

# INDONESIA'S ROAD MAP TO E-GOVERNMENT: OPPORTUNITIES AND CHALLENGES<sup>1</sup>

By : Djoko Agung Harijadi<sup>2</sup>

and

Eddy Satriya<sup>3</sup>

## I. INTRODUCTION

Having political reform after the economic turmoil in 1997, Indonesian society has raised their expectation to the new elected Government. Public expects fundamental changes in almost all aspects such as social, economic, law and justice, and good governance. On the other hand, they are also aware about the ability of government institutions to realize the reform.

Information and Communication Technology (ICT) has been observed as an unprecedented potential solution for economic and social development to developing countries. It could help networking to the global economy and create new context of development. This is a new opportunity for every nation that needs the right conception suitable to each situation and resources at hands. This conception could be a good basis for a clear and innovative decision in connecting a developing country to the world information based economy.

Electronic government (e-Gov), as an application of ICT, could improve government's ability in delivering services to the public. In this perspective, the conception of e- Gov covers

---

<sup>1</sup> Paper presented at APEC High-Level Symposium on e-Government, Seoul, Korea, July 2-5, 2000.

<sup>2</sup> Assistant to the Deputy for e-Government Development, Ministry of Information and Communication, Republic of Indonesia.

<sup>3</sup> Deputy Director, Directorate of Energy, Telecommunication and Informatics, National Development Planning Agency, BAPPENAS, Republic of Indonesia.

a wide range of application such as government administration, health care, education, information provisioning, trade, agriculture and culture as well as businesses.

### The Era of Local Government Autonomy

New Regional Autonomy Law no. 22 was enacted in 1999. Since then, the autonomy of government is delegated to regional/district level in a number of areas. There have been significant changes in local government management as well as in the relationship between local and central government. Therefore, the demand for delivering effective, efficient, clean and transparent services to the public is essential. E-Gov is expected to help the newly empowered local government administration so that it can be responsive to high demand for fast change in the society. It is also directed to expedite the economic recovery by providing prompt and accurate information for investors, both local and foreign investors.

It is then expected that e-Gov practices in Indonesia will contribute in solving the most challenging problems, namely the discrepancy of human capability, the scarcity of infrastructure, recovery of the economy and rebuilding the social unity.

## **II. CURRENT e-GOVERNMENT DEVELOPMENT**

Like many other countries, the Government of Indonesia (GOI) has also recognized the importance of establishing online services to become more accessible and transparent to the public. Recently, the GOI has instituted a number of ICT policy initiatives designed to promote e-leadership in Indonesia and to reform its telecommunication sector. These initiatives involve adopting a series of e-Government legislation that bring Indonesia to be more aligned with international practice in the near future.

Current efforts are underway to establish a National Strategy and Policy on ICT development. Key ICT legislation that have been introduced are the blue print on Indonesia Telecommunication Sector Policy (1999) and Telecommunication's Law no. 36 of 1999, which became effective in 2000. Both are aimed to liberalize telecommunication sector as a prerequisite for advanced ICT development.

In addition, through a Presidential Decree No. 50 (2000) GOI established the Coordinating Team for ICT Development (TKTI), high-level task force to advance the use of electronic media to facilitate the government's internal functions, relationships, interaction and transactions.

TKTI is also responsible for providing guidelines and recommendations on how to proceed with ICT development including e-Government. In April 2001 government issued the presidential instructions (Inpres) No.6 consisting several guidelines for the development and empowerment of ICT in the society. This Inpres is implemented through the action plan comprising of 75 programs. These programs are classified into 4 categories i.e. policy and legal framework; human capacity building; infrastructures; and application both for the government and private sector. The objective of the action plan is to provide donors and local investors with more prioritized programs and for the related agencies as well. Among 75 programs, 17 are already on going, 22 are urgent and 36 are important programs. In summary, the ICT Action Plan issued by TKTI addresses the following issues:

- Reform Policy and legal framework to support ICT development, including e-Government.
- Establish provisions to develop human capacity to support ICT and e-government.
- Effort to accelerate the development of infrastructure to support ICT and e-Gov application through domestic and foreign partnerships.
- Provide the development of useful applications for e-Government
- Program to revitalized e-Gov portals
- Implement e-Gov strategy
- Prepare e-Gov action plan for related government office / agency.

