

e-Government of Korea :

Development History and outcomes



National Information Society Agency

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I. Overview of Korea's e-Government

Strategic Tool for Government Innovation

- **The world is using e-Gov't for public sector reforms and service innovation**
 - The Obama administration emphasized “connecting” and “empowering” the whole U.S through technology and innovation (The Clinton administration focused on “recreating” government)
 - OECD emphasized the importance of “government” over “e”
- **ICT and e-Gov't are core strategic tools supporting innovation**
 - Increase administrative efficiency and transparency
 - Provide information and services to the people and businesses anywhere anytime
 - Expand channels for participating in policy making for citizens

Utilizing ICT as Opportunity for Economic Development

- **1975 Korea commenced digitization of public administration under President Park Jung-Hee's order**
 - Recognizing the benefits of information efficiency led by the development of ICT as a challenge for Korea's economic development the government of Korea began to aggressively pursue transformation into a knowledge information powerhouse.

2. History of e-Government

Stages	Period	classification	Major Actions
Inception	1978~1987	Implementing Administrative Computerization	<ul style="list-style-type: none"> ■ The first & 2nd administrative computerization project
	1987~1996	Building Administrative Computer Networks	<ul style="list-style-type: none"> ■ The first & 2nd National Basic Information System computer networks project
Foundation	1997~2000	Promoting informatization	<ul style="list-style-type: none"> ■ Building the foundation for high-speed information and communications <ul style="list-style-type: none"> - Building 144 regional optical transport network nationally ■ Informatization on unit business or function <ul style="list-style-type: none"> - procurement, passport, patent, customs etc
Launch	2001~2002	11 major tasks for e-Government	<ul style="list-style-type: none"> ■ pan-ministry 11 major tasks such as e-civil service, e-procurement ■ partial & limited convergence among unit businesses
Diffusion	2003~2007	31 major tasks for e-Government	<ul style="list-style-type: none"> ■ Execution of 31 e-Government Project ■ Amendment of e-Government Acts (2007.1)
Maturity	2008~	Expansion of convergence & sharing	<ul style="list-style-type: none"> ■ Implementation of e-Government focused on usage and convergence <ul style="list-style-type: none"> - Expansion of linked convergence into public & private sector ■ Unification of implementation system for national informatization and e-Government

e-Government

- Framework Act on National Informatization, e-Government Act, Office Management Regulation, Law on Processing Civil Affairs, Law on Resident Registration, Act on Public Records Management, Information Disclosure Act

Information Usage Enabling Environment

- Digital Signature Act, Framework Act on e-Commerce, Act on Promotion of e-Trade, Act on Internet Address Resource

Prevention of Negative Effects of Informatization

- Act on Promotion of Information and Communications Network Utilization and Information Protection, etc, Act on Personal Information Protection, Use and Protection of Credit Information Act, Protection of Communication Secrets Act, Act on the Protection of Information and Communications Infrastructure

Sustained Development of IT and Industry

- Framework Act on Telecommunications, Act on the Protection, Use, etc of Location Information, Framework Act on Electronic Commerce, Electronic Financial Transaction Act, Software Industry Promotion Act, e-Learning Industry Development Act, Framework Act on the Promotion of Cultural Industries

	2002	2005	2010	2011
Budget	12,155	20,272	22,203	21,948
Fund	7,053	8,780	10,892	11,075
Total	19,208	29,052	33,095	33,023

