CURRENT STATUS AND ISSUES OF E-GOVERNMENT IN THE PHILIPPINES

Jose Gil K. ESCALANTE, Jr.
Programmer
NATIONAL COMPUTER CENTER
jgil@ncc.gov.ph

I. MAJOR IT INITIATIVES

In view of the current programs of the Philippine government to be globally competitive, the government has undertaken initiatives towards the improvement of the current situation of Information Technology (IT) in the Philippines namely: National Information Technology Plan for the 21st Century or IT21, Medium-Term Philippine Development Plan or “Angat Pinoy 2004”, Government Information Systems Plan (GISP), RPWEB, the E-Commerce Law, and the Information Technology and E-Commerce Council (ITECC).

A. National Information Technology Plan for the 21st Century or IT21

The National Information Technology Plan for the 21st Century, or IT21, documents the Philippines’ common vision and broad strategy to spur the country to global competitiveness through IT. This document will serve as a framework to guide IT development in the country over the next seven (7) to fifteen (15) years. The vision is the transformation of the Philippines as Asia’s Knowledge Center in the 21st century.

To attain the vision of IT21, a three-phased action agenda was incorporated. The first phase which covers the years 1998-2000 is called the period for consolidation and providing new impetus to our efforts. The second phase pertains to the period 2001-2005, which is called the period for building on the momentum we have gained. The third phase covers the period 2006-2010 which is the realization of our vision.

Phase I. Providing the Impetus

By the year 2000, the Philippines will have laid the infrastructure for every business, every agency of government, every school, and every home in the Philippines to have access to IT.

Phase II. Building Up Momentum

By the year 2005, IT use will be pervasive in daily life. Philippine companies will be producing competitive IT products for world markets.

Phase III. Realizing Our Vision
Within the first decade of the 21st century, the Philippines will be a Knowledge Center in Asia: the leader in IT education, in IT-assisted training, and in the application of information and knowledge to business, professional services, and the arts.

B. Medium-Term Philippine Development Plan (MTPDP) or “Angat Pinoy 2004”

The MTPDP is the country’s blueprint for socioeconomic development until 2004. It contains the various policies and strategies designed to guide the country along the road to sustainable development and growth with social equity.

In order to raise Philippine productivity to international benchmarks, the government will complement its competition policies with programs aimed at encouraging investment in education, science and technology, including IT. Foreign capital and technology shall also be encouraged to augment domestic resources and to improve the country’s technological stock. These shall raise the productivity of Philippine industries and redound to a sustained source of growth in output and employment. These shall link rural communities in the geographically separate areas of the country to markets of goods and services, including international markets. New technology, including IT, shall be increasingly used to significantly raise productivity.

**IT-RELATED INITIATIVES IN MTPDP:**

i. **Industry and Services**

Promotion of Electronic Data Interchange (EDI) and Electronic Commerce in trade transactions through the utilization of electronics, optical and similar medium and ensuring security, authenticity and reliability of electronic records and documents.

ii. **Infrastructure Development**

The communication sector shall promote open competition for greater investment so that it can keep pace with the latest technologies in the area of communications.

a. Efficient competition will be promoted by:

- Adopting clear guidelines for interconnecting all public networks.
- Encouraging settlement schemes to ensure financial viability of local exchanges and other access providers including mobile telephone service.
Enforcing full interconnection and sanctions for noncompliance of franchises.

b. The policy and regulatory system shall be strengthened to resolve issues arising from interconnection, toll settlement, radio-spectrum usage and monitoring, and complex technical options under a multi-operator business environment.

c. A new set of regulatory guidelines in the use of Internet for other applications shall be developed, as well as on the introduction of emerging policies.

iii. Governance and Institutions Development

The government shall expand the use of IT to enhance productivity, efficiency and effectiveness:

a. Promoting proper and judicious use of IT to ensure compatibility, sustainability and cost-effectiveness vis-à-vis adopted systems and procedures and to create a value chain for the customers / clients of government agencies.

b. Institutionalizing IT reforms, administrative systems and procedures to speed up the use and acquisition of IT resources and the development and implementation of IT projects.

