e-Government of Korea :
Development History and outcomes

National Information Society Agency

Contents

KOREA

I. Overview of Korea's e-Government

KOREA

1. e-Government Implementation Background

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	■ The first & 2nd administrative computerization project
	1987~1996	Building Administrative Computer Networks	■ The first & 2nd National Basic Information System computer networks project
Foundation	1997~2000	Promoting informatization	■ Building the foundation for high-speed information and communications - Building 144 regional optical transport network nationally ■ Informatization on unit business or function - procurement, passport, patent, customs etc
Launch	2001~2002	11 major tasks for e-Government	■ 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	■ Execution of 31 e-Government Project ■ Amendment of e-Government Acts (2007.1)
Maturity	2008~	Expansion of convergence & sharing	■ Implementation of e-Government focused on usage and convergence - Expansion of linked convergence into public & private sector ■ Unification of implementation system for national informatization and e-Government

3. Related Legal Framework

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

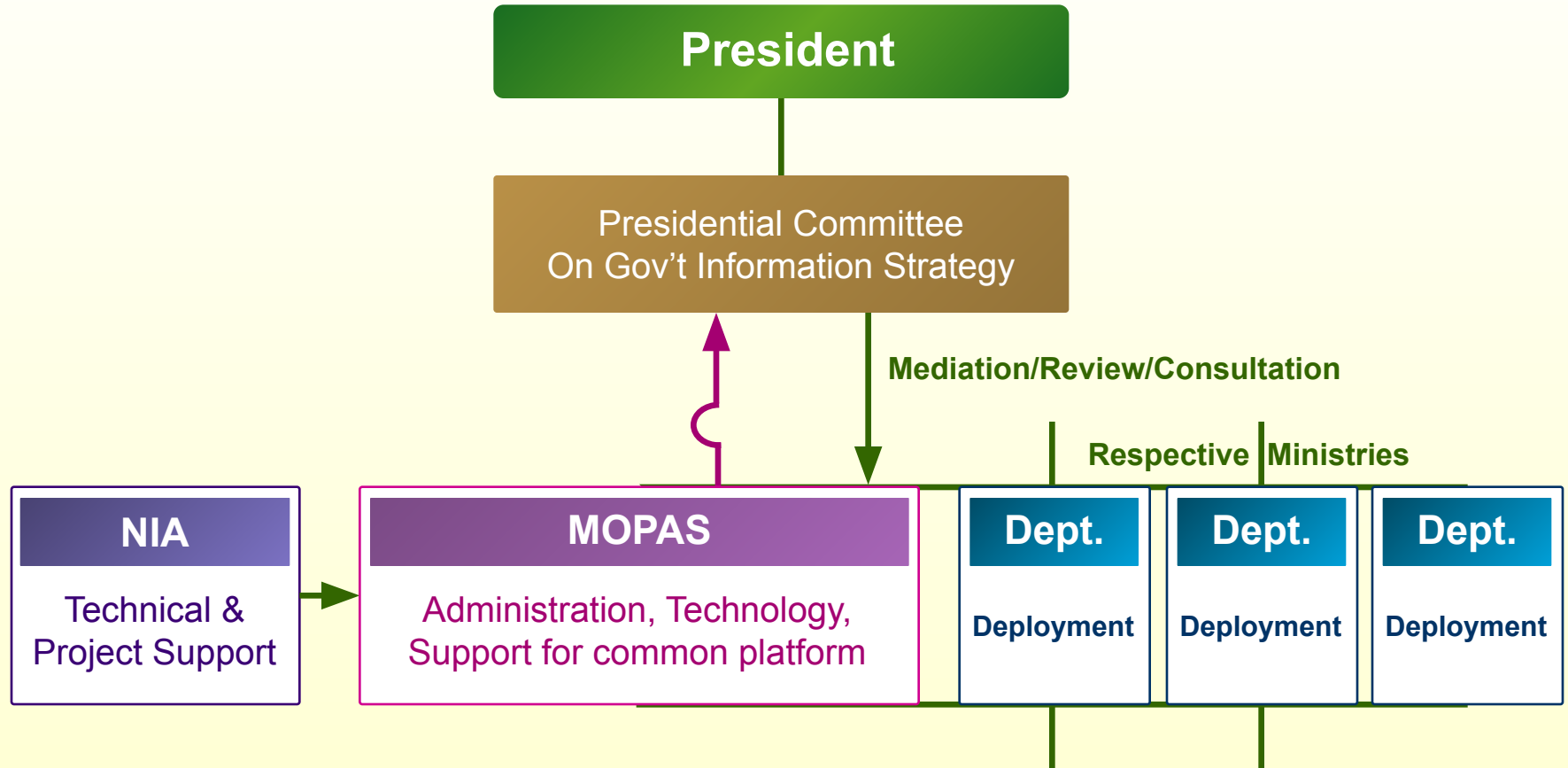## Sustained Development of IT and Industry

- 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

4. e-Government Budget

	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)

5. Organization

President

Presidential Committee
On Gov't Information Strategy

Mediation/Review/Consultation

Respective Ministries

NIA

Technical &
Project Support

MOPAS

Administration, Technology,
Support for common platform

Dept.

