Indonesia's ICT-Updated

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Agenda

- Introduction
- ICT Policy and Progress
- E-Government Progress
- Requirement for Cooperation with Japan
- Conclusion

Introduction

Introduction

Indonesia Profile as Developing Country

Source: Badan Pusat Statistik, 2006

- **National Statistics**
  - The largest archipelago worldwide
  - Population of 230 million
  - National GDP of US$865 billion
    Annual economic growth of 6%
    Unbalanced regional development

- **People Characteristics**
  - Almost equal balance of gender
  - Labor force of 94 billion
  - Farmer as majority occupation
  - 583 dialects across the country
  - 66% people in productive age
  - Unbalanced community density

- **Geographic Spread**
  - Over 18,000 islands
  - Almost 2 million km^2
  - Coastline length of 55,000 km
    33 provinces
    440 districts
    5,263 municipalities
    62,806 villages

- **Government Agencies**
  - 20 Departments
  - 15 Ministries
  - 26 Non-Departmental Bodies
  - 5 High Institutions

The country profile create huge opportunities
and challenges at the same time ...

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Introduction

- Archipelagic country with more than 17,000 islands
  - ICT not yet affordable the majority of the population
  - The cost of distributing access and technology is too high in some areas and hence not economically attractive for private sectors

- More rural than urban areas
  - Urban Teledensity 11 – 25 %
  - Rural Teledensity 0.2 %
  - ± 43.022 villages without phones (64.4 % from 66.778 villages)

- Mobile telecommunications penetration higher than fixed line
  - 8 mio fixed line (± 4 % of population).
  - 100 mio mobile phones (± 43 % of population).

ICT Policy and Its Progress

## Toward Indonesia Information Society

- ICT-based Indonesian Society

- Information as main commodity and need

- As civilization tool for interaction among people that information as integral part of society

- Create, access, use and share of information and knowledge

- Supporting individual and society to develop its potency

- Improvement of life quality of Indonesian Society
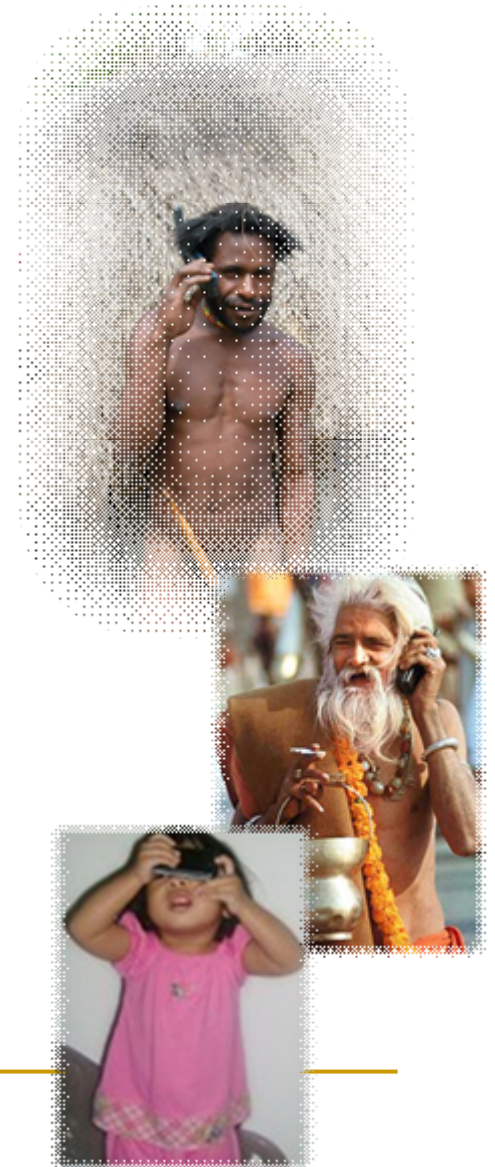
ICT Policy and Its Progress