C. Government Information Systems Plan (GISP)

The “Philippine Government On-line” program is a major strategy adopted by the government in reforming governance today. The Government Information Systems Plan (GISP) is the framework and overall plan that will make this happen. It provides the roadmap for putting in place the enabling infrastructure, environment, and policies to achieve the vision of development in the Medium-Term Philippine Development Plan or “Angat Pinoy 2004”, and IT21, which is to make the Philippines a knowledge center in Asia. It sets the framework for electronic governance and the goal of making government more accessible to the citizenry at all levels nationwide. It subscribes to the creation of a globally competitive environment by building on the existing capacities of agencies, particularly on the development of frontline and common application information systems for greater efficiency and productivity in government operations. It likewise prescribes policies to improve implementing capacities of government institutions, as well as the strategies for the integrated and coordinated development of information systems, as well as the more rational procurement and deployment of information and communications technology (ICT) resources in government.
Information Systems Strategic Plan (ISSP) – this embodies a government agency’s overall strategic plan for the development and implementation of information systems, the use of IT, and the corresponding resource requirements over a fixed long-term period (planning horizon). It is a natural component of the Agency’s planning process and should be considered a tool to ensure IT application in strategic areas of government concern and map out its IT direction. All government agencies are required to prepare a 5-year ISSP, which is reviewed by the National Computer Center. The latter sees to it that an agency’s ISSP is consistent with the GISP.

D. RPWEB

In 1997, in response to the need to immediately set in place a viable and cost-effective communication and information exchange system for greater speed and efficiency in intergovernmental communications and transactions, at the same time ensuring wider and faster access to government information and services among government agencies and the public, then President Fidel V. Ramos ordered the establishment of RPWEB, which directs all government agencies and instrumentalities including all local government units to undertake electronic interconnection through the Internet.

i. RPWEB’s major tasks:

a. Interconnect all government offices and units, including schools, colleges and universities, government corporations, as well as those at the local level, by authorizing the use of savings for Internet access, through any Internet Service Provider (ISP) in their area, to facilitate faster communication and data interchange in government.

b. Interconnect all ISPs through Internet exchanges for greater connectivity among users in the country.

c. Speed up implementation of the telephone roll-out programs, particularly in unserved areas in the country.
ii. **Basis for facilitation of the establishment of RPWEB:**

a. Ensure that the ISPs servicing government offices and the academe are interconnected with each other for purposes of local transmission via the Internet and through network access points which should also be connected to each other at no cost to the government.

b. Ensure that the telecommunications carriers give priority, as may be necessary, to the telephone dial-up lines, leased/dedicated lines and trunking facility requirements of the ISPs.

c. Ensure the completion of telecommunication facilities programmed for 1998 under the Service Area Scheme by requiring all telecommunication carriers to speed up the implementation of their telephone roll-out programs, especially in the regions/provinces.

d. Study the possibility of reducing or maintaining at minimal levels the tariff rates on international and local leased/dedicated lines to ensure greater affordability of these services, as well as other measures that will encourage the wider use of and access to the Internet.

E. **E-Commerce Law of the Philippines**

Recognizing the importance and vast potential of Internet, e-commerce, and electronic transactions in the country, the government and private sector accelerated its implementation with the passage of Republic Act 8792 or the Electronic Commerce Law last June 14, 2000.

This law aims to facilitate domestic and international dealings, transactions, arrangements, agreements, contracts and exchanges and storage of information through the utilization of electronic, optical and similar medium, mode, instrumentality and technology to recognize the authenticity and reliability of electronic documents related to such activities and to promote the universal use of electronic transaction in the government and general public.

This law shall apply to any kind of data message and electronic document used in the context of commercial and non-commercial activities.

i. **Salient points of the E-Commerce Law**


b. Retention of documents in electronic form.

c. Recognition and validity of electronic contracts.

d. Guidelines for use of transport documents in carriage of goods.
e. Mandate to all government departments and offices to accept electronic data messages and documents in their transactions within two years from the effectivity of the Act.

f. The directive for the Department of Trade and Industry to function as the country’s E-Commerce authority.

g. The penalties to crimes such as hacking, cracking, and piracy offenses.