Deployment

Dept.

Deployment

Dept.

Deployment

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

6. Major Outcomes

	Before	After
Services to the People		
● Customs Clearance Service (export clearance)	● 1+days	● 2-min
● Patent Service (examination period)	● 36 month(1997)	● 9.8 month(2006)
Efficient Public Administration		
● e-Procurement (No. of contract per employee)	● 179(1997)	● 890(2008)
● e-Document distribution	● 78.1%(2002)	● 100%(2010)
International Recognition		
● UN e-Government development index	● 15 rank(2001)	● 1 rank(2010 & 2012)
● UN Public Service Awards	● 0	● 5 winner(2003, 2007, 2011)

7. Levels of e-Government

We are Here !

Level 4

Seamless

❖ **Seamless online service provided by agencies**

❖ **Converged public/ civil services**

Level 3

Transactional

❖ **Visa, passport, birth records obtained online**

❖ **Taxes & fees paid online**

Level 2

Enhanced

❖ **Regularly updated contents and information**

Level 1

Emerging

❖ **Limited web presence**

8. Success Factors
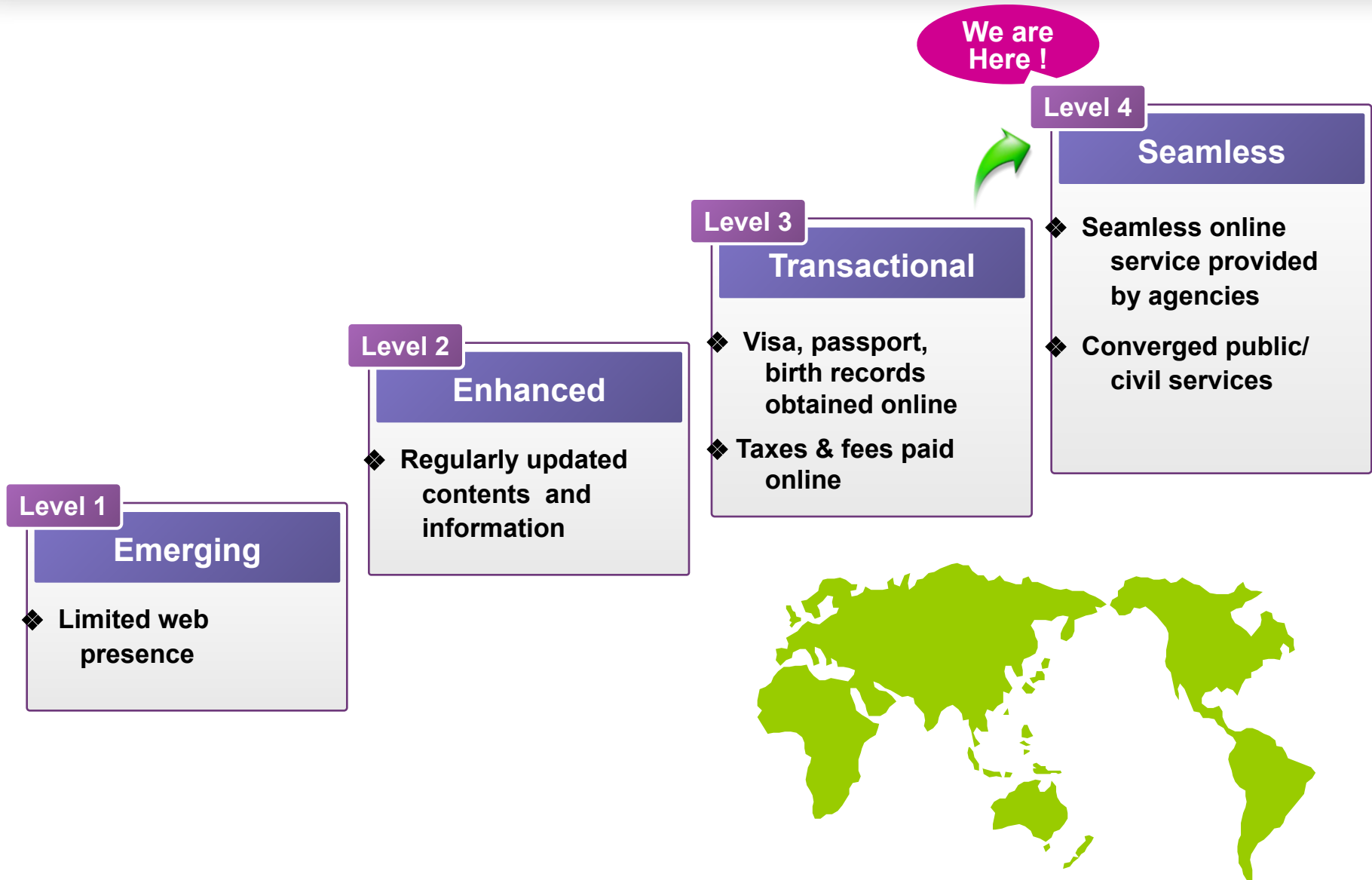
1 Customer Oriented e-Government Services

