Ministry of
the Interior and Safety

209, Sejong-daero, Jongno-gu, Seoul, Republic of Korea
Tel : +82-2-2100-3957 / Fax : +82-2-2100-4164

e-Government
Systems of Korea
100
acknowledged worldwide
e-Government Bureau
Ministry of the Interior and Safety

ISBN 978-89-8483-312-8

e-Government

Systems of Korea

100

acknowledged worldwide

Touch!

KOREA **e-Gov.**

08 Citizen–Government Relations

18 Public Administration

32 Judicial Affairs / Public Order

44 Land / Transport / Ocean

58 Finance / Statistics

72 Health / Welfare

82 Education / Culture

92 Industry / Procurement / Employment

108 Safety / Environment

126 Communication / Infrastructure

Contents :

e-Government Systems of Korea acknowledged worldwide 100

Citizen-Government Relations

001 The People's Online Petition & Discussion Portal (e-People) 10
002 Public Information Sharing System 11
003 Public Information Disclosure System 12
004 Online Civil Complaint Center *(Eungdapso)* 13
005 Mobile Voting System (mVoting) 14
006 Mobile Civil Complaint Report System 15
007 One-Stop Civil Service Portal (Government24) 16

Public Administration

008 Government Integrated Data Center (GIDC) 20
009 Government Enterprise Architecture 21
010 e-Government Standard Framework 22
011 Administration Information System for Local Governments *(Saeol)* 23
012 Resident Registration System 24
013 Government Public Key Infrastructure System 26
014 Enterprise Portal for Administrative Affairs *(Hamoni)* 27
015 On-nara Knowledge Management System 28
016 Electronic Human Resources Management System *(e-Saram)* 29
017 National Human Resource Database 30
018 Digital Mayor's Office 31

Judicial Affairs / Public Order

019 Korea Information System of Criminal Justice Services (KICS) 34
020 Constitutional e-Court System 35
021 Automated Immigration Clearance System (SES) 36
022 Immigration Information System 37
023 National Law Information System 38
024 Integrated Service for Emergency Hotlines 39
025 National Forensic Information System (NFIS) 40
026 Probation Information System 41
027 Cyber Probation Office 42
028 Sex Offender Alarm System 43

Land / Transport / Ocean

029 Architectural Administration System *(Sae-um-teo)* 46
030 Korea Land Information System (KLIS) 47
031 National Real Estate Information System 48
032 Korea National Spatial Data Information Portal 49
033 General Information Center on Maritime Safety and Security (GICOMS) 50
034 Marine Environment Information System (MEIS) 51
035 Intelligent Transport System (ITS) 52
036 Transport Advice on Going Anywhere (TAGO) 53
037 Traffic Monitoring System (TMS) 54
038 Seoul Transport Operation Information Service (Seoul TOPIS) 55
039 Passport Information Comprehensive Administration System (PICAS) 56
040 Driver's License Information System 57

Finance / Statistics

041 Electronic National Tax System (HomeTax) 60
042 Digital Budget and Accounting System (dBrain) 61
043 Korean Statistical Information Service (KOSIS) 62
044 Nara Statistics System 63
045 National Property Inspection System 64
046 Korea Property Information System *(e-Narajaesan)* 65
047 Local Government Financial Management System *(e-Hojo)* 66
048 Local Tax Affairs Information System of Seoul Metropolitan Government 67
049 Deposit Insurance Payout System 68
050 Online Bidding System (Onbid) 69
051 Credit Recovery Information System (OnCredit) 70
052 All Public Organization Information In-One (ALIO) 71

Contents :

e-Government Systems of Korea acknowledged worldwide 100

Health / Welfare

053 Social Security Information System (SSIS) 74
054 Welfare Information System *(Bokjiro)* 75
055 Civil Petition System on Food and Drug 76
056 Food Safety Information System 77
057 Electronic Medical Record (EMR) Systems of National Hospitals 78
058 Medical Care Information System 79
059 Funeral Service Information System *(e-Haneul)* 80
060 National Pension Information System 81

Education / Culture

061 National Education Information System (NEIS) 84
062 Educational Information Sharing System (EDUNET · T-CLEAR) 85
063 Online Schooling System (Online School) 86
064 Government e-Learning Platform *(Nara baeumteo)* 87
065 Digital Administration System on Cultural Heritage 88
066 Korean Library Information System (KOLIS) 89
067 Central Archives Management System (CAMS) 90

