The Key Success Factors of e-Government in Korea

Chapter 04
Legal Framework and Policy Tools for e-Government
This chapter aims to discuss the significance of legal frameworks and various policy tools that support e-Government policy-making in the context of e-Government building in Korea. This chapter will also help understand that e-Government should be regarded as a socio-technical phenomenon from a holistic perspective for successful e-Government building in developing countries.
Chapter 04

Objectives

- To build an understanding of the significance of laws and regulations for e-Government in Korea
- To build an understanding on the effectiveness of various policy tools used for achieving e-Government policy objectives in Korea
- To build an understanding of e-Government as a socio-technical phenomenon from a holistic perspective for successful e-Government building
Chapter 04

Structure

1. Significance of Legal Framework
2. Significance of Policy Tools
3. e-Government Act of Korea
4. ICT Laws in Korea
5. Policy Tools: Stable Funding
6. Policy Tools: Agencies Providing Expertise and Support
7. Conclusion
The legal framework

It is concerned with establishing government relations, or broad strategic alignments at the legislative level for e-Government building

(Source: NIA, 2016; MOIS & NIA, 2019)
The legal framework

It defines formal roles of organizations participating in the e-Government policy development process.

- Division of work among agencies
- Responsibility
- Resources
- Concentration of authority

The legal framework is regarded as one of the main foundations of policy development capacity

(Source: NIA, 2016; MOIS & NIA, 2019)
Chapter 04

1. Significance of Legal Framework

A major obstacle to emerging ICT-based e-Government services

Legal system
Designed to fit the existing offline administrative environment centered around paper documents

The Korean government therefore promoted legal system readjustment while pushing ahead with its e-Government projects

(Source: NIA, 2016; MOIS & NIA, 2019)
The policy tools for coordination and control

These are concerned with elaboration of strategies by each organization as an actor.

They should have policy tools to make participating agencies in e-Government building process follow their policy orientations and directions.

(Source: NIA, 2016; MOIS & NIA, 2019)
Chapter 04

2. Significance of Policy Tools

The policy tools can contribute to …

The development of routine, stable, and recurring modes of behavior within legal frameworks and among organizations by providing government operations with coherence and effectiveness

(Source: NIA, 2016; MOIS & NIA, 2019)
3. e-Government Act of Korea

Background of e-Government Act

e-Government Act designed mainly to facilitate

1. Implementation and operation of e-Government
2. Digitalization of public services and management
3. Reduction of paperwork
4. Promotion of e-Government initiatives

(Source: NIA, 2016; MOIS & NIA, 2019)
The e-Government Act has served as the fundamental law behind e-Government implementation

As e-Government emerged as a national policy agenda and full-scale projects started to be carried out in 1990s, it was required to enact the laws and regulations to justify the e-Government promotion and its implementation.

The Korean government enacted in 2001 the Act on the Promotion of e-Government, Administrative Tasks for Implementing e-Government, the first legislation of its kind in the world.

This Act was amended as the “e-Government Act” in March 2007.

(Source: NIA, 2016; MOIS & NIA, 2019)
Main Contents of the e-Government Act

The main contents of the e-Government Act focus on the provision and utilization of e-Government services including:

- Basic principles for e-Government policy promotion
- Digitalization of the civil petition processes
- Introduction of emerging technology-based e-Government services

(Source: NIA, 2016; MOIS & NIA, 2019)
The Act also stipulates:

1. Establishment and utilization of electronic documents
2. Administrative electronic signatures & common data utilization infrastructure systems
3. Joint use of administrative information
4. Introduction and utilization of information technology architecture to strengthen the operational foundations of e-Government
5. Creation of an efficient management base for information resources
6. Designation of electronic government project promotion
7. Assessment and international cooperation agencies as means of implementing the e-Government projects