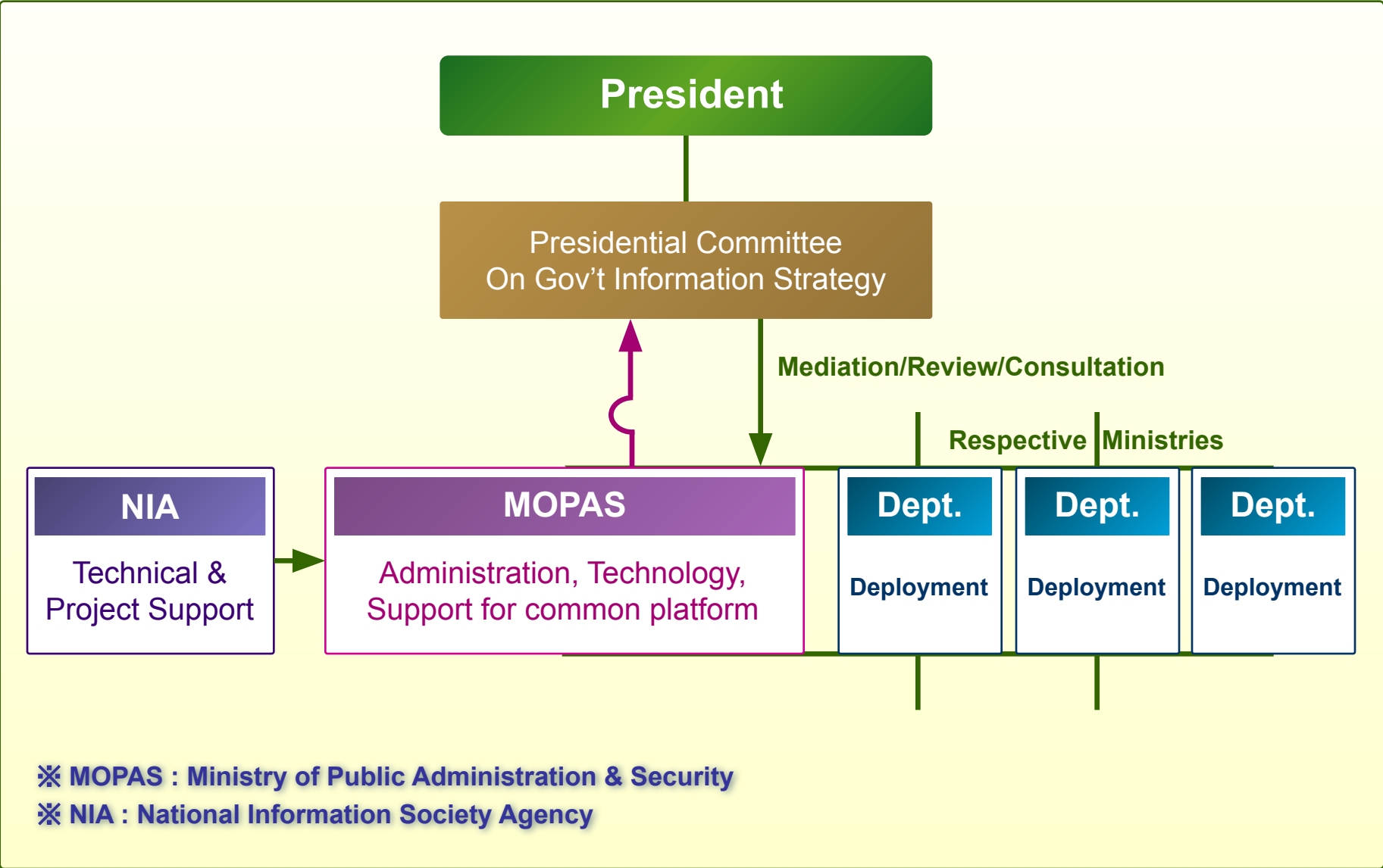
(Unit: KRW 100 million)

- Built early e-Government foundation form government budget and the Information and Telecommunication Promotion Fund

- Around 10 years of continued investment into informatization (1% of State Finance Budget)