F. Information Technology and E-Commerce Council (ITECC)

The ITECC was formed in 2000 from the merger of the National Information Technology Council and the E-Commerce Promotion Council. It is a policy-making and direction-setting body on all matters relating to information and communications technology. When the ITECC was created, the Secretary of Trade and Industry was designated to be the Chairman. However, when President Gloria Macapagal-Arroyo became the President, she stressed the importance of IT and decided to personally head the council.

The ITECC has ten (10) government sector representatives who are primarily the heads of the key departments involved in IT development, and eight (8) private sector representatives, one of whom is designated as co-chairman of the council. It has the following five (5) strategic committees, all of which have government and private sector representatives:

- Information Infrastructure Development
- Human Resource Development
- Legal and Regulatory Issues
- Business Development
- E-Government Implementation

II. STATUS OF E-GOVERNMENT AND E-COMMERCE IN THE PHILIPPINES

With the introduction of the Internet in the Philippines seven years ago, there has been much effort to utilize its potential in almost every aspect of society, whether in the government, private sector or academe. Much has been done to improve the telecommunications infrastructure and Internet access in the country. Both the government and the private sector have undertaken various programs to utilize the Internet and e-commerce in their operations.

A. Telecommunications

The current liberalized telecommunications environment has so far resulted in the operation of the following: 11 international gateway facility operators (those that can provide international long distance calls), 5 cellular mobile telephone system operators, 15 paging companies, 7 inter-exchange carrier licensees (those that service other carriers’ traffic using their own networks) and 3 fixed line operators
(those with landline services) in one area. There are 2.8 million fixed (land line) phone lines subscribed at present while cellular mobile telephone service subscriptions reached a subscriber base of 4,298,000 as of May 2000, from 2,849,880 in 1999. Telephone line charges is fixed at an average of US$20-$25 per month.

B. Internet Access

There are around 200 Internet Service Providers (ISPs) in the country today with the major providers offering 56K service at an average rate of $0.50 per hour. Digital Subscriber Line (DSL), wireless and fixed broadband, cable, satellite Internet facilities are now being offered as well.

The number of Philippine Internet users ranges from 2 to 3 million. Contributing heavily to its growth are Internet cafes (rentals) that allow Filipinos who don’t own computers to gain access to the facility at an affordable price at US$0.25 to $1.00 per hour.

Estimates by the International Data Corporation (IDC) show Internet-related revenue in the country amounting to $146.75 million in 2000 from $52.93 million in 1999, and projects revenue growth at $417.88 million by 2001.

Penetration of computers in Filipino households has increased significantly and presently estimated to be at 1 million with more than half having access to the Internet.

C. E-Government

At the policy level, the government is continuously updating its plans and programs to set clear directions to develop and accelerate the use of IT. There are around 250 government agencies connected to the Internet, and majority of them have websites offering information and services to the general public. There are already initiatives in government in the application of e-commerce. Some of them are:

i. GTEBNet

The Garments and Textile Export Board’s electronic network for textile quota administration, export documentation, and import authorization that started in 1994. It is intended to serve more than 1500 garment exporters to issue clearances for garments, textiles, carpets, yarn, fiber, etc. to other countries.

ii. SSSNet

The Social Security System’s electronic network allows companies to transact electronic monthly contribution lists, payment orders, credit/debit
advice notices. On the consumer side, SSSNet has an interactive voice response system that allows its members to inquire about their contributions and other member services.

iii. **BOC EDI Gateway and Super Green Lane**

The Bureau of Customs electronic network allows companies to transact with the agency through remote computer workstations and make a shipping declaration to add to the speed and efficiency of the Customs clearance process. The Super Green Lane intends to provide the top importers ship-to-truck release of goods.

iv. **E-Census**

The National Statistics Office website and call center allow Filipinos to request for birth, marriage, no-marriage, and death certificates electronically.

v. **Electronic Procurement System**

The Department of Budget and Management’s Internet-based 24-hour procurement system allows government agencies, state colleges and universities, government owned or controlled corporations, and local government units to post bid notices and get responses from accredited suppliers.

vi. **Electronic Filing and Payment System**

The BIR’s Electronic Filing and Payment System is the electronic processing and transmission of the taxpayers tax return information including attachments and taxes due to the government, made over the Internet through the BIR website. E-Filing uses BIR-supplied validation and computation rules to efficiently check for completeness and correctness of taxpayer inputs. E-Payment is the on-line payment and confirmation process between the system and participating banks. The Bureau of Internal Revenue’s e-filing system provides an alternative to taxpayers to file returns online.