(Source: NIA, 2016; MOIS & NIA, 2019)
### 3. e-Government Act of Korea

#### The Act also stipulates

<table>
<thead>
<tr>
<th>Classification</th>
<th>Main Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Provisions</td>
<td>• Purpose, Definitions, Duties of Administrative Agencies and Public Officials</td>
</tr>
<tr>
<td></td>
<td>• Principles of e-Government</td>
</tr>
<tr>
<td></td>
<td>• Formulation of Master Plans for e-Government</td>
</tr>
<tr>
<td></td>
<td>• Formulation and Evaluation of Plan for Each Agency</td>
</tr>
<tr>
<td>Provision and Utilization of e-</td>
<td>• Electronic Processing of Civil Petitions</td>
</tr>
<tr>
<td>Government Services</td>
<td>• Provision of e-Government Services and Promotion of Their Utilization</td>
</tr>
<tr>
<td>Electronic Administrative Management</td>
<td>• Preparation, Formation and Effects and Transmission of Electronic Documents</td>
</tr>
<tr>
<td></td>
<td>• Timing of Delivery or Arrival, Authentication of Administrative Digital Signature</td>
</tr>
<tr>
<td></td>
<td>• Construction and Utilization of Data Sharing Hub</td>
</tr>
<tr>
<td></td>
<td>• Electronic Performance of Work, Reduction of Paper Documents</td>
</tr>
</tbody>
</table>

(Source: NIA, 2016; MOIS & NIA, 2019)
3. e-Government Act of Korea

The Act also stipulates

<table>
<thead>
<tr>
<th>Classification</th>
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</table>
| Sharing Administrative Information | • Efficient Management and Use of Administrative Information  
• Administrative Information-Sharing Center  
• Applications for Sharing Administrative Information and Approvals thereof  
• Rights of Owners of Information to Request Access  
• Charges for Sharing Administrative Information |
| Strengthening Operational Basis for e-Government | • Introduction and Utilization of Information Technology Architecture  
• Laying Groundwork for Efficient Management of Information Resources  
• Improving Safety and Reliability of Information Systems |
| Promotion of Policies for Realization of e-Government | • Promotion and Support for e-Government Projects  
• Entrustment of Management of Electronic Government Projects  
• Promotion of and Support for Local Informatization Projects  
• Prior Consultation; Analysis and Examination of Performance  
• International Collaboration for e-Government  
• Designation of Specialized Institutions |

(Source: NIA, 2016; MOIS & NIA, 2019)
Principles of e-Government

Each administrative agency, etc. shall consider, among other things, the following matters in materializing, operating, and developing electronic government, and take measures necessary therefor:

• Digitize public services and improve citizens’ convenience
• Innovate administrative affairs and improve their productivity and efficiency
• Ensure the security and reliability of information systems
• Protect personal information and privacy
• Expand disclosure and sharing of administrative information
• Prevent duplicative investment
• Improve interoperability
• Other measures necessary to enhance e-Government

(Source: NIA, 2016; MOIS & NIA, 2019)
Principles of e-Government

Each administrative agency, etc. shall promote the realization, operation, and development of electronic government, based on an information technology architecture.

Each administrative agency, etc. shall not require civil petitioners to submit matters that can be electronically verified through the sharing of administrative information between the agencies, etc.

No personal information maintained and managed by administrative agencies, etc. shall be used against the wishes of the relevant person, unless otherwise provided for in other Acts or subordinate statutes.

(Source: NIA, 2016; MOIS & NIA, 2019)
Formulation of Master Plans for e-Government

Every **five** years,
Heads of central agencies must formulate a **master plan for e-Government**

- The National Assembly
- The court
- The government
- Other central administrative institutions

by combining the plans of each administrative agencies

(Source: NIA, 2016; MOIS & NIA, 2019)
3. e-Government Act of Korea

Formulation of Master Plans for e-Government

According to the e-Government Act, the following matters should be included in the master plan for e-Government:

1. Basic direction-setting for e-Government realization
2. Mid- and long-term development
3. Modification of related Acts and subordinate statutes and systems
4. Facilitation of e-Government service delivery
5. Utilization of e-Government services
6. Electronic administrative management
7. Increased sharing of administrative information

(Source: NIA, 2016; MOIS & NIA, 2019)
Status of Laws on the Internet Promotion and Information Security

The laws on the Internet and information security in Korea have been made to cope with:

- Advancement of ICT
- Social changes

(Source: KISA, 2017)
Status of Laws on the Internet Promotion and Information Security

The laws can be broadly categorized into:

1. Promotion of the Internet
2. Internet industry
3. Cybersecurity
4. Personal information protection

(Source: KISA, 2017)
Status of Laws on the Internet Promotion and Information Security

The laws

Law on promotion of the Internet

The Internet industry laws can be sub-divided into laws designed to establish the foundation for Internet services and laws designed to promote the Internet industry and services.

