# FIVE - YEAR ACTION PLAN FOR THE DEVELOPMENT AND IMPLEMENTATION OF INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT) IN INDONESIA

Government of Indonesia's Action Plan to overcome the Digital Divide,

Information and Communication Technologies in Indonesia under Presidential Instruction No. 6 / 2001

#### Introduction

The Action Plan reflects and will be implemented in the spirit of public-private sector-community partnership.

The Action Plan addresses priority needs over the next 5 years for extending ICT benefits throughout Indonesia, including extending transparency and equal access to information, improving access to services and opportunities, and implementing measures to foster the realisation of individual potential across society.

These needs are addressed by policy innovation and through support to human and institutional capacity building, legal framework reform, partnership with private sector in infrastructure and services, improvement and extension of public infrastructure and services including Government On-line, and other measures to improve

The Action Plan includes assistance to local governments, the private sector and public organisations. The complementary action plans of local governments, cooperating public organisations and the private sector, not represented in this Acton Plan, will also be facilitated by the Government in accordance with the Policy Framework.

Socialization and improvement of the Action Plan by information dissemination and dialogue throughout the Indonesian community is an important aspect of its contribution. Through this continuing process, the Action Plan will be updated and extended at least annually to reflect changed needs to fulfil the requirements derived from the Policy Framework that are within the mandate of the Indonesian Telematics Coordinating Team (TKTI). As part of this process, TKTI will be able also to identify and promote initiatives that are of great individual merit or strategic significance.

## 1. Policy and Legal Framework

The Government of Indonesia recognises the need to create a condusive and enabling legal and regulatory environment to support ICT development. It is prepared by 1) deregulating existing ICT-related acts and drafting necessary ICT-related legislation and regulation to ensure a clear-guided and transparent framework; 2) facilitating interaction among stakeholders; 3) promoting collaboration with international counterparts in various matters as well as the provision of national information infrastructure including covering remote areas.

In addition to the need of a condusive and enabling legal and regulatory framework, it is also extremely important to have one agency, which manages and coordinates all the initiatives and efforts related to ICT development. Based on Presidential Decree No. 50/2000, TKTI has the mandate to formulate and update ICT policy framework as well as administer and coordinate with related government agencies, private sectors, and society at large to ensure effective implementation. The TKTI secretariat is also being strengthened to assure the achievement of directions stated in the Policy Framework.

No.	Issue	Action Plan	Time Schedule	Priority	Implementing Agency
	Policy and Legal Framework 1. Policy				
	1. Telecommunications	<ul> <li>Improve telecommunications regulatory framework in Indonesia including licensing, tariff, interconnection, standardization, and frequency spectrum management</li> </ul>	2001-2002*)	Α	Min.of Communications, TKTI
		- Accelerate the enactment of telecommunication-related ministerial decrees	2001*)	Α	Min.of Communications
		- Define universal access policy and targets	2001-2002*)		Min.of Communications, TKTI telecommunication operators
		<ul> <li>Remove barriers to competition in the telecommunications market and facilitate faster integration service safeguards and roll out of telecommunication and internet technologies, including high capacity, broadband services and peer group radio networks</li> </ul>	2001-2003*)	А	Min.of Communications
		- Accelerate the resolution of KSO problem	2001-2002*)	Α	Min.of Communications, PT. Telkom, KSOs
		<ul><li>Empower independent regulatory body</li><li>Complete broadcasting bill</li></ul>	2001 2001-2002*)	, ,	Min.of Communications Min.of Communications, TVRI, RRI
	2. Information Technology	<ul> <li>Develop awareness and educational campaign on ICT for GoI officials and legislators</li> </ul>	2001-2005	Α	TKTI, all ministries, Parliament
		- Prepare regulation for intra government communication and disclosure	2001-2003	В	Min.of Administrative Reforms, TKTI

	- Prepare regulations for prescribing public information access and on-line	2002	В	TKTI
	services /procedures to improve service levels, transparency and good			
	governance in government and public institutions			