Industry / Procurement / Employment

068 Electronic Customs Clearance System (UNI-PASS) 94
069 Intellectual/Industrial Property Office Automation System (KIPOnet) 95
070 Korea Intellectual Property Rights Information Service (KIPRIS) 96
071 Government-for-Business (G4B) System 97
072 Employment Information Platform (Work-Net) 98
073 SME Support Administration System 99
074 Business Information System for SMEs (Bizinfo) 100
075 Korea ON-line e-Procurement System (KONEPS) 101
076 Government e-Shopping Mall 102
077 RFID-Based Public Goods Management System 103
078 Korea e-Catalog Information System 104
079 Procurement Procedure Management System 105
080 Subcontracting Management System for Procurement 106

Safety / Environment

081 Korea 119 Multimedia Report Service 110
082 Disaster Scene Image Transfer and Monitoring System 111
083 Korea Safety Map 112
084 Safety Assessment System 113
085 Earthquake Early Warning System 114
086 Forest Fire Command Control System 115
087 Landslide Alarm System 116
088 Waste Treatment Management System *(Allbaro)* 117
089 Forest Resources Management System 118
090 National Forest Management Information System 119
091 Forest Engineering Management System 120
092 Forest Projects Management System 121
093 Forest Projects On-Site Support System 122
094 Forest Diseases and Pests Management System 123
095 Roadside Tree Information System 124

Communication / Infrastructure

096 Information Network Village (Invil) 128
097 Open Data Portal 129
098 Radio Wave Management and Control System 130
099 Internet Post Office (ePOST) 131
100 Postal Logistics Information System (PostNet) 132

e-Government serving citizens 24/7

Citizen-Government Relations

Citizen-Government Relations

The e-Government services with the largest impact on citizens are the Internet civil application and petition. These services allow citizens to file petitions and print out certificates from home without having to visit government offices. Korea's e-Government not only handles these services in a timely manner but also facilitates the participation of citizens using information disclosure and opinion gathering, through which the feedback is applied to enhance the reliability of policies.

10 The People's Online Petition & Discussion Portal (e-People)

11 Public Information Sharing System

12 Public Information Disclosure System

13 Online Civil Complaint Center *(Eungdapso)*

14 Mobile Voting System (mVoting) 15 Mobile Civil Complaint Report System

16 One-Stop Civil Service Portal (Government24)

The People's Online Petition & Discussion Portal (e-People)

This system is a major government-wide online communication channel where all civil petitions, proposals, complaints or reports and policy discussions are conveniently filed and processed on the Internet.

System Features

One-stop processing

Once a petition or a proposal is filed, the system relays it to the most relevant institution for one-stop processing. It also administers a feedback satisfaction assessment to improve the service quality.

- Some 920 institutions – all administrative institutions (central government ministries, local government offices, educational offices and overseas diplomatic offices), judicial organizations and public institutions – are integrated and interconnected.

Easy addition of new administrative institutions and service expansion

The number of participating organizations increased from 7 in 2005 to 924 in 2017, with service additions including petition/proposal filing and policy engagement (2005), government waste report (2011) and public interest report (2012).

Big data analysis service

The system monitors people's opinions and identifies frequently-filed or rapidly increasing requests, which are then transferred to relevant institutions for complaint prevention and an early resolution.

Site Map

Non-structured public services and different types of reports such as civil petition, citizen proposal, policy engagement, government waste report, and public interest report

User

Public officials and citizens

Estimated Development Period

50 months

Estimated Development Cost

USD 10 million

Award/Recognition and Export

- Top 10 in World e-Government Forum in France (2006.10)
- Best Demonstration Stand Award at the e-Challenge 2008 (2008.10)
- UN Public Service Award (2011. 06)
- Preparations underway for E-People system development in Tunis (2016.01 ~ 2018.03)

Managing Organization

E-People Division of Anti-Corruption & Civil Rights Commission

Access

http://www.epeople.go.kr

Public Information Sharing System

This system facilitates sharing and electronic handling of information among administrative, public, educational and financial institutions to ensure the convenience of citizens and the work efficiency of the government.

System Features

Information inquiry service

The system allows public officials to view and confirm documents (administrative information) for themselves, which are otherwise required to be submitted in paper by citizens requesting public services.