Ministry of Communication and Information (KOMINFO) is promoting a strategy that focuses on the development ICT infrastructures as a pre requisite to e-government ( *"I before E"* strategy). This strategy centers on developing e leadership at all levels of government commitment, determination, human resource preparation, network infrastructure and legislation development.

Despite its commitment to e-government, the GOI is confronted with a number of challenges that could inhibit its effort to fully embrace e-government and achieve the above objective, among others are:

- Inadequate and expensive telecommunication infrastructure and capacity
- Insufficient sustained funding for e-Government initiatives
- Lack of coordination and integration
- Deliberation process of finalizing e-Commerce and e-Government laws and regulations.

Among the challenges on national level is the need to overcome a low PC penetration, Internet users and telephone density that are 1.0 %; 2.0%; and 3.4 % respectively for the year of 2001. Improvement on ICT infrastructure is a critical step for e-readiness including the development and enhancement of all aspects of telecommunication and network infrastructure (wire less and wire line)

Several initiatives have been taken by ministries and local government to expedite the development of e-Government. As of February 2002, more than 400 **go.id** domains have been launched. Some of local government such as Takalar and East Kutai districts have already implemented online system for public services (SIMTAP), while others provide portal and information site of potential resources that can be accessed through internet. SIMTAP Takalar has been implemented since March 2000. As the system was implemented, the quality of public services increased, for example it takes only 10 minutes to apply personal ID instead of more than one day, and to apply for other permits it takes only 1 day now while it took about a week, previously.

Unfortunately, about 24% of those initiatives were failed, because of insufficient sustained funding, lack of human resource and leadership. Also, recent e-Government efforts at the central and local levels have already been “compartmentalized“ and undertaken without sufficient consideration of sustainability or possible redundancy. The need now exists for a more integrated and coordinated approach to the e-Government program.

Awareness within the GOI about e- Government has sharply increased in the last five years. This is due in large measure to the enthusiasm for e-Commerce in the private sector and the efforts of TKTI/Kominfo to facilitate implementation of the National IT Plan. For each ministry and agency, these tend to be at least one group of staff that drives e-Government.

Efforts led by the Ministry of Communication and Information to finalize a Cyber law were begun in late 2001. The draft law will provide a framework for components of a Cyber law. Specific rules, standards, rights and liabilities, including the e-Government area will be left to specific Presidential / Ministry decrees and regulations. The framework law addresses all of the important areas, such as parity between electronic and paper documents, electronic signatures, e-banking, evidence and electronic contracts. Finally, to boost the development of e-Government, the Ministry of Communication and Information established a Task Force consisting of experts, business practitioners, universities and government agencies