			Time		Implementing
No.	Issue	Action Plan	Schedule	Priority	Agency
		- Prepare regulation accommodating ICT local industry access to the	2001-2003	В	Min.of Industry and Trade
		government procurement  - Adopt, adapt, and apply common data interchange standards and common content specification to support interoperability of data integration for common public sectors and interacting business sector needs	2001-2002	В	Min.of Communications, National Standardization Agency, Bakosurtanal, Badan Kataloging Nasional, ICT-related associations
		- Eliminate any restrictions on ICT investment and reduce burdensome bureaucratic procedures imposed on domestic and foreign investors	2001-2002	В	Min.of Finance
		<ul> <li>Remove luxury sale tax, as well as other taxes and charges, imposed on an expanded range of ICT products and services</li> </ul>	2001*)		Min.of Industry and Trade, Min.of Finance, Min.of Home Affairs, local government, ICT- related association
		<ul> <li>Remove regulatory and institutional barriers to applying innovative technologies such as wireless, high speed data transfer, and VoIP from standard phones to provide an additional low cost service</li> </ul>	2001	В	Min.of Communications
		<ul> <li>Reinforce and update intellectual property definition, protection and compliance assurance measures</li> </ul>	2001-2003		Min.of Justice, National Police, Attorney Office
		<ul> <li>Enhance the development of information content and application industries including the use of open source software</li> </ul>	2001-2003		TKTI, Min.of Industry and Trade, BPPT, private sector
		- Build partnerships and alliances among private sector participants to build government online platform based on competitive bids	2001-2002		Min.of Industry and Trade, Agency for the Assessment and Application of Technology (BPPT), private sector
	3. E-commerce	<ul> <li>Adopt minimalist e-commerce law, including resolution of web-contract issues such as e-signatures, encryption security, legal validity of electronic information and messages with references to UNCITRAL, ASEAN, and APEC model laws</li> </ul>	2001		Min.of Justice, Min.of Industry and Trade, Min.of Communications, Lembaga Sandi Negara, TKTI, BPHN
		<ul> <li>Develop measures to support SME's participation in ICT development, applications and e-commerce</li> </ul>	2001-2003	В	Min.of Industry and Trade
	2. Legal Framework				
	1. Information Technology	<ul> <li>Finalize Cyber Law and modernize criminal law to cover computer and cyber crime; and the enforceability of electronically made representations and commitments</li> </ul>	2001-2002	Α	Min.of Justice, Min.of Communications
	2. E-commerce	- Review and revise tax law to facilitate electronic transactions	2003	В	Min.of Industry and Trade, Min.of Finance

	-	Adopt national legislation on general e-commerce consumer protection	2001-2002	В	Min.of Industry and Trade, YLKI
3. Institutional Development	<u>-</u>	Adopt a broad online privacy law with prudent safeguards against protection of criminal activities  Strengthen the institutional capacity of TKTI to accomplish its mandate	2002-2003 2001-2003*)		Min.of Justice, Min.of Communications, Min.of Industry and Trade TKTI

No.	Issue	Action Plan	Time Schedule	Priority	Implementing Agency
		<ul> <li>Strengthen the frequency spectrum management system in Indonesia including effective frequency management for new multimedia wireless, broadcasting and broadband services and systems; as well as peer group and specified non-commercial/ public benefit networks, such as inter and intra government</li> </ul>	2001-2002	А	Min.of Communications, BPPT
		- Develop an independent regulatory body	2001-2003	Α	Min.of Communications, TKTI
		<ul> <li>Develop regional IT centers of excellence, e.g., Bali Camp, Bandung High Tech Valley, APEC center for Enterpreunership</li> </ul>	2001-2005*)		Min.of Research and Technology, Min.of Industry and Trade, Min.of National Education, BPPT, local government, universities, private sector
		<ul> <li>Establish e-commerce coordinating group that will articulate a national e- commerce vision and harmonize act as a focal point for fostering regional and domestic e-commerce cooperation</li> </ul>	2001-2003		Min.of Industry and Trade, TKTI, private sector

## 2. Human Capacity Building

In regard to ICT human resources, the Government of Indonesia recognises the enormous potential of ICT usage to extend and enrich human capacities. The introduction and utilization of ICT education are critically essential and have to begin at the earliest age possible. School and university curricula will be gradually adapted. The Government, together with all stakeholders, implement and boost private sector's participation in providing equal opportunity to access information through distance learning programs as well as the development of standardized and user friendly interface software in Indonesian language to overcome the language barriers. The Government also enhances ICT awareness and readiness of its employees by intensifying ICT education and training.

No.	Issue	Action Plan	Time Schedule	Priority	Implementing Agency

2.	Human Capacity Building	<ul> <li>Establish policy to stimulate R&amp;D in ICT in the private sector and in partnership with universities and public institutions</li> </ul>	2001-2003	_	Min.of Industry and Trade, Min.of Reseach and Technology, Min.of National Education, universities, private sector
		<ul> <li>Develop collaboration between ICT industry and ICT educational institutions through training and R&amp;D collaboration; and form a network for skill and capacity development</li> </ul>	2001-2005	_	Min.of National Education, Min.of Research and Technology, Min.of Industry and Trade, universities, national institutes of sciences, private sector