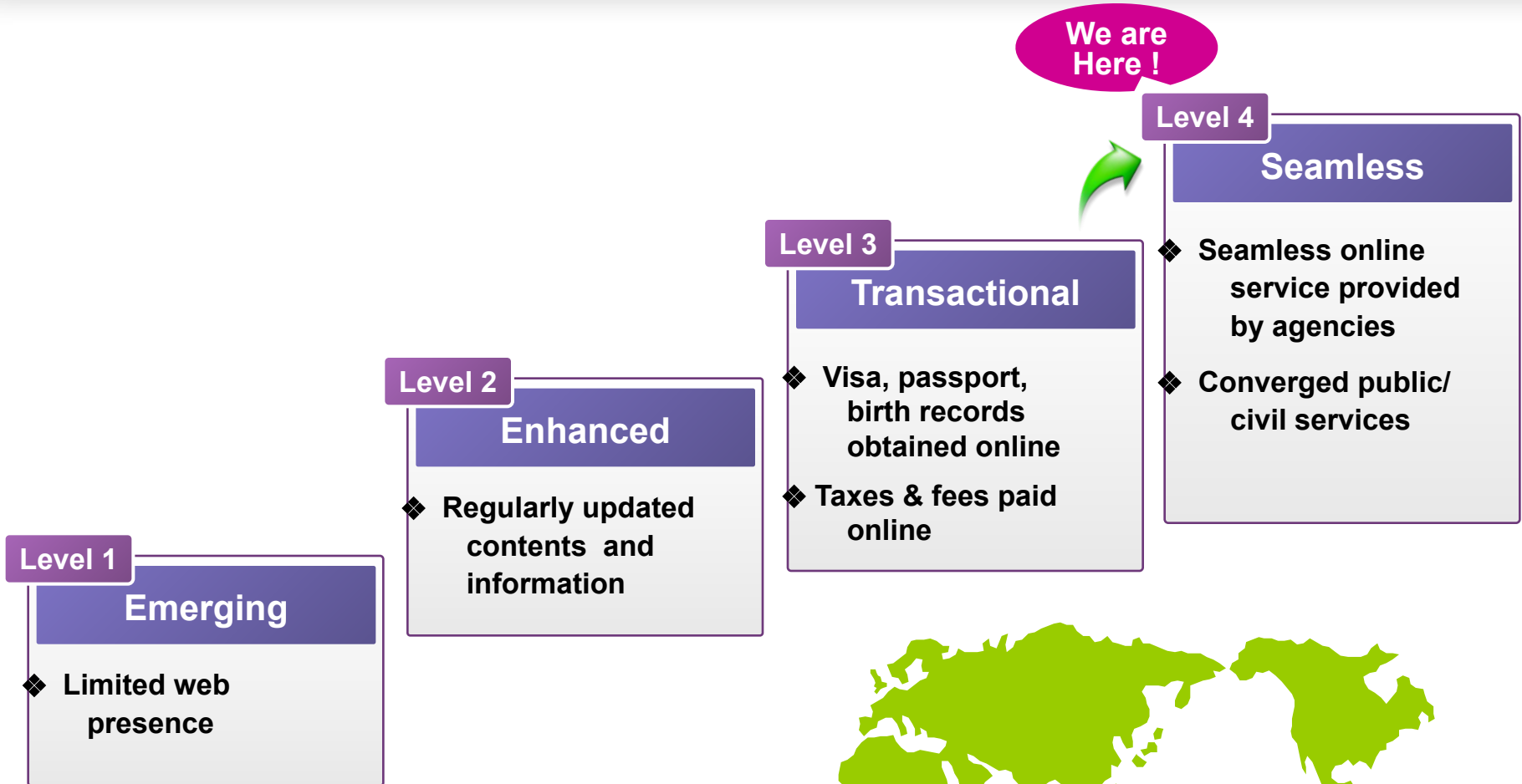


- The ministry in charge of e-Government (MOPAS) set aside a separate budget for horizontal projects involving multiple ministries (prevent duplicative investment and effectively carry out horizontal projects)



※ MOPAS : Ministry of Public Administration & Security
※ NIA : National Information Society Agency

	Before	After
Services to the People <ul style="list-style-type: none"> • Customs Clearance Service (export clearance) • Patent Service (examination period) 	<ul style="list-style-type: none"> • 1+days • 36 month(1997) 	<ul style="list-style-type: none"> • 2-min • 9.8 month(2006)
Efficient Public Administration <ul style="list-style-type: none"> • e-Procurement (No. of contract per employee) • e-Document distribution 	<ul style="list-style-type: none"> • 179(1997) • 78.1%(2002) 	<ul style="list-style-type: none"> • 890(2008) • 100%(2010)
International Recognition <ul style="list-style-type: none"> • UN e-Government development index • UN Public Service Awards 	<ul style="list-style-type: none"> • 15 rank(2001) • 0 	<ul style="list-style-type: none"> • 1 rank(2010 & 2012) • 5 winner(2003, 2007, 2011)



1 Customer Oriented e-Government Services

- e-Government initiatives with the most potential to impact everyday lives of citizens such as resident registration, vehicle, customs clearance, employment, statistics management, etc... were given first priority, which became the foundation for e-Government

* Korea's e-Customs, e-Procurement, and e-Patent solutions grew to become globally recognized brand products

2 Appropriate Institutions for Each Phase of e-Gove Implementation

- In order to sustain e-government implementation, appropriate laws were enacted during each phase ensuring a positive enabling environment for e-Government

* Act on Expansion of Dissemination and Promotion of Utilization of Information System (1986), Framework Act on Informatization Promotion(1996), Digital Signature Act(1999), e-Government Act(2001), Act on Shared Utilization of Public Administration Information(2010), etc.