(Source: KISA, 2017)
4. ICT Laws in Korea

Status of Laws on the Internet Promotion and Information Security

● ● ● The laws

The laws on cybersecurity can be sub-divided into:

- Laws regulating sectors
  - Public, Private, Financial sectors, etc.
- Laws regulating infrastructure
  - Critical infrastructure

(Source: KISA, 2017)
The laws on personal information protection can be divided into:

- General law concerning the protection of personal information
- Special laws supporting the general law

(Source: KISA, 2017)
## Status of Laws on the Internet Promotion and Information Security

<table>
<thead>
<tr>
<th>Category</th>
<th>Key Laws</th>
</tr>
</thead>
</table>
| Establishment of the Foundation for the Internet Services | • Digital Signature Act  
• Framework Act on Electronic Documents and Transactions  
• Internet Address Resources Act |
| Promotion of the Internet Industry and Services | • Special Act on Promotion of Information and Communications Technology, Vitalization of Convergence Thereof, etc.  
• Act on the Promotion of the Information Security Industry  
• Act on the Development of Cloud Computing and Protection of Its Users |

(Source: KISA, 2017)
### Status of Laws on the Internet Promotion and Information Security

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Public Sector</td>
<td>• Framework Act on National Informatization</td>
</tr>
<tr>
<td></td>
<td>• Electronic Government Act</td>
</tr>
<tr>
<td></td>
<td>• Regulations on National Cyber Security Management</td>
</tr>
<tr>
<td>Private Sector</td>
<td>• Act on Promotion of Information and Communications Network Utilization and Information Protection, etc.</td>
</tr>
<tr>
<td>Financial Sector</td>
<td>• Electronic Financial Transaction Act</td>
</tr>
<tr>
<td>Critical Infrastructure</td>
<td>• Act on the Protection of Information and Communication Infrastructure</td>
</tr>
</tbody>
</table>

(Source: KISA, 2017)
# 4. ICT Laws in Korea

## Status of Laws on the Internet Promotion and Information Security

<table>
<thead>
<tr>
<th>Category</th>
<th>Key Laws</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laws on Personal Information Protection</td>
<td>• Personal Information Protection Act</td>
</tr>
<tr>
<td>General Law</td>
<td>• Act on Promotion on information and Communication Network Utilization and Information Protection, etc.</td>
</tr>
<tr>
<td>Special Law</td>
<td>• Act on the Protection, Use, etc. of Location information</td>
</tr>
<tr>
<td></td>
<td>• Credit Information Use and Protection Act</td>
</tr>
</tbody>
</table>

(Source: KISA, 2017)
Financing for e-Government

- Recognizing the importance of securing the resources needed to establish its information and communication infrastructure and e-Government, South Korea utilized diverse funding methods.

- The ‘settlement after investment’ method
  - Used to establish the long-term national computing network

- The Informatization Promotion Fund
  - Created to establish the high-speed information network

After the 2010s, the general government budget has been allocated to e-Government initiatives.

(Source: NIA, 2016; MOIS & NIA, 2019)
## e-Government Financial Support System

<table>
<thead>
<tr>
<th>Duration</th>
<th>Financial System</th>
<th>Ministry in Charge</th>
<th>Legislation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987~1992</td>
<td>Settlement after Investment</td>
<td>Postal Service</td>
<td>Act on Promotion of Expansion and Utilization of Computer Networks</td>
</tr>
</tbody>
</table>

(Source: NIA, 2016; MOIS & NIA, 2019)
Settlement after Investment

To establish
National Basic Information System Project, a total of about 700 million USD was needed over 10 years

To cope with
This tremendous scale of required funding, the Presidential Office of Economic Affairs chose to set up a subsidiary of the Korea Telecommunications Corporation (currently KT) to provide the necessary funds

(Source: NIA, 2016; MOIS & NIA, 2019)
Settlement after Investment

Korea Telecom

Major agency carrying out the project

A subsidiary of Korea Telecom invested the project costs with its own funds

Later retrieved the funds from the government

(Source: NIA, 2016; MOIS & NIA, 2019)
Chapter 04 5. Policy Tools: Stable Funding

Informatization Promotion Fund

1993~1996 Korea had inherited the Informatization Promotion Fund which had operated under the “Act on Research and Development of Information Communication” from 1996

1993~2001 A total of 7 million USD were injected into the Informatization Promotion Fund

Establish high-speed networks, Promote information services, Develop the IT industry and advance IT research

(Source: NIA, 2016; MOIS & NIA, 2019)
Chapter 04
5. Policy Tools: Stable Funding

Informatization Promotion Fund

Through this bold and resilient input of the Informatization Promotion Fund

Korea had laid the foundation for its knowledge and information society by establishing a high-speed information and communication network (155M – 5Gbps), accessed by anyone, from anywhere

(Source: NIA, 2016; MOIS & NIA, 2019)
Securing e-Government Funding

When Korea had adopted

- e-Government vision
- e-Government policies

Put e-Government at the core of the national informatization policy

After 2005, the government’s general account budget has been allocated to e-Government initiatives because it was critical to secure necessary funding from the government in a stable manner under the president’s strong commitment.