			Time		Implementing
No.	Issue	Action Plan	Schedule	Priority	Agency
Г		- Develop ICT networks for public and private universities as well as research and education networks in Indonesia	2001-2005	В	Min.of National Education, Min.of Research and Technology, universities, internet and telecommunication operators, private sector
		- Prepare master plan for ICT human resource development in Indonesia	2001-2003	В	Min.of Research and Technology, Min.of National Education, TKTI
		- Develop and implement ICT curricula	2002-2004	Α	Min.of National Education
		<ul> <li>Use ICTs as an essential part of the curricula and learning tools in schools/universities and training centers</li> </ul>	2001-2005	В	Min.of National Education, schools, universities, private sector
		- Establish distance education programs including participation in Global Development Learning and other networks	2001-2005	А	Min.of National Education, Min.of Research and Technology, Min.of Health and Social Welfare, universities, private sector
		- Conduct ICT skills training for government employees	2001-2005	В	TKTI, all ministries, local government
		<ul> <li>Conduct training on facilitating e-commerce standard (UNCITRAL) for implementation</li> </ul>	2001-2003	В	Min.of Communications, Min.of Industry and Trade, Min.of Research and Technology
		- Extend and further develop SME ICT awareness program and incubators	2001-2003	В	Min.of Reseach and Technology, Min.of Industry and Trade, CCI, local government
		<ul> <li>Facilitate the use of internet for more efficient teaching and learning (e.g School 2000)</li> </ul>	2002-2005*)	Α	Min.of National Education, schools, universities, private sector
		- Establish an efficient support and facilitation scheme for the procuring/financing/conducting of ICT skills training and capacity	2002-2005	В	Local government, private sector
		<ul> <li>Develop Indonesian language-based man-machine interface as well as applications and contents</li> </ul>	2002-2004	В	Min.of Research and Technology, BPPT

## 3. Infrastructure

The Government, as facilitator and motivator, develops various forms of partnership and collaboration with the domestic and foreign private sector to increase ICT infrastructure access and coverage, especially to underserved and less profitable areas. Information network infrastructure is vital to bridge digital divide between urban and rural areas, in addition to support decentralization process.

The Government also considers funding support schemes to encourage the development of information network services for small medium enterprises (SME) and for the provision of non-commercial services for people in rural areas.

In addition to those efforts, the Government continues developing competitive market environment for ICT business that ensures that private sectors will be able to grow efficiently. It includes developing solid strategies and initiatives to encourage international participation in expanding and improving information networks.

No.	Issue	Action Plan	Time Schedule	Priority	Implementing Agency
3.	Infrastructure	<ul> <li>Facilitate internet access to public services, such as schools, universities, and hospitals</li> </ul>	2001-2003	_	telecommunication and internet operators, schools, universities, hospitals, private sector
		- Progressively develop national backbone infrastructure and develop local access networks in underserved areas	2001-2005		Min.of Communications, telecommunication network providers, private sector
		<ul> <li>Implement universal access program and extend access beyond the market through a range of innovative public access initiatives, including new technologies and telecenters</li> </ul>	2001-2003		Min.of Communications, local government, telecommunication and internet operators, telematics society

#### 4. Applications

Networking within the public administration is a prerequisite for improving transparency and accountability in various government transactions, effectiveness in public services as well as for increasing the efficiency of the decentralization process.

The private sector plays a central role in translating the potential of ICTs into activities that bring about real economic growth. Thereby, without some form of intervention from the Government, the threat of digital divide between urban and rural areas will become more apparent. To overcome this problem, the Government develops models of partnership and cooperation with the private sector to maximize the utilization of domestic commercial networks.

No.	Issue	Action Plan	Time Schedule	Priority	Implementing Agency

4.	Applications for the Government	- Restructure government interaction system to achieve good governance	2001-2005	В	Min.of Administrative Reforms
		<ul> <li>Revitalize government portals to provide ease of use-transparency and minimum consistency, fast downloads, rapid access to information, procedures and specific contacts</li> </ul>	2001	В	TKTI, all ministries
		<ul> <li>Complete implementation of government online strategy prepared under IIDP</li> </ul>	2001-2003*)	Α	ТКТІ
		- Prepare government online action plan for each government agency	2001-2002	В	All government agencies, TKTI
		- Ensure easy access to essential public data in Indonesia	2002-2003	В	TKTI, local government