INDONESIA ICT BLUEPRINT : MAIN COMPONENTS

ICT INFRASTRUCTURE	E-EDUCATION
Palapa Ring Project	Legalization of Educational Software
Transition into Digital Terrestrial TV	ICT Human Resources Competency Standard
3G Implementation	e-Education in Formal Education
BWA Deployment	E-Education in Non-Formal Education
Affordable PCs	Internet Use for Education Campaign
E-GOVERNMENT	ICT INDUSTRY DEVELOPMENT AND SUPPORTING ELEMENTS
Legalization of Software in Government Institutions	Techno park Development
E-Service & e-Procurement	ICT Venture Capital
National Single Window	Information and Electronic Transaction Law
National Identification Number (NIN)	ICT Convergence Law
E-Budget	

ICT Policy and Its Progress

Towards Indonesian Information Society 2015 (MII 2015)

➔**National Smart Society Development:**
  One School One Computers Lab Program
  Community Access Point Development
  USO Program
  Information Dissemination, etc
➔**Legal S/W Campaign**
➔**ICT Industry Development**
➔**Basic Application and Killer Application Development**
➔**Public Service Interoperability:**
  Information System Interoperability
  Standardization and Audit
  Common ID Numbering System
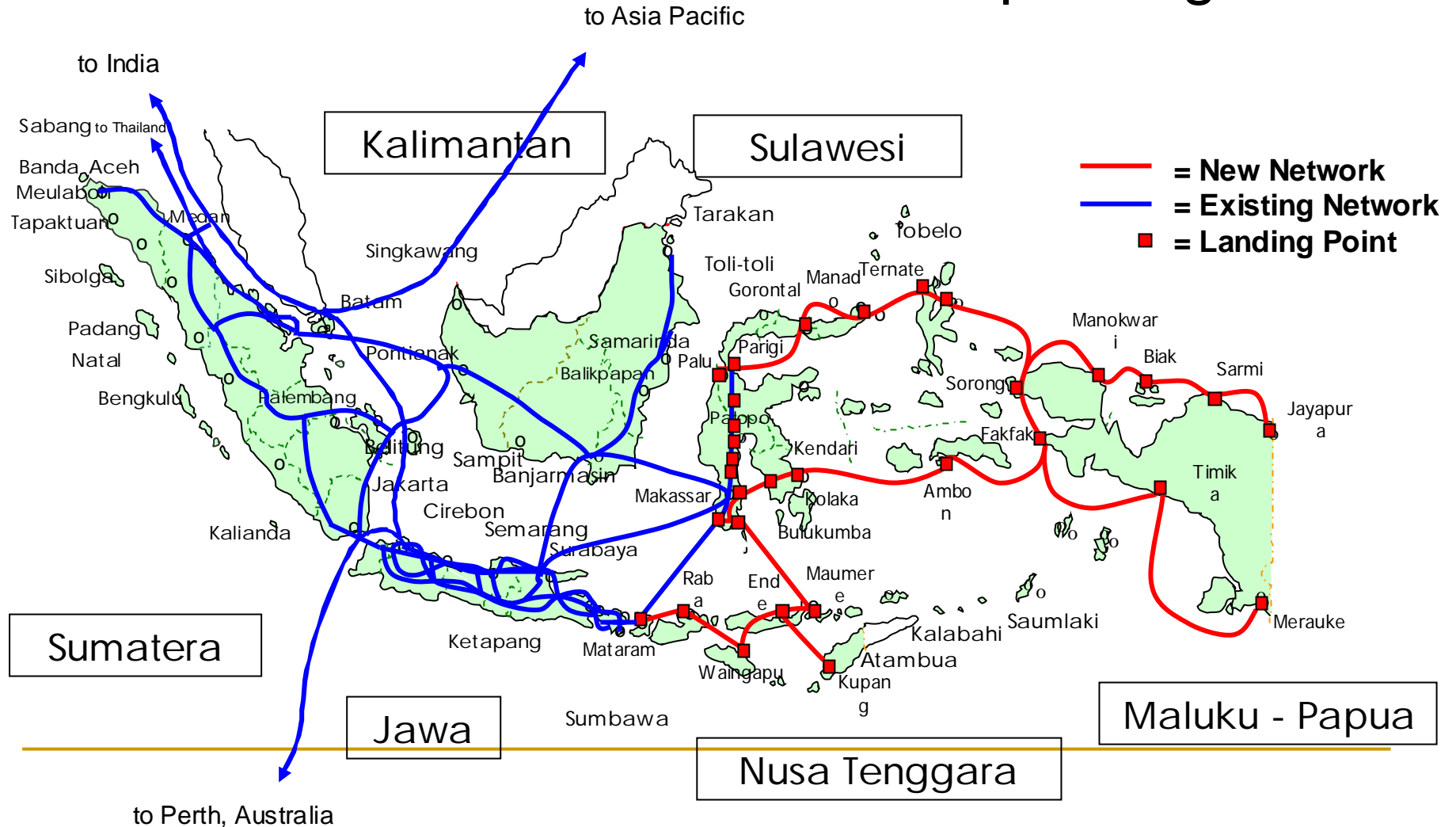
Develop National Information Infrastructure