Information distribution service

When administrative institutions need to obtain information held and managed by other institutions in order to handle affairs required by law, such information can be shared and provided through the system.

Site Map

Information required for handling 2,495 businesses, including passport issuance application and welfare benefit application (as of October 2017)

User

Public service officials in administrative and public institutions

Estimated Development Period

72 months

Estimated Development Cost

USD 76.9 million

Managing Organization

Public Information Sharing Division of Ministry of the Interior and Safety

Access

http://www.share.go.kr

Public Information Disclosure System

This system provides information held and managed by public institutions to citizens in a convenient and prompt manner with the aim of expanding their right to know and enhance transparency in public administration.

System Features

Information disclosure before request

Public institutions disclose in advance, even before requests are made from citizens, the information on policies that are closely related to citizens' daily lives and large-scale budget projects, which citizens are likely to be highly interested in.

- It provides the information title and link for users to conveniently look up the list of information already disclosed on the website of each institution.

Information disclosure in its original form

The system provides the original texts of documents produced in public institutions on a real-time basis, which are classified as information to be disclosed and approved by director-level executives or higher.

One-stop shop service

Once a request is filed, the institution holding the information reviews whether or not to disclose the information, notifies of the decision and provides the requested information.

- The process of search, request and perusal is all offered at a one-stop shop.

Mobile service

There is also a mobile service, through which citizens can request for information without restrictions of time and place and check the results (launched in June 2017).

Site Map

Information already disclosed, original text information, information disclosure request, status(statistics) of information disclosure, user guide, etc.

User

All Korean nationals and foreigners who have the right to request information disclosure (Foreigners who reside in Korea for scholarships/research, corporations, or corporations or groups operating local offices in Korea)

Estimated Development Period

2015 ~ 2017
(phased development and functional upgrade)

Estimated Development Cost

USD 12.3 million
(mainly for system construction)

Managing Organization

Information Disclosure Policy Division of
Ministry of the Interior and Safety

Access

https://www.open.go.kr

Online Civil Complaint Center *(Eungdapso)*

This integrated civil petition management system that unifies windows for online petitions and proposals, which had been scattered in different functions and departments, with the aim of improving the efficiency and transparency of services for citizens.

System Features

Unified channel for citizen petitions and requests

- Citizens can file petitions or proposals on all areas and check the results on the same website.
- 3-step notifications of "reception-transfer-result" allow citizens to understand how their petitions or proposals are processed.

Integrated management of petitions and requests

- The system reduces redundant work as it receives and handles multiple petitions and proposals all upon a single website (The amount of time required for handling a petition decreased by 1.0 day, from 3.8 days before the system development to 2.9 days after).
- Petitions or proposals on all areas-civil petitions, opinion proposals, reporting on public official corruption, public interest reporting, human rights violation, and social welfare-can be filed.
- Feedback is sent out on the same day of reception of proposals that are filed as simple requests.
- As for petitions or requests that need in-depth review, the system notifies the petitioners with the estimated processing time and the department in charge before providing the results.
- The whole process of how a petition or proposal is handled is completely open on the system website and SNS.

Eungdapso offline

- Offline *Eungdapso* makes a tour around the city and provides consultations and various administrative services.
- Citizens can have one-on-one consultation with specialists of each area and also have certificates and documents issued.

Emergency messaging through SNS

In case of emergency, the system sends out official messages all at once to registered citizens, informing how to cope with the situations.

Site Map

Filing petitions or proposals, Progress and result notification, Best cases of user experience, and Citizens'Voice

User

Citizens and city government officials

Estimated Development Period

11 months

Estimated Development Cost

USD 0.8 million

Award/Recognition and Export

- Best practice in 2014 KMAC Conference (2014.05)
- Best practice in Gov 3.0 Exhibition, Ministry of the Interior and Safety (2015.02)
- Minister's Award in Administrative System Improvement Competition, Ministry of the Interior and Safety (2015.12)
- Expansion to other local governments of home and abroad-Daegu Metropolitan Government (integrated administrative management system, 2015) and Dubai

Managing Organization

Citizen Service Division of Seoul Metropolitan Government

Access

http://eungdapso.seoul.go.kr

Mobile Voting System (mVoting)

This mobile voting system is designed for a fast collection of citizens' opinions regarding the city government administration and their application to policy development.