3 Sustained Investment in e-Government Budget

- 1% of the national budget was invested into e-Government construction every year
- Created and utilized the Information and Telecommunication Promotion Fund to build early e-Government

* Appropriated 10% of the informatization budget for e-Government support projects by MOPAS in order to effectively implement multi-ministry horizontal projects (2004)

4 Dedicated Organization Structure for e-Government Implementation

- Established supervisory committees to drive e-Government directly under the President or Prime Minister
- Assigned CIO for central and regional e-Government and created dedicated support structures
- Utilized specialized e-Government technical support agencies

* National Information Society Agency , Korea Local Information Research & Development Institute

5 Change Management of Public Officers in a Changing e-Government Environment

- Overcame issues such as public officers' fear of workforce reduction due to e-Government deployment, and resistance in using information systems through sustained change management education

* electronic system user training, public officer e-capacity development, informatization contests and so forth

6 Public - Private Partnership

- Efficient role division with the government taking care of e-Government policy making, IT companies providing technology and skills, and citizens actively participating were key factors in e-Government construction and utilization

* Informatization Promotion Committee (1996), Special Committee on e-Government (2001), Presidential Committee on Government Innovation and Decentralization (2003), Presidential Committee on Government Information Strategy (2009)

I. Best Practices

II. Best Practices

- Separately managed information systems are consolidated by establishing NCIA

Information systems of government agencies integrated and managed together



Seamless & Flawless Operation Achieved

- Stable integrated IT management for 24 / 7
- Monthly system failure time : 67min ▶ 5.4 sec.



IT Management Improved

- 67% of employees licensed for ITIL (IT Infra. Lib.)
- Number of systems managed per person : 1.8 ▶ 13



Security Environment Consolidated

- 8-layer protection / 4-step analysis against intrusion
- Cyber attack / intrusion detection system equipped
- Dual system for natural disaster relief

- Bidding procedures are now processed online in a one-stop process

In 2009, over 70% of Korea's total public procurement (122 billion USD) was conducted through KONEPS

* Users: 191,000 businesses and 41,000 agencies

The screenshot displays the KONEPS website interface. At the top, there is a navigation bar with links for HOME, Korean, SITEMAP, On-line Call Center, Video Manual, and Help. Below this, there are tabs for About PPS, Bid Info, Buyers' Page, Suppliers' Page, Shopping Mail, Product Code, Price Info, and Customer Support. A secondary navigation bar includes Log In, Register, My Page, and e-Document. The main content area is divided into several sections: 'Issue In Focus' with a banner about bid validity; 'News' with a list of recent updates; 'Quick Links' for Bid Info, Buyers, and Suppliers; 'Bidding & Contract Info Quick Link' with a list of notices; 'KONEPS Service' with search and reference options; and 'e-vote' section. A calendar for November 2006 is also visible. The footer contains contact information and a disclaimer.

- * Korea received UN Public Service Award (PSA) in 2003 and was introduced as a best practice model for transparency enhancement by OECD

Enhanced Efficiency

- Information on all public biddings
- One-time registration for bidding for all agencies and bidding documents submitted online
- Saves USD8.1B worth of transaction costs annually

Enhanced Transparency

- Bidding and contract information open
- Real-time checking of procurement processing
- Reduced face-to-face meeting by work procedure automation

- Number of documents and visits have decreased through online civil services

Civil information inquiry, petition & application, document inquiry and issuance, etc.



Civil information inquiry and application

- Online information services for up to 4,969 inquiries
- Online application statistics : 410 inquiries(2005) ▶ 3,020 inquiries(2010)
 - ※ Online business registration, tax payment and its certificates, factory registration, etc.

Online document inquiry and issuance

- Issuance statistics : 8 inquiries(2005) ▶ 1,208 inquiries(2010)
 - * Awarded the 2011 UNPSA
 - Improving transparency, accountability and responsiveness in the public service

- IT infrastructure established and IT education provided to rural regions

363 e-villages established, creating IT friendly environment in rural regions

The screenshot shows the homepage of the Information Network Village website. At the top, there is a navigation bar with 'Introduction | BBS | Sitemap | Contact us' and a language dropdown set to 'English'. Below the navigation are four main categories: 'Invil Villages', 'Tourism', 'Special products', and 'Festival'. A central banner features a photo of people in a rural setting with the text 'We invite you to Information Village, the home of your heart!'. Below this are two featured sections: 'Hot! Theme Travel' with a link to 'Seorisan Mountain' and 'Hot! Food and Travel' with a link to 'Pumpkin Porridge'. A 'This Month's Festival' section lists various events with their dates. At the bottom, there is a 'Information Village Specialties' section with icons for Grain, Fruit, Vegetable, Seafood, Meat, Processed Food, Healthy Food, Plant, and Others. The footer includes the website logo, copyright information for 2002, and a 'TOP' button.