On-going HR Development And Capacity Building

Regulation, Law, Incentive Systems

ICT Policy and Its Progress

- ## Information Infrastructure – Palapa Ring

ICT Policy and Its Progress

- ## Information Infrastructure – Palapa Ring

  - ### 6 Members of PALAPA-RING Consortium:

    - PT. Bakrie Telecom, Tbk
    - PT. Excelcomindo Pratama, Tbk
    - PT. Indosat, Tbk
    - PT. Infokom Elektrindo
    - PT. Powertek Utama Internusa
    - PT. Telekomunikasi Indonesia, Tbk

  - Consortium Agreement Signed in Surabaya, 10 November 2007.
  - Project Funding from each member investment, with consortium business scheme.
  - Estimated Cost : USD $ 255,1 million eq. with IDR 2.346 billion.

ICT Policy and Its Progress

- ## Regulation, Law and Incentive

  - Cyberlaw on Electronic and Information Transaction
    - The electronic transaction law will be the first Cyberlaw in Indonesia and this year (2008) has been established.
    - This law will give better security for electronic transactions.
    - EU Convention on Cybercrime 2001 will be adopted

  - IPR (Intellectual Property Rights) Law Issued and enacted in 2003.

ICT Policy and Its Progress

- Human Resources Development

Strength

- High Tech export is on the rise
- Current government's keen interest in development of ICT
- Large population, sufficient labor supply

Opportunity

- Low labor costs
- Increasing tendency of ICT outsourcing
- SW and ICT service sector are expected to grow fast

ICT HRD and R&D

Weakness

- Weak ICT Industrial base
- Low ICT Infrastructure
- Inadequate investment in R&D
- Lack of business dynamism

Threat

- The rise of India and China as ICT powerhouse
- Other Asian countries exert full efforts in ICT HRD and R&D

ICT Policy and Its Progress

- Human Resources Development

- **IT Enabling Job: Outsource ICT Job**
  - 3.3 million of ICT outsource job opportunity until 2015
  - Est. Salary 136 billion USD
- **IT Enabling Job: Domestic Market**
  - Est. Salary 1 billion USD
- **IT Enabled Job**
  - 10 workers for every office: 1 admin and 9 IT operator

ICT Policy and Its Progress

- Human Resources Development – For ICT Product Export

	2002	2004	2006	2008	2010
Annual Growth	*10%*	*20%*	*55%*	*70%*	*70%*
Production Target (mio US $)	500.00	660.00	1,108.80	2,835.76	8,195.33
Productivity ($/Person)	25,000	25,000	25,000	25,000	25,000
Total Target of ICT Worker	20,000	26,400	44,352	113,430	327,813