System Features

Mobile voting system

It is a simple mobile voting system open to anyone who accesses the app or website and goes through the authentication process via telephone or SNS.

Diverse voting types

- **Policy voting :** Polls organized by the Seoul government (city, districts, educational offices) asking for citizens' opinions
- **On-site voting :** Polls accessed by only the participants of certain events such as festivals, conferences, trainings, etc.
- **Employee voting :** Polls organized by the Seoul government asking for the employees' opinions
- **General voting :** Polls organized and voted by citizens

Major voting functions

- **Open voting :** Polls open to all mVoting users
- **Closed voting :** Polls open partially to specific samples sorted by phone number, password, residence, site/location (GPS or QR code)

Site Map

- Vote : Participating in policy polls, citizen polls, local polls, etc.
- Make poll : Creating a citizen poll with short-answer, multiple-choice, or true-or-false questions
- My voting : Checking the participated, created, and obtained polls
- Policy application : Checking whether the policy voting results are applied to policy making

User

The system is mainly for Seoul citizens and Seoul Metropolitan Government, but is open to all citizens and institutions.

Estimated Development Period

12 months

Estimated Development Cost

USD 0.2 million

Award/ Recognition and Export

- Grand Prize in App Award Korea 2014 in the category of public service (Digital Chosun, 04, 2014)
- Selected as a Gov3.0 lead project, received government commendation (12, 2014)
- Smart City Expo Award Finalist (Barcelona, 11, 2015)
- Introduced in Metropolitan Solutions 2016 (Berlin, 06, 2016)

Managing Organization

Information System Planning Division of Seoul Metropolitan Government

Access

https://mVoting.seoul.go.kr

Mobile Civil Complaint Report System

This system allows citizens to report complaints or grievances (parking violations, illegal ads, urban facilities, wastes, and pavement conditions) they may have in all aspects of the city, including facilities, transportation, and environment, via their smartphones or the website on a real-time basis and promptly be informed on the whole process of how such reports are being handled and settled.

System Features

Location-based and photo reporting

Using the website or mobile application, citizens can mark the problematic spot on the map and upload photos when necessary.

Complaint or petition processing

Once a complaint is filed through the system, it is relayed immediately to the "120 Dasan Call Center,", which locates the case into the relevant department using the integrated civil petition/ proposal management system. Each relevant department delivers the result to the citizen who filed the complaint.

Site Map

Reporting of illegal parking or bus-only lane violations and reporting of grievances in daily life

User

Citizens

Estimated Development Period

6 months

Award/Recognition and Export

- Export to Mumbai, India (2014)

Managing Organization

Geospatial Information Division/ Information System Planning Bureau of Seoul Metropolitan Government

Access

http://gis.seoul.go.kr

One-Stop Civil Service Portal (Government24)

This government portal provides a single window to all government services and policies of central government ministries, public institutions and local governments 24/7. Users can also view, apply for and receive information and certificates on the portal.

System Features

Government service search
The system collects information on 70,000 government services, provides the information by each area, and allows users to search for government services by life cycle and customized benefits.

Service for citizens
Based on the interconnection with government and public services of other institutions, the system offers information on 5,000 types of services, of which 3,000 types can be applied for online.

Information
The system provides government news, policy information, research reports, legal information and statistics, which are often needed by the citizens.

Mobile service
Major services are also available on mobile for user convenience.

Site Map

Government news, civil petition application and result, document authenticity verification, civil petition document issuance record, status of civil petition document issuance, life information, and benefit finder

User

Central and local governments, citizens

Estimated Development Period

24 months

Estimated Development Cost

USD 18.6 million

Award/ Recognition and Export

- UN Public Service Award (2011)

Managing Organization

Steering Group for Administrative Service Integration under Ministry of the Interior and Safety

Access

http://www.gov.kr

e-Government enhancing efficiency of public administration

Public Administration

The key enabler of e-Government development in Korea is an the infrastructure that covers the entire central and local governments. In Korea, all central government ministries and local government offices share information by interconnecting their systems for document and HR managements. Any duplicated systems are integrated and more administrative information is shared in order to improve the expertise and efficiency of public administration.