vii. **PCs for Public Schools**

Under the Department of Education, Culture and Sports’ State Universities and Colleges (SUCs) Computerization Program, a total of 159 schools and 166 public high schools were given computers in 1999 and 2000, respectively, bringing the total number of recipients to 986 since 1996. Moreover, the secondary education curriculum or the Philippine Secondary Schools Learning Competencies of Technology and Home Economic Program, offered computer education as one of the components of the Technology and Home Economics (THE) module.
viii. **E-Agriculture**

The Department of Agriculture is currently doing an e-commerce awareness program to farmer cooperatives. It recognized websites such as B2BpriceNow.com as a facility to promote the country’s agricultural products.

ix. **Online IT, Investment, and Outsourcing Help Desk**

The Department of Trade and Industry (DTI) launched its IT Help Desk that serves as a facility for Filipinos to seek the assistance of the DTI in their various queries particularly in the IT sector.

D. **E-Commerce in the Private Sector**

On the private sector side, Filipinos now have the capability to do e-commerce such as:

i. **E-Banking**

Several banks now allows its depositors to create virtual accounts, manage and transfer funds via the Internet and through mobile phone using technologies such as wireless application protocol (WAP) and short messaging system (SMS). United Coconut Planters Bank, Equitable-PCIBank, UnionBank, Citibank, and Bank of the Philippine Islands are some of the banks that offer such service.

ii. **E-Learning**

Filipinos now has the capability to earn a degree or certificate courses online as several universities, technical and online schools offers such facility. This includes: 2StudyIT.com and University of the Philippines Open University.

iii. **E-Trading**

a. Business-to-business (B2B) trading in the Philippines is as vibrant as ever as supermarkets like SuperValue, Makro are expanding their hubs membership. B2B service providers such as PhilBx, BayanTrade, Catering Exchange, Medilink, among others are growing.

b. Business-to-consumer (B2C) sites and services are growing as well such as Smart Communications’ call credits reloading facility, Cebu Pacific and Philippine Airlines online ticketing, online stores
III. DOCUMENTATION STANDARDS FOR PHILIPPINE WEBSITES

English is the default language on the Internet and increasingly, web pages are getting bilingual (both English plus another language). In cases where some languages have different character set, some languages need a special software for correct display. The Philippines uses English as its second language and majority of Filipinos knows how to speak English. In transacting business, English is commonly used. Most of the Philippine websites are done using English as their mode of communication. The Philippines is not unique with regards to documentation / presentation because it uses the universal language of English in creating the contents of webpages. Also, there is not much difference between the character set of the native language of the Philippines, which is Tagalog, and the character set of English. On the other hand, in creating webpages, majority of the government webpages of the Philippines are still done in HTML, which is the very basic language in creating webpages.

The National Computer Center (NCC), which is responsible for monitoring the RPWEB, issued guidelines on the content of government websites. The prescribed contents are the following:

- Agency Mandate
- Programs / Projects Activities
- Foreign-Assisted Projects
- Locally-Funded Projects
- Rules and Regulations Promulgated
- Information Holdings and Custodian Units
- Public Transaction Servicing Procedures/Flowcharts

Based on the NCC Memorandum Circular 2001-01, each agency shall set up its own website and shall be the agency’s official bulletin board which shall serve the Filipino citizen’s information needs. This is pursuant to the government’s policy of accessibility and transparency. At present, most government websites contain the following:

- Profile, Vision, Mission, Functions
- Directory, Organizational Chart
- General Information on Services
- Links to other government websites (from departments to attached agencies except for the Office of the President website which has a link to all government agencies)

On the other hand, other government websites have the following additional features:

- Detailed Information on Services
- Policies, Memoranda, Regulations, Circulars
- Online suggestion box (E-mail)
- Frequently Asked Questions (FAQ), Help Desk
At present, the Philippine government is giving more emphasis on the connectivity of all agencies to the Internet. In addition, there are efforts to set up a government portal which will provide links to all the government websites and facilitate the delivery of services to the general public.