ICT Policy and Its Progress

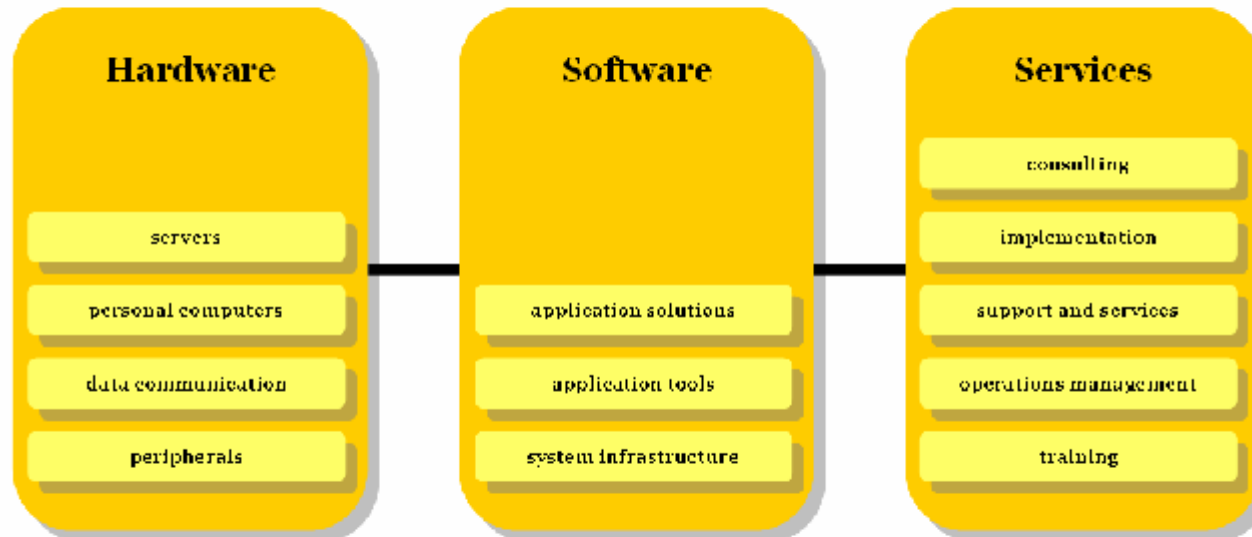- **University/Institute**
  - ITB, UI, ITS, STIKOM, Universitas Petra, Universitas Pelita Harapan, Universitas Bina Nusantara, Universitas Gunadarma, STT Telkom, UGM

- **HRD ICT Center: 2(two) centers (Cooperation Between MCIT-UIN Jkt and MCIT-UIA Jakarta)**

- **Private Training Center**

- **Vendors Training Center**
  - Microsoft, Hewlett-Packard, SUN Microsystems, Cisco, Oracle, IBM, Schlumberger

ICT Policy and Its Progress

Indonesian ICT Market Segment

Source: International Data Center, 2006

Hardware	Software	Services
servers		consulting
personal computers	application solutions	implementation
data communication	application tools	support and services
peripherals	system infrastructure	operations management
		training

HR-ICTs become the main player in every industry segment determining the growth performance of such technology sector ...