IT Infrastructure Established

- High speed internet subscription rate : **9.1% ▶ 66.5%**
- 6,297 PCs provided to schools, local governments, public agencies, information network villages
- PC penetration rate : **37.3% ▶ 72.1%**

Online Commerce Vitalized

- Selling local specialties through online : **\$3M('06) ▶ \$20M('10)**
- Local specific contents, web portal, shopping, and community services provided
- * Awarded the 2011 UNPSA**
 - Fostering participation in public policy-making decisions through innovative mechanisms

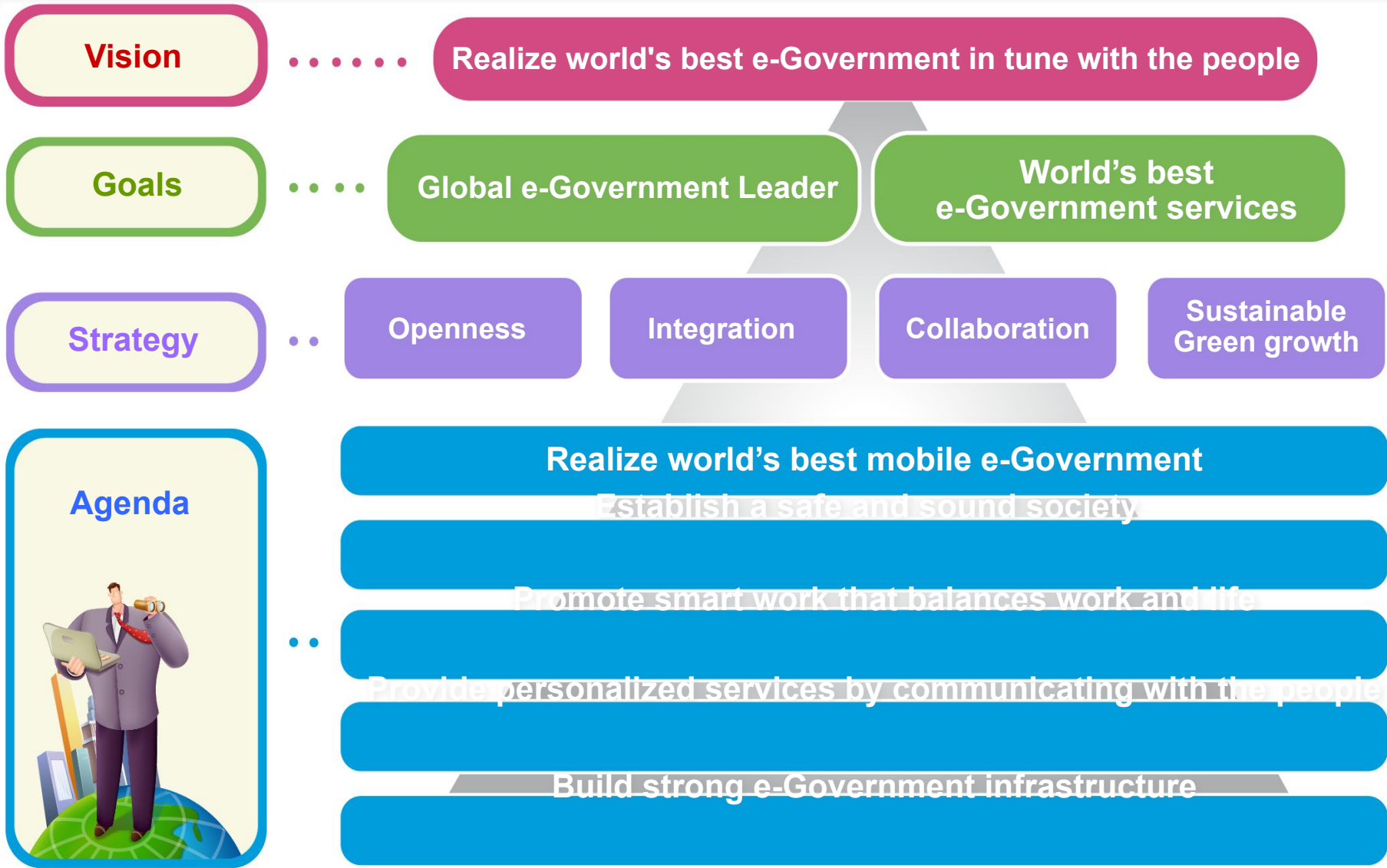
• Achieving the World's Best e-Government