(Source: NIA, 2016; MOIS & NIA, 2019)
Chapter 04  6. Policy Tools: Agencies Providing Expertise and Support

**NIA**

National Information Society Agency

- Promoted practical policies and projects, including the expansion of the national computing network
- Laid the foundation for expanding informatization and e-Government

**KLID**

Korea Local Information Research & Development Institute

**In the past**

- Supporting the operations of e-Government systems
- Conducting research on related legal systems and policies
- Developing e-Government support projects, and implementing and managing e-Government

(Source: NIA, 2016; MOIS & NIA, 2019)
National Information Society Agency (NIA)

- It was founded based on the Framework Act on National Informatization

Supports the Ministry of the Interior and Safety with its electronic government department

**Supporting tasks**

1. Promotion of policies and businesses for mobile government
2. Public sector innovation using intelligent information technologies such as artificial intelligence
3. Promotion of projects for discovering application services in the emergence of the intelligent information society

(Source: NIA, 2016; MOIS & NIA, 2019)
The Korea Local Information Research & Development Institution (KLID)

Established under the e-Government Act

It aims at strengthening regional competitiveness and improving the qualities of life of residents through local government informatization

It mainly contributes to the promotion of e-Government by

- Establishing and operating local governments’ administrative information systems
- Fixing information system failures and strengthening security systems
- Conducting research and consultation on the development of systematic informatization of local governments

(Source: NIA, 2016; MOIS & NIA, 2019)
Chapter 04 7. Conclusions

Summary

- Initiated the National Basic Information System Project
- Sponsored KII, 11 e-Gov. Project, e-Gov. Roadmap, etc.
- Ensured all relevant ministries’ support & collaboration by strongly signaling President commitment
- Accompanied commitment of resources and expertise

Political Leadership

- Informatization Strategy Meeting and Special Committee for e-Gov. under the President
- Informatization Promotion Committee chaired by Prime Minister in close consultation with the Advisory from private sector
- Ministry of Science and ICT & MOIS as the focal point
- Technology support agencies: NIA, KISA, NIPA, ETRI, KLID, NCIA

Governance

- “Settlement after Investment”: National Basic Information Project
- Informatization Promotion Fund: KII and 11 e-Gov. R&D, ICT education
- Public-Private Partnership: Co-investment (KII Network)

Funding

- Computer Network Act of 1986 for the NBIS
- Framework Act on Informatization Promotion of 1995

Legal Framework

- Mass digital literacy campaigns sponsored by Korean Government
  - 1st phase (2000.7 ~ 2002.6): 13,805,192

ICT Capacity Building
e-Government as a socio-technical phenomenon

- Not only technological artifacts, but also the social and organizational aspects and elements around those artifacts contributed to the success of e-Government.
- The ICT applications to the public sector can be an opportunity for strengthening the public administration, but the following factors should be established to realize the expected effect of ICT adoption to the government and the public sector:
- Elements of e-Government
  - The use of ICTs
  - The support of governmental actions to provide information, services, administration, products
  - The improvement of government relationships with citizens through the creation of new communication channels or the promotion of citizen engagement in the political or administrative process
  - The use of a strategy to add value to the participants in the process
7. Conclusions

e-Government viewed from a holistic perspective

(Source: MOIS & NIA, 2019)
Virtuous Circle Perspective

The Korean e-Government system has been developed and improved by the forming of a virtuous cycle between infrastructure (services) and service policies and regulations.

New Demand for Public Services

Infrastructure (technology) Environment

Policy and Regulations

Feedback and Incentive

Policy Making Legal and Institutional Reform

New e-Government service provision

(Source: MOIS, 2017; MOIS & NIA, 2019)
Virtuous Circle Perspective

- In the history of the Korean e-Government system, innovative evolution and progressive evolution have happened simultaneously.

- The emergence of a new innovated administrative paradigm becomes a catalyst to imminent innovative evolution.

- And progressive evolution continues until the next cycle of innovation begins, in a process that repeats itself about every 10 to 15 years.

(Source: MOIS, 2017; MOIS & NIA, 2019)
Chapter 04 References