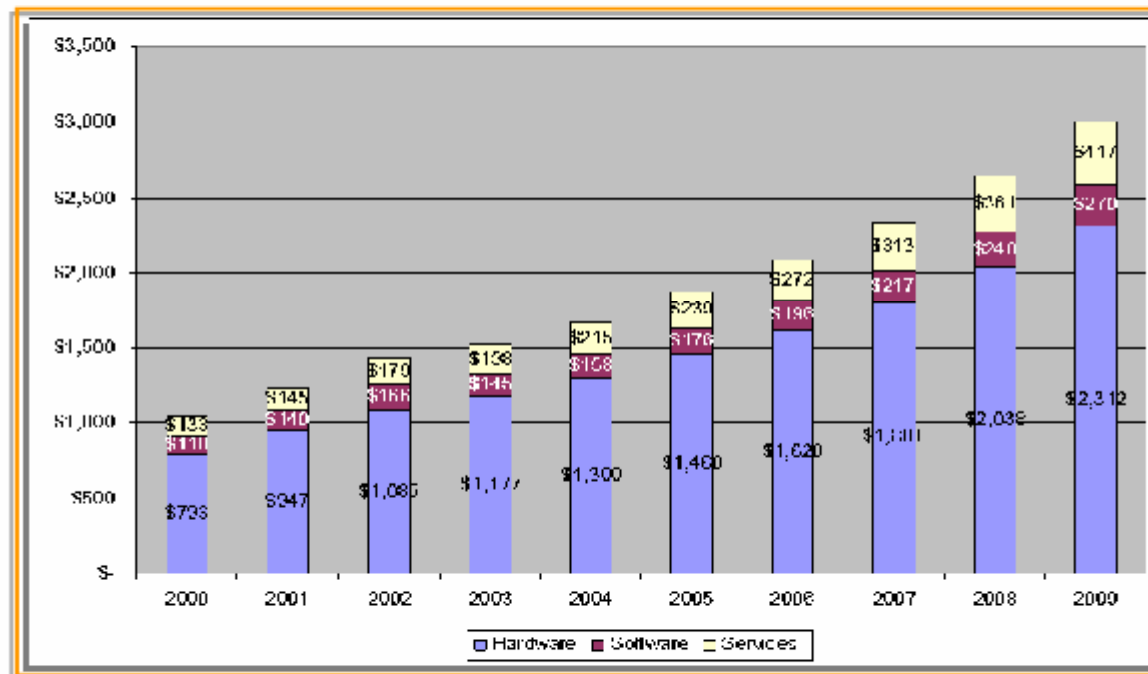# ICT Policy and Its Progress

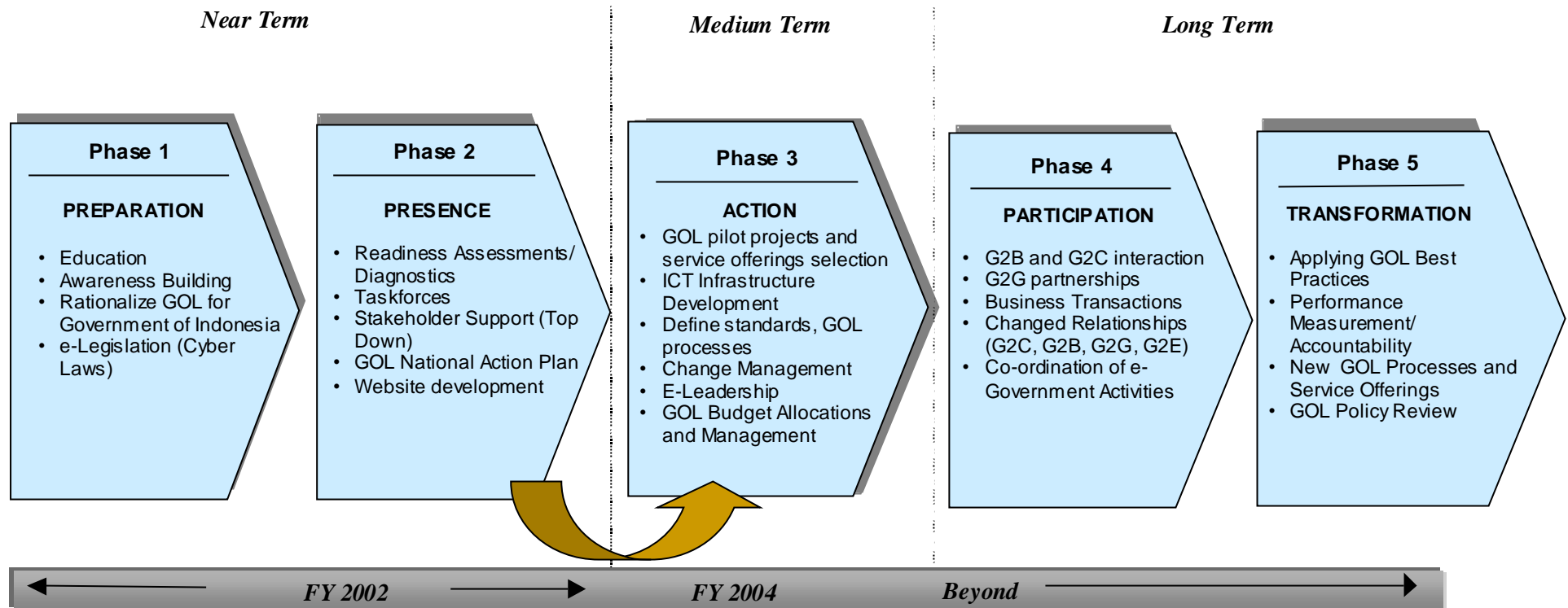Indonesia ICT Market Growth

Source: International Data Center, 2006

E-Government Progress

- Officially was introduced to public administration by Presidential Directive No 6/2001 on Telematics:

- *- That the government of Indonesia has to use telematics to support good governance*

- *- That e-government should be introduced for various purposes in government offices.*