IV. CHALLENGES IN PURSUING E-GOVERNMENT

There are a number of factors that impede the implementation of an electronic government, as envisioned in the Government Information Systems Plan. These are the following:

A. Digital Divide

This refers to the gap between those who can effectively use new information and communication tools, such as the Internet, and those who cannot.

Factors that contribute to the digital divide of the country:

- **Geographical Divide** - The Philippines is composed of 7100 islands which makes it difficult to connect the provincial government agencies to the Internet and provide interconnection among government agencies.
- **Social Divide** - Majority of the Filipinos is in the lower income bracket and is thus not exposed to IT.
- **Cultural Divide** - The Philippines is divided into regions and further divided into provinces. The country has different dialects, and the culture varies from one region to another.

B. Lack of Telecommunications Infrastructure

One of the factors identified is the limited access to and high cost of telecommunication services. The Medium Term Philippine Development Plan, or “Angat Pinoy 2004”, has set as a priority over the next 4-5 years the development of the Philippine Information Infrastructure (PII). The PII would consist of physical telecommunication links, multipoint multimedia distribution systems, and value-added services such as Internet access and e-commerce. The establishment of local exchange services in all municipalities is another target identified by the government. To accomplish these, the government is encouraging private and foreign investment in the telecommunications sector. Increasing foreign ownership in telecommunications and other utilities beyond the 40 percent limit is also being considered.

C. Privacy Protection

Issues on privacy protection, consumer protection (for E-Commerce transactions) including intellectual property rights are among the legal challenges. It is
important for the government to provide the appropriate policy and legal framework that would assure citizens and business that their personal data is protected.

V. PLANS AND TARGETS TO DATE

The Philippines has all the potential to be an active player in the digital domain. At present, joint government and private sector groups such as ITECC are unified in pushing for the development of E-Commerce in the Philippines. It is seen as an important driving force that could fuel the country’s economic growth and development. The government is positioning the country to serve as host to various service-oriented businesses particularly in the IT and related industries.

However, the government and private sector recognize the fact that the country’s infrastructure and policies must be continuously improved in order to be competitive in the global market and to bridge the digital divide in the country. As such, the government and private sector identified the following areas that need to be improved:

A. Increase telephone density to 12 lines per 100 persons in the year 2004. Develop the country’s telephone network infrastructure to cover 80% of 1,602 municipalities. Provide public telephone service to its 35,000 barangays. Nationwide cellular phone coverage of major highways and corridors in the country. High speed broadband Internet service to major cities nationwide.

B. Development of the country’s human capital through improvements in the education system. Setting standards for ICT education and its incorporation to the curriculum in the elementary and tertiary education is a primary goal. Emphasis on science, mathematics, and English education in the young is identified as a critical strategy as well to develop competitive Filipinos. 100,000 IT graduates are being eyed in 2004.

C. Moratorium on the imposition of taxes and tariffs on commercial transactions over the Internet in the next three to four years is being proposed in the country’s Medium Term Development Plan.

D. Boost the competitiveness of small and medium scale enterprises in getting e-services projects abroad. An E-Services Strategy plan has been prepared to address this.

E. Reengineering of government processes and having the capability to offer e-commerce services to the public, in compliance with the E-Commerce Law, by 2003.

F. Priority legislations were identified as well such as:

• Strengthening and modernizing of the National Telecommunications Commission (NTC)
• Creation of a separate Department of Information Technology and Communications (DITC)
• Passage of a Convergence Telecommunications Services Law
• Legislation for stronger protection against computer fraud and abuses and other cyber-related fraudulent activities, including acquisition of a domain name over the Internet.
• Revision of the Public Education Curriculum Act of 1998

Sources:

1) http://www.ncc.gov.ph/services/it21.htm
2) http://www.ncc.gov.ph/policies/AO332.htm
3) http://www.ncc.gov.ph/services/mc2000_01.htm
4) NCC Memorandum Circular No. 99-01
5) Janette Toral; Philippines Responding to the Challenge of the Digitized Society; http://digitalfilipino.com
6) http://www.pids.gov.ph/mtpdp/mtpdp.htm
7) IT21 Philippines: Asia’s Knowledge Center; National Information Technology Council
8) http://www.neda.gov.ph/GISP