Public Administration

20 Government Integrated Data Center (GIDC)

21 Government Enterprise Architecture 22 e-Government Standard Framework

23 Administration Information System for Local Governments *(Saeol)*

24 Resident Registration System 26 Government Public Key Infrastructure System

27 Enterprise Portal for Administrative Affairs *(Hamoni)*

28 On-nara Knowledge Management System

29 Electronic Human Resources Management System *(e-Saram)*

30 National Human Resource Database 31 Digital Mayor's Office

Government Integrated Data Center (GIDC)

This data center exclusively built for government use, leads the digital government and provides quality ICT services based on the e-Government foundation, which is firmly-built through the innovation of information resource management.

System Features

Integrated operation of e-Government systems

The data center integrates the management of e-Government systems of 45 central administrative organizations and has built for the operation of a comprehensive AI-based, multi-layer defense framework.

Construction and operation of K-Net

The data center operates K-Net, the exclusive government communications network that is fast and stable.

Resource integration and cloud service

- The data center makes group purchases and installation of IT resources needed in government and public institutions.
- Works of 740 central administrative organizations are moved to cloud.

Common big data platform ('Insight')

The center builds and operates a common big data platform for central government ministries and local governments to share.

Site Map

- nTOPS : Integrated operation environment management system
- e-ANSIS : Multi-layer comprehensive defense system / nSIMS : Big data-based log analysis system
- K-Net : Information and communication infrastructure for national institutions (local governments included) throughout the country
- G-Cloud : Information resource management portal dedicated for government use
- Insight (Hye-an) : Common big data platform

User

45 government ministries and institutions

Estimated Development Period

36 months

Estimated Development Cost

USD 92.6 million (for 1center as of 2005)

Award/Recognition and Export

- mobileGov Recognition Award in 2017 mobileGov World Summit
- Data Center Excellency Award in 2010 futureGOV Awards

Managing Organization

National Information Resources Service

Access

Internal Use (Integrated Data Center for Government)

Government Enterprise Architecture

This system allows integrated registration and management of information resources (information systems, data and hardware) and EA information of the public sector.
It offers a reference model for promoting informatization and also provides and manages information based on the government-wide EA, so it can be shared in informatization efforts.

System Features

Information resource registration and maturity/status survey

- The system allows each individual institution to register, and manage EA information and use the function of EAMS (EA management system).
- It provides functions for EA maturity measurement and EA status surveys.

Prior consultation to prevent redundancy

The system enables prior consultation on redundancy, interconnection/ shared use analysis, etc., in order to prevent duplicated investment to IT projects by different administrative organizations.

Performance management

The system provides measuring and managing functions on the operational performance of e-Government systems to support the integrated performance management of e-Government projects.

EAMS support for each institution

This system provides EAMS function to institutions having difficulties building and operating their own EAMS.

Site Map

Informatization status/analysis, EA status/analysis, prior consultation, EA information registration, e-Government system operation performance measurement, EA maturity management, policy information and guidelines, and EA education management

User

Central administrative organizations, legislative/ judicial/ constitutional institutions, local governments, public institutions

Estimated Development Period

10 months

Estimated Development Cost

USD 1.1 million

Award/ Recognition and Export

- UN Public Service Award (2013)

Managing Organization

Information Resource Policy Division of Ministry of the Interior and Safety

Access

https://www.geap.go.kr

e-Government Standard Framework

This system develops open-source, standardized software frameworks, and standardizes the functions commonly used in government systems. It is a free system open to all, which further prevents technological dependency on particular vendors and expands opportunities for SMEs to take part in national ICT projects.

System Features

Open-source framework
- The system is open-source, preventing dependency on particular technologies or vendors.
- It actively uses new global technologies to cope with the fast-changing environment.

Use of national standard technologies to improve efficiency of public informatization
- Reusing public resources saves cost.
- It enhances the quality and interoperability of public systems.

Foundation-building for domestic software industry development and fair competition
- The system can be actively used by SMEs to improve their competitiveness.
- It can be also used for commercial solution development for free of charge.