E-Government Progress

Indonesia's Roadmap to e-Government

Near Term   *Medium Term*   *Long Term*

Phase 1

PREPARATION

- Education
- Awareness Building
- Rationalize GOL for Government of Indonesia
- e-Legislation (Cyber Laws)

Phase 2

PRESENCE

- Readiness Assessments/ Diagnostics
- Taskforces
- Stakeholder Support (Top Down)
- GOL National Action Plan
- Website development

Phase 3

ACTION

- GOL pilot projects and service offerings selection
- ICT Infrastructure Development
- Define standards, GOL processes
- Change Management
- E-Leadership
- GOL Budget Allocations and Management

Phase 4

PARTICIPATION

- G2B and G2C interaction
- G2G partnerships
- Business Transactions
- Changed Relationships (G2C, G2B, G2G, G2E)
- Co-ordination of e-Government Activities

Phase 5

TRANSFORMATION

- Applying GOL Best Practices
- Performance Measurement/ Accountability
- New GOL Processes and Service Offerings
- GOL Policy Review

FY 2002   *FY 2004*   *Beyond*
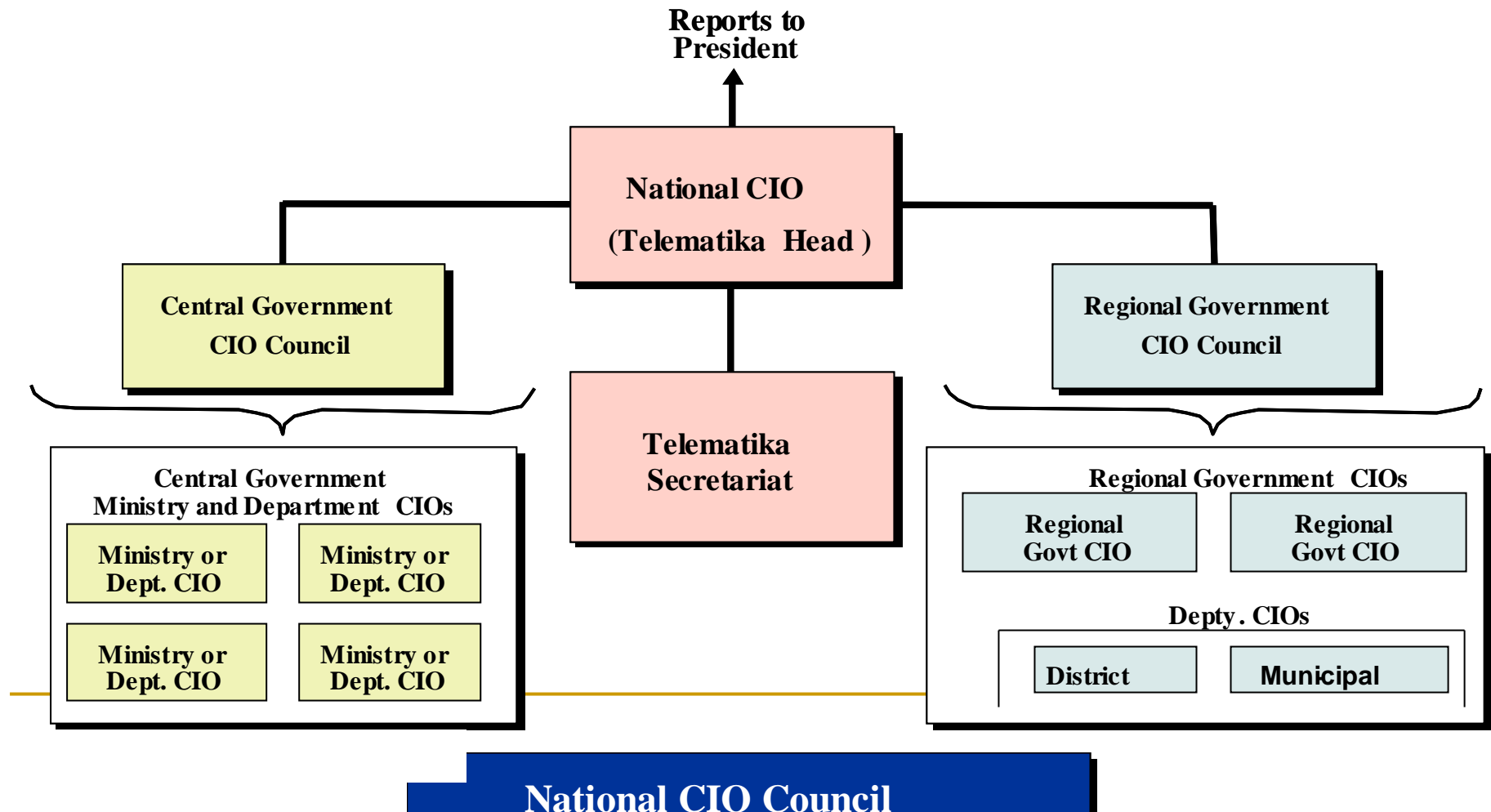
E-Government Progress

