Support and enhance state management activities and respond to the information demands of the Government and the Primer Minister, as well as the Office of Government;
- Provide quick, accurate and complete information on government policies and activities and the socio-economic development of the provinces; and
- Acquire public feedback on government policies to make government decision-making more responsive to public concerns and needs.

Output of the project would include:

- Improvement of the government WAN network;
- Development of a government e-portal, enabling it to link to existing ministerial, provincial and enterprise web sites and to integrate information from these web sites and others;

- The e-pPortal should be an “e-first port” for foreigners who want official information about Viet Nam.

B. Methodology and key activities

The government e-portal development proposal was approved by the Prime Minister at the end of 2003. Following this, a steering committee for the future project was established. The chairperson of the steering committee is the Minister of the Office of Government. Its membership is drawn from the ministerial and deputy ministerial level of the Government. Supporting the steering committee is the project management division of the Office of Government. Work on drafting a detailed project document is now under way.

Project framework

Design summary	Performance indicators/targets	Monitoring mechanisms	Assumptions and risks
Goals	Government operations are more transparent and effective; people can participate in the development of important government policies To support economic growth, social and political stability To support Viet Nam’s membership in international organizations, in particular WTO	Reporting requirements for steering committee and the project management board Economic contracts with consultant organizations, independent experts, IT companies	Viet Nam does not join the WTO Complexity of government operations Citizens’ interest in participating in state administrative management activities of government Capacity of partner organizations
Purpose	Citizens, socio-economic organizations, government organizations, employees, an individuals outside of Viet Nam can access all ministerial, provincial and large enterprise web sites via the government e-portal Central and provincial government can acquire public feedback Decisions of the Government and the Prime Minister are more responsive and effective	Activities of the project management board and of the steering committee Activities of consultant organizations or independent experts Implementing a careful check before acceptance	Lack of necessary resources (in particular human and financial resources, including after the project) Lack of comprehensive measures during the implementation of the project

Design summary	Performance indicators/targets	Monitoring mechanisms	Assumptions and risks
Outputs	<p>Government WAN improved and upgraded, satisfying requirements defined in official document</p> <p>E-portal satisfies under content and technology requirements in official document of the project</p>	<p>Activities of the project management board</p> <p>Contracts with IT companies and vendors</p> <p>Activities of consultant organizations or independent experts</p> <p>Review of contract and design before implementation</p>	<p>Government WAN upgrade does not meet Government needs, in particular network security</p> <p>E-portal lacks necessary content</p> <p>Technologies used for developing e-portal are quickly surpassed</p> <p>Indigenous IT companies do not have enough capacity</p> <p>Implementation runs overtime</p>
Activities	<p>Identify financial and human resources for implementing the project and managing the e-portal after completion of the project</p> <p>Develop official project document for the e-portal design</p> <p>Improve existing web sites</p> <p>Review each activity before final implementation</p>	<p>Activities of the project management board and the steering committee</p> <p>Contracts signed with the selected IT companies, vendors, consultant organizations or independent experts</p>	<p>Financial resources are inadequate</p> <p>Official design document is not well prepared</p> <p>Selected technologies are not appropriate</p>
Inputs	<p>Web sites of ministries, provinces and large enterprises</p> <p>Existing government WAN and LAN networks of ministries and provinces</p> <p>Consultant organizations or independent experts</p>	<p>Organization law</p> <p>Financial and budget law</p> <p>Science and technology law</p> <p>Activities of the project management division and the steering committee</p> <p>Contracts signed with selected consultant organizations or independent experts</p>	<p>Selection of inappropriate consultant organizations or independent experts</p>

C. Cost estimates and financing plan

COST ESTIMATES AND FINANCING PLAN (US\$ million)

Item	Government	Donors	Total cost
1. Consultants	0.2	0.3	0.5
a. International consultants	0	0.2	0.2
b. National consultants	0.2	0.1	0.3
2. Equipment and software	5	2	7
a. Equipment	2	1	3
b. Software	3	1	4
3. Buildings and furniture	1.5	0	1.5
a. Building	1	0	1
b. Furniture	0.5	0	0.5
4. Training, seminars and conferences	0.2	0.5	0.7
5. Research, development and surveys	0.1	0.1	0.2
6. Miscellaneous administration and support costs	0.3	0	0.3
7. Contingencies	0.2	0	0.2
Total	7.5	2.9	10.4

D. Implementation arrangements

The Office of Government is the host organization for the development of the government e-portal. The Office is a state administrative management organization, as is a ministry.

The project requires consultant inputs in the following areas:

- Preparation of official project documents (July-October 2004);
- WAN design and security (October 2004-May 2005);
- Selection of technologies for development of e-portal (October 2004-February 2005);
- Development of e-portal, in particular the integration of information and data from many web sites and management information systems (January-June 2005);

- Trial launch of the e-portal (July 2005); and
- Official launch of the government e-portal (28 August 2005).

IV. BENEFITS OF THE PROJECT

- Citizens, socio-economic organizations, government employees and individuals and businesses overseas can access online official information about the Government of Viet Nam (including central and provincial governments) via one “portal”;
- Facilitation of activities of state administrative management organizations and increased transparency and effectiveness; and
- Enhanced international relations of the Government of Viet Nam.