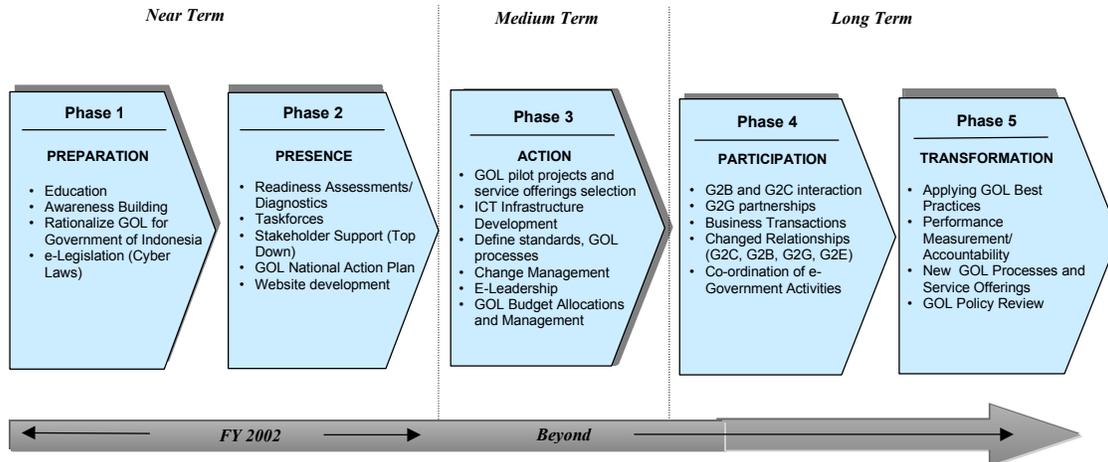
## **II. ROAD MAP TO e-GOVERNMENT AND THE CRITICAL NEXT STEPS**

This section build on the insights gained in the previous sections to outline specific, targeted and implementation steps for making the transition from the strategic planning phase to the successful e-government implementation. Indonesia faces the same challenges that other developing countries face in developing e-Government. The critical question for most e-government initiatives in the developing world is how users will gain access to e-services and products.

Indonesia's archipelago geography offers a high degree of diversity in population density, level of access and Internet awareness. Indonesia's e-Government program should be designed around the relative levels of access available its diverse communities. Greater number will go in access on a shared basis or through institutions (community centers, offices, telecenters, kiosks, etc). Moreover due to their varied levels of sophistication, many users will have to rely on "intelligent intermediaries" to add human interaction to an e-Government transaction. These considerations are especially applicable to rural area and remote villages.

To the successful deployment e-Government programs, the GOI developed a five- phased roadmap of activities that is exhibited below:

# Indonesia's Roadmap to e-Government



This roadmap provides an evolutionary framework that incorporated GOI current activities and charts a direction towards achieving GOI's e-Government vision and sustaining the full benefits of a mature e-Government environment.

Currently, Indonesia is in the phase 2 of the roadmap. To move to phase 3 or “jump start” it self into action, the GOI focus on the following five critical next steps.

- Step 1 : **Create e-leadership** establish a core high level e-government body to facilitate and co-ordinate e-government activities at all levels of government.
- Step 2 : **Enable the environment,** develop appropriate e-government legislatives and Cyber laws.
- Step 3 : **Build out ICT infrastructure,** expand the utilization and efficient allocations of existing ICT Capacity and develop key ICT infrastructure that will have a cross cut effect through out government.
- Step 4 : **Pilot Project,** develop prioritized list of pilot projects and outline a phased implementation strategy.
- Step 5 : **Change Management and BPR,** incorporate change management practices as an integral part of the deployment of each e-Government program.

E-Gov Task Force have already identified series of policies and guidelines required to implement e-government, among others are:

- e-Government Development Framework Policy
- Framework for Information Infrastructure Building Blocks.
- Framework for Public e-Services.
- Institutional Role and Responsibility
- Good Governance and Change Management
- Skill Development, and
- Project Budgeting.

Moreover, GOI also identified 22 pilot projects categorized by priority 1 and 2 and has been offered to be financed by donors, as presented on Donors Meeting on 2 May 2002 at Jakarta, which has positive response from the donors.

### III. CONCLUSION

Development and implementation of e-government in Indonesia are facing some challenges on financial constraint, inability to attract and retain good IT staff, low computer and internet penetration, insufficient telecommunication connection, regulatory environment and organization culture. Series of effort have been done by the TKTI and Ministry of Communication and Information. Some improvement especially on increasing awareness among almost all level of government already in placed. Diagnostic on current status of e-government has also been done by the government, followed by formation of special National e-Government Task Force. This Task Force have already identified the policies and guidelines required to implement e-government and also some pilot project. Close cooperation with private sectors in development of e-government and delivering services is essential.

Finally, as part of international communities, Indonesia is strongly willing to cooperate with other countries and international organization to eliminate digital divide and being more aligned with international in the near future.

**Contact:**

Djoko Agung Harijadi: [djokoagung@yahoo.com](mailto:djokoagung@yahoo.com)

Eddy Satriya: [satriyaeddy@yahoo.com](mailto:satriyaeddy@yahoo.com); [esatriya@bappenas.go.id](mailto:esatriya@bappenas.go.id)