Site Map

Introduction of the standard framework, download, developer's guide, Q&A, technical support, application for education, and documentation

User

National ICT project managers and service developers

Estimated Development Period

60 months

Estimated Development Cost

USD 16.7 million

Award/ Recognition and Export

- Export to 9 countries-Mongolia, Tunis, Vietnam, Bulgaria, Mexico, Nepal, Ecuador, Tanzania and Saudi Arabia
- Excellence Award in 2009 Korea Software Technology Grand Prix; Minister's Award for open source software use (2010); Government Organisation of the Year/ Technology Leadership Award/ Government Transformation of the Year in FutureGov 2010

Managing Organization

Information Resource Policy Division of
Ministry of the Interior and Safety

Access

http://www.egovframe.go.kr

Administration Information System for Local Governments *(Saeol)*

This is a comprehensive administrative information systems designed to help local public officials to handle public services and administrative affairs online, as they are delegated by the state government.

System Features

Administrative support
- The system provides administrative support for 22 types of business handled by local governments, such as licensing/permission.
- It provides mobile administrative services,enabling access from the field.

Civil petitions, requests and applications
- The system provides convenient and fast one-stop shop services for citizens, including services for inheritance and childbirth.
- It enables automatic issuance of civil petition documents, and O2O (online-to-offline) service available everywhere.

Information hub
- The system interconnects administrative information of central government ministries, local governments and public institutions.
- It also discloses administrative information for citizens, including spatial information and license/permit data.

Site Map

- **Metropolitan/provincial administrative information system** : 22 types of business including local autonomy, welfare/women, common properties, public health and sanitation, etc.
- **Local administrative information system (Saeol)** : 22 types of business including public service management, civil defense, local industry, road traffic, etc.

User

Local governments
(17 metropolitan/provincial governments and 228 city/town/district-level local governments)

Estimated Development Period

36 months

Estimated Development Cost

USD 131.6 million

Managing Organization

Regional Informatization Division of
Ministry of the Interior and Safety

Access

Internal Use Only

Resident Registration System

This system records and manages resident registration information of people living in Korea; information is used in administrative tasks including welfare, education and election to include and provide customized services for all residents.

Development History of Resident Registry

Introduction : Registration record cards in paper form (1962~1975)

- The Resident Registration Act was established (1962) to clearly ascertain the population movement. The Act required the government to allocate 12-digit registration numbers to residents and issue certificates (1968).
- The resident registration numbering scheme changed to consist of 13 digits (1975).

•Social/economic/technological background

1962 **26.28M population;** GDP/capita USD 90; 3.8% economic growth rate
1967 The first computer in Korea introduced for demographics and other administrative affairs.
1975 **35.28M population;** GDP/capita USD 615; 7.9% economic growth rate; establishment of the Master Plan for Computerization of Administrative Affairs (1,029 computers introduced in Korea)

Computerization : Registration record cards replaced with information system (1987~1994)

- The resident registration computer network was established (1987~1991).
  - 3,600 town offices, local government offices, central government ministries, and public institutions were all connected online.
- 78 categories of resident registration information, including name, address and military service record, were organized into a database (1989).
- Town offices started computerized handling of resident registration work (1991).
- Certified copies or abstracts of resident registration were issued via online (1994).

•Social/economic/technological background

1987 **41.62M population;** GDP/capita USD 3,267; 12.5% economic growth rate
1987~1991 National Backbone Network Project implementation, including the National AdministrationNetwork (computerization of resident registration)
1994 **44.64M population;** GDP/capita USD 10,168; 9.2% economic growth rate

Ubiquitous : Issuance of resident registration certificates and abstracts via kiosks(2001) and website(Gov24)

- Public Information Sharing Center (2002~2006): Government and administrative information sharing contributed to simplified procedures for handling civil petitions and service applications.

•Social/economic/technological background

2001 47.37M population; GDP/capita USD 11,177; 4.5% economic growth rate;
(1995~2010) Korea Information Infrastructure (high-speed information network) project
2004 48.08M population; GDP/capita USD 15,884; 4.9% economic growth rate
2016 51.25M population; GDP/capita 27,533; 2.8% economic growth rate

Resident Registration System

System composition

- Hardware : 53 pieces including web servers, database servers, memory units and security equipment
- Software : 14,546FP in 7 areas including the operation software for the central resident registration information system, and 7 sets of commercial software including database encryption software
- Database : 73.34M resident registration data (51.77M for individuals; 21.57M for households)
- Network : The government information network (KII-G) connects town offices ↔ local governments ↔ central resident registration system ↔ disaster recovery system for resident registration information ↔ ministries and public institutions.