- e-Government initiatives with the most potential to impact everyday lives of citizens such as resident registration, vehicle, customs clearance, employoment, 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 environmtn 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 Adminstration 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)

8. Success Factors

4 Dedicated Organization Structure for e-Government Implementation

- **Established supervisory committees to drive e-Governemnt 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

KOREA

1. Governmental IDC

- **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**

2. E-Procurement : KONEPS

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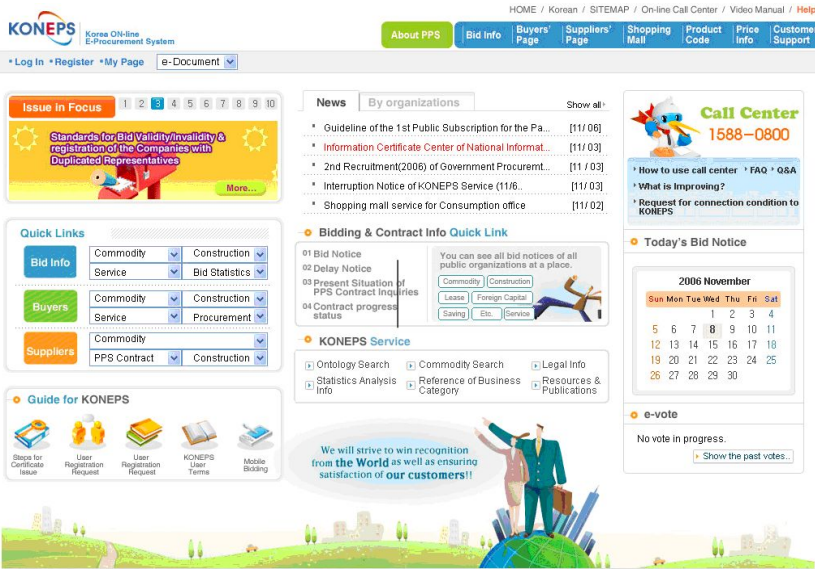
* **Korea received UN Public Service Award (PSA) in 2003 and was introduced as a best practice model for transparency enhancement by OECD**

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**

4. Information Network Villages

- **IT infrastructure established and IT education provided to rural regions**

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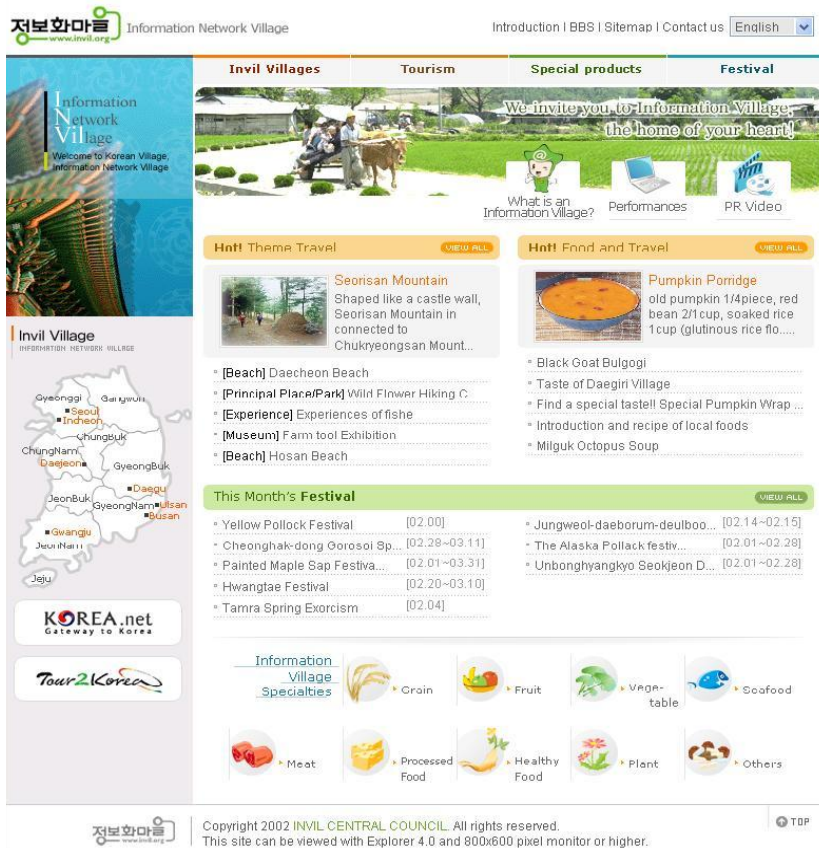
IT Infrastructure Established