International Awards	Model Cases Selection	International Certification
<p>HANAR</p>  <ul style="list-style-type: none"> Shared use of administration info 1st prize by e-challenge (2010) 	<p>HOMETA</p>  <ul style="list-style-type: none"> Comprehensive Tax service Good practice of e-Tax by OECD (2006) 	<p>g2b</p>  <ul style="list-style-type: none"> e-Procurement services Int'l Standard by UN/CEFACT (2005)
<p>INVI</p>  <ul style="list-style-type: none"> Internet villiage 1st Public Service Awards by UN(2011) 	<p>MINWON2</p>  <ul style="list-style-type: none"> Internet Civil Services Best Website by YAHOO (2002) 	<p>KIPORO</p>  <ul style="list-style-type: none"> e-Patent services ISO 20000 (2006)
<p>NCI</p>  <ul style="list-style-type: none"> Gov't Data Center Data center excellency Award by futureGov (2010) 	<p>e-peopl</p>  <ul style="list-style-type: none"> Petition and discussion portal Top 10 e-Gov by World e-Gov forum (2007) 	<p>UNIPASS</p>  <ul style="list-style-type: none"> e-Customs clearance services ISO 20000 (2006) ISO 9001 (2009)

I. Best Practices

II. Best Practices

**III. Towards
Smart Government**





Realize a world-best e-Government that works for the people

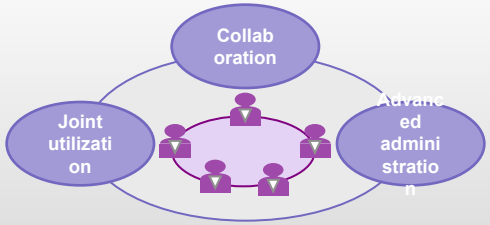


User-oriented multiple channel integration service

Information disclosure/Public participation

Smart-work business environment

Business space	Group remote conference (major hubs)	Nurturing service
Personal remote conference	Offline meeting (major traffic point)	Remote training

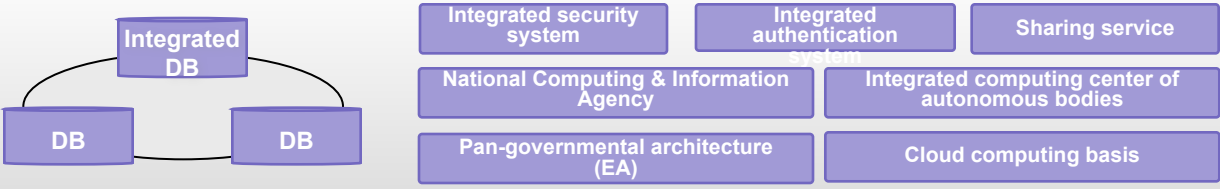


Link with the related agencies

Administrative agencies	
Public agencies	
Medical care, welfare, education, employment agency	
Enterprises	

Collaboration/Information sharing

e-Government infrastructure



E-Gov't is Strategic Tool for Government Innovation

- Be keen and smart on socio-technical public sector reform and service innovation
- Integrate ICT and e-Gov't into the centerfold of PA innovation & reform
- Invest capable resources enough under Strategic National Plan in a whole view
- Solve e-Gov't risks(Tech/Law & policy/Org. Culture/Funding/BPR/M&M/Human...)
- Roll out Citizen Centric e-Government & Collaboration Model with private sector
- Overcome barrier context w/ stronger leadership in one body of State partnership
- Localize Global Standards & Best Practices on structured develop methodology
- Adopt Best Of Breed future trend technology into designing of e-Gov't
(Pan Gov. ITA/EA, Cloud computing, Web 3.0, Big data, Mobile centric, Context...)

Utilize ICT sector as Powerhouse for Economic Growth

- Believe Digital modernization of PA will expedite Economic Development
- Aggressively pursue transformation into future Knowledge Economy Powerhouse
- Focus on the technology product R & D led by development of HR & ICT industry
- Make ICT industry as one of strong drivers for future Economic Growth

Thank you