To Move to Phase 3 of its Roadmap or "Jump Start" itself into Action, the GOI should Focus on the Following 5 Critical Next Steps

CIO responsibility

- **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 legislation and cyber laws
- **Step 3: Build out ICT Infrastructure** — expand the utilization and efficient allocation of existing ICT capacity and develop key ICT infrastructure that will have a cross-cutting effect throughout the 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-Government Progress

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

E-Government Progress

Indonesian Experiences

- The first CIO model would be commenced from Central Government, provincial, municipalities, district.

- For the period 2002-2008, there have been 35 group of ICT training program, conducted by MICT for senior officials (level 2, 3 and 4).

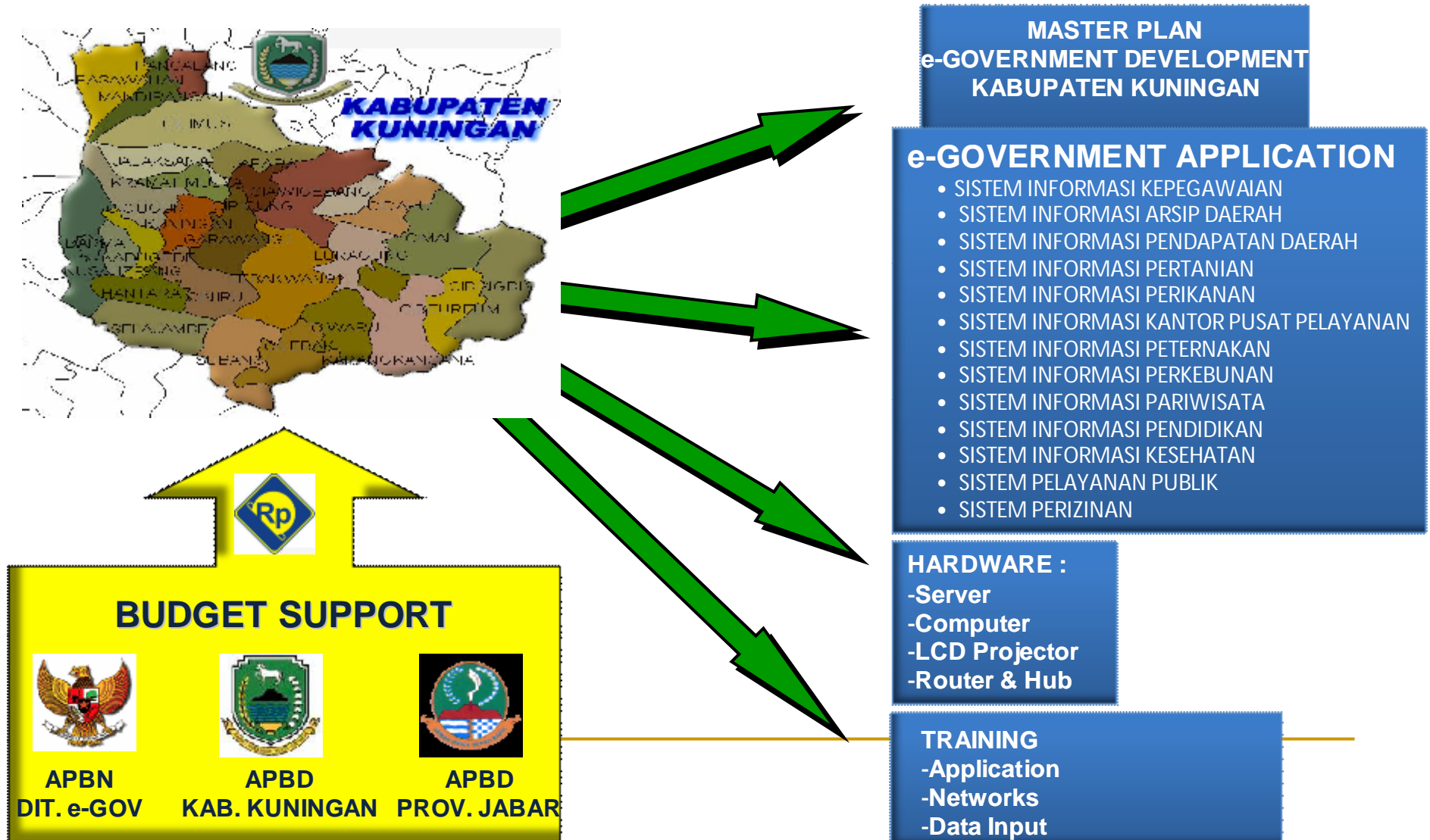- Indonesia is still in awareness stage of CIO training since the focus has been on the ICT aspect