- **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**

- 17 -

- **Achieving the World's Best e-Government**

International Awards	Model Cases Selection	International Certification
HANARO	**HOMETAX**	**g2b**
▪Shared use of administration info	▪Comprehensive Tax service	▪e-Procurement services
▪1st prize by e-challenge (2010)	▪Good practice of e-Tax by OECD (2006)	▪Int'l Standard by UN/CEFACT (2005)
INVIL	**MINWON24**	**KIPORO**
▪Internet villiage	▪Internet Civil Services	▪e-Patent services
▪1st Public Service Awards by UN(2011)	▪Best Website by YAHOO (2002)	▪ISO 20000 (2006)
NCIA	**e-people**	**UNIPASS**
▪Gov't Data Center	▪Petition and discussion portal	▪e-Customs clearance services
▪Data center excellency Award by futureGov (2010)	▪Top 10 e-Gov by World e-Gov forum (2007)	▪ISO 20000 (2006)
		▪ISO 9001 (2009)

I. Best Practices

II. Best Practices

III. Towards
     Smart Government

KOREA

1. Vision Framework

Vision · · · · · · **Realize world's best e-Government in tune with the people**

Goals · · · · **Global e-Government Leader** | **World's best e-Government services**

Strategy · · **Openness** | **Integration** | **Collaboration** | **Sustainable Green growth**

Agenda · ·

Realize world's best mobile e-Government

Establish a safe and sound society

Promote smart work that balances work and life

Provide personalized services by communicating with the people

Build strong e-Government infrastructure

Openness
- Public information and services made available to the people
- Increased transparency in Government policies and operation

Integration
- User-oriented service integration
- Multi-channel integration such as PC, smart-phone, and smart TV.

Collaboration
- Expand partnerships and information sharing with local autonomies, public entities, and private sector
- Establishes collaborative culture and institutions

Sustainable growth
- Low carbon green growth through green IT systems
- Joint growth among e-Government stakeholders

4 strategies

3. Smart Government in 2015

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

Indivi-duals	User desired customized service at any time and place	Enter-prises	enterprise competitiveness using customized services	Society	Lives a safe and protected life	Public servant	Smart work whereby work is harmonized with life

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

Collaboration

Joint utilization

Advanced administration
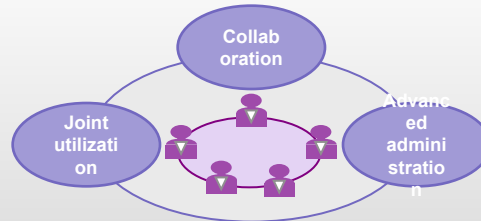
Link with the related agencies

Administrative agencies

Public agencies
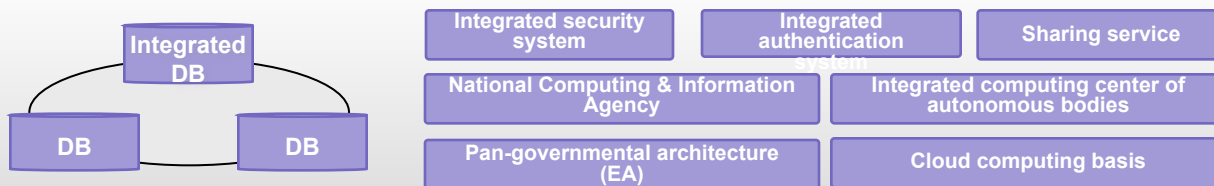
Medical care, welfare, education, employment agency

Enterprises

Collaboration/Information sharing

e-Government infrastructure

Integrated DB

DB

DB

Integrated security system	Integrated authentication system	Sharing service
National Computing & Information Agency	Integrated computing center of autonomous bodies	
Pan-governmental architecture (EA)	Cloud computing basis	

Recommendation for Belarus

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