	_		Time		Implementing
No.	Issue	Action Plan	Schedule	Priority	Agency
		<ul> <li>Promote and develop electronic access to provide basic information, interaction, and services for citizens and government's client community</li> </ul>	2001-2005	В	Min.of Communications, related ministries (based on information/services that are provided)
		<ul> <li>Develop applications that promote civil society and community participation in democratic and public activities</li> </ul>	2003-2005	В	Min.of Home Affairs, local government
		- Develop on-line submission of financial reports by public agencies	2001-2005	В	Min.of Finance, local government
		<ul> <li>Develop on-line submission of financial and transaction reports by tax entities</li> </ul>	2001-2005	В	Min.of Finance
		<ul> <li>Develop public services online (such as workforce, land use, conflict resolution, agriculture, export/import, telemedicine and health data center, and immigration information systems) to improve public services</li> </ul>	2001-2003	А	Min.of Home Affairs, Min.of Workforce and Transmigration, Min.of National Education, Min.of Finance, National Land Affairs Agency, Politics and Security Coordination Office, Indonesian Police, National Army, Min.of Agriculture, Min.of Forestry and Plantation, Min.of Industry and Trade, Min.of Health and Social Welfare, Central Agency for Statistics, Min.of Justice, local government
		<ul> <li>Implement MIS and decision support system in supporting decentralization process and assurance of minimum service standards and obligations under special funding provisions, intergovernment loans and cooperation agreements</li> </ul>	2001-2003	В	Min.of Home Affairs, local government
		<ul> <li>Establish executive information system for national and local government, including 1) providing integrated information/database for state-owned companies (BUMN/D), and 2) increasing controlling mechanism for government to BUMN/D</li> </ul>	2001-2005	В	Min.of Finance, Min.of Home Affairs, central and local government, state-owned companies

	Enable public e-procurement for central and regional governments and their enterprises through establishment of appropriate framework for 1) business opportunities and contract awards, 2) quality standards on content and availability, 3) coding standards for normalization, cross referencing, and analysis of public procurement data	2002-2005	Min.of Finance, National Development Planning Agency
	<ul> <li>Establish ID databank for industry/enterprise to provide digital certificate for industry/enterprise</li> <li>Develop e-television based interactive program through digital technology application in TV broadcasting</li> </ul>	2001-2005*) 2001-2004	 Min.of Industry and Trade, CCI, BARKI Min.of Communications, TVRI

No.	Issue	Action Plan	Time Schedule	Priority	Implementing Agency
Г		- Change the ID card system to a national card and database system and integrate with national demographic information systems	2002-2005		Min.of Home Affairs, Central Statistics Agency, local government
		<ul> <li>Develop support system for government, legislature, and judicatory interaction</li> </ul>	2003-2005		State Secretariat, Min.of Administrative Reforms, Min.of Justice, Supreme Court, Parliament
		<ul> <li>Implement comprehensive e-government, e-business, and e-public infrastructure services as national pilot project (G2G, G2B, G2C) e.g, Batam Intelligent island, Kemayoran Cyber City, etc</li> </ul>	2001-2005	А	BPPT, TKTI, BIDA, BPKK, CCI, private sector
	Applications for Private Sectors	- Develop telecommunication/internet kiosks to implement Community Telecenter concept	2001-2005		Min.of Communications, local government, private sectors, telematics society
		<ul> <li>Extend regional electronic access to provide basic information tailored to local social and economic activities to promote the competitiveness of the region (e.g. Desa Maju)</li> </ul>	2001-2005*)		Local government, private sector, telematics society
		<ul> <li>Extend and improve the e-payment system (Indonesia Network Payment System) for greater speed, realibility and lower cost catering for micro payments, including development of multipurpose smart card</li> </ul>	2001-2003	В	Min.of Finance, Central Bank, private sector
		Prepare e-commerce standard applications for SME	2001-2003	В	Min.of Industry and Trade, CCI
		<ul> <li>Provide trade facility, information, assistance center for development of SME</li> </ul>	2001-2003	Α	Min.of Industry and Trade, Min.of Finance, Min.of Cooperatives, CCI, private sector
		<ul> <li>Extend technical assistance and training funding support scheme for SMEs capacity improvement, including matching grant scheme</li> </ul>	2001-2003*)	Α	Min.of Industry and Trade

-	Promote and assist more efficient industry market and logistics, including	2001-2003	В	Min.of Industry and Trade, private sector
	provide automotive industry solution center: 1) streamlining spare-parts			
	and automotive distribution process, and 2) providing information			
	system for small medium spare-parts supplier			
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No.	Issue	Action Plan	Time Schedule	Priority	Implementing Agency
		<ul> <li>Facilitate and assist ICT application to market reaserch marketing and trade for Indonesia industry and targetted market groups, including: 1) support local purchases by Indonesian Diaspora in the US and elsewhere to be supplied by Indonesian companies through a consolidated ecommerce web site/cybermall, 2) facilitate industry B2B ecommerce by leveraging industry-specific B2B vertical industry portals with a focus of expanding existing market share, 3) facilitate e-business, both B2B and B2G and associated opportunities, and 4) support overseas marketing via B2C e-commerce development of aggregated web sites (supported by catalogs with product, services and transaction capabilities)</li> </ul>	2002-2005	_	Min.of Industry and Trade, CCI, private sector

### Note:

\*): on-going program
A: first priority (urgent)

B: second priority (important)