E-Government Progress

Step 5: Change Management and BPR — Incorporate Change Management Practices as an Integral Part of the Deployment of Each e-Government Program

- Educate GCIO Officials and Staff (at all levels) through e-Government Immersion Programs with Special Focus on Accelerating the Learning Curve in Rural Areas

- Upgrade Skills at the Grassroots level through Free "Train The Trainer" Programs to the Public

- Develop Comprehensive National Communication Campaign Designed to Improve Internet Awareness Among the General Public

- Establish Policies that Require that the Organizational, Human Resource and Skill Impact be Evaluated and Accommodated as an Integral Part of Deploying all e-Government Programs

E-Government Progress

Typical of e-Gov Implementation

KABUPATEN KUNINGAN

MASTER PLAN
e-GOVERNMENT DEVELOPMENT
KABUPATEN KUNINGAN

e-GOVERNMENT APPLICATION
- SISTEM INFORMASI KEPEGAWAIAN
- SISTEM INFORMASI ARSIP DAERAH
- SISTEM INFORMASI PENDAPATAN DAERAH
- SISTEM INFORMASI PERTANIAN
- SISTEM INFORMASI PERIKANAN
- SISTEM INFORMASI KANTOR PUSAT PELAYANAN
- SISTEM INFORMASI PETERNAKAN
- SISTEM INFORMASI PERKEBUNAN
- SISTEM INFORMASI PARIWISATA
- SISTEM INFORMASI PENDIDIKAN
- SISTEM INFORMASI KESEHATAN
- SISTEM PELAYANAN PUBLIK
- SISTEM PERIZINAN

HARDWARE :
-Server
-Computer
-LCD Projector
-Router & Hub

TRAINING
-Application
-Networks
-Data Input

BUDGET SUPPORT

APBN
DIT. e-GOV

APBD
KAB. KUNINGAN

APBD
PROV. JABAR

E-Government Progress

Already implemented

KAB. SUMBAWA

KOTA DUMAI

KOTA JAMBI

Others

KAB. GARUT

KAB. GIANYAR

KAB. KUNINGAN

KOTA MALANG

E-Government Progress

- ## E-Government Implementation Chalengge

  - Limited budget, or insufficient funding to continue e-Government project (aided by donors)

  - Limited quantity and quality of HR

  - Limited infrastructures (esp. computer and Internet)

  - Lack of awareness and concerns of local government leaders

  - Unclear the structure of organization of local government institutions (the name and structure vary, sometimes even do not exist, and not clear who is responsible)

Requirement for Cooperation with Japan

- Senior official workshop/training in Japan with intensive discussion on implemention process and its constraints to give a broad view on e-government role

- Technical cooperation on e-government implementation

- Pilot project of e-government implementation

Conclusions

- We present our ICT Policy and its progress so far, including some strategic step toward Indonesia Information Society 2015

- E-Government Policy also has been presented including its roadmap and its progress achieved and some challenges.

- Cooperation with Japanese Government has been list up