System operation

- The system manages registration information of all citizens to ensure universal provision of administrative services.
- Local resident registration information system : This system allows some 3,500 town offices to handle registration number allocation and move-in reports.
- Central resident registration information system : This system interconnects and manages nation-wide resident registration information and issues resident registration certificates.

System utilization

- A wide variety of civil affairs regarding resident registration, such as certificate/abstract issuance, are handled through kiosks or the Internet (Gov24) anytime, from anywhere.
  Online services : 21 services offered by 53 institutions-126.6 million cases of service applications/requests handled in 2016
- The system provides educational and welfare services that can be used for handling various administrative affairs like tax and election, as well as school enrollment and health insurance, which are customized to the life cycle of individual citizens.
  Online interconnection : Regularly providing resident registration data for 70 business types of 35 institutions; 1.58 million cases of data provision in 2016
  Offline interconnection : Providing data to 72 institutions when needed; 718 million cases of data provision in 2016

User

citizens

Estimated Development Period

24 months

Estimated Development Cost

USD 31.4 million (USD 24.4M for hardware and USD 7.0M for software)

Managing Organization

Ministry of the Interior and Safety

Access

Internal Use (Fundamental basis for all e-Government Services)

Government Public Key Infrastructure System

This is a government-level authentication system that ensures the identification of administrative institutions and public officials exchanging digital documents, prevents digital document forgery, and promotes safe distribution of digital documents.

System Features

Support for digital signature certificate management
The system verifies identities of public officials, issues and operates certificates for individuals for handling administrative affairs.

WebTrust standard compliance
The system is the first certification system in Korea that obtained the global trust mark, WebTrust certification, for CA (Certificate Authority) and SSL (Secure Sockets Layer) in October 2015, further adding to the reliability of system operation.

Site Map

- Administrative digital signature certificate issuance, renewal, disposal and verification services
  Management of certificates for individuals and institutions (for official digital seal, servers, G-SSL, etc.)
- Storage and recovery services for digital signature encryption key

User

- **Individuals** : Officials of the central and local governments and managers using the Public Information Sharing System in administrative institutions (corporations)
- **Institutions** : Administrative institutions, their subsidiary or assisting agencies, institutions exchanging digital documents with administrative institutions (corporations), institutions (corporations) using the Public Information Sharing System

Estimated Development Period
18 months

Estimated Development Cost
USD 5.2 million

Managing Organization
Information Infrastructure Protection Policy Division of Ministry of the Interior and Safety

Access
https://www.gpki.go.kr

Enterprise Portal for Administrative Affairs *(Hamoni)*

This is a portal system for internal administrative affairs of the staff of the Ministry of the Interior and Safety

System Features

Interconnection to in-house systems
The system is interconnected to other in-house systems such as e-approval, e-mail and e-HR *(e-Saram)* systems to support a broad range of administrative affairs.

Search and document security service
The system provides document and e-bulletin search service and ensures secure document management with its security system applied to important documents.

Management of National Assembly documents, policies and integrity
- The system efficiently manages documents requested annually by the National Assembly.
- It performs streamlined management of ministerial governance affairs and policies and also operates a system for corruption reporting to improve the integrity of officials.

Mobile *Hamoni* service
Some features are also available on mobile – press release, conference room reservation, and notifications.

Site Map
Search, document security, executive presence/absence signal, National Assemblydocument management, integrity management service, library, executive schedule management, Ministry schedule management, online poll, bulletins, etc.

User
Ministry of the Interior and Safety

Estimated Development Period
12 months

Estimated Development Cost
USD 0.7 million

Managing Organization
Director for Information & Statistics of Ministry of the Interior and Safety

Access
Internal Use Only

On-nara Knowledge Management System

This system is shared throughout government ministries, through which public officials share and use a broad area of knowledge and resources, including documents and videos produced by different ministries, as well as communicate with each other through shared mailing, scheduling, and board functions.

System Features

Open system

On-nara's subsystem, GKMC (Government Knowledge Management Center) was converted into an open format for the knowledge information to be used in individual business portals or systems.

- Materials such as government plans, white papers, manuals and guidelines are systematically collected and shared.
- The system interworks with other systems holding major information for integrated search and use of knowledge information.
- The system allows opening up online communities, which serve as communication channels among public officials of different organizations.

Mailing among nation-wide public officials

The On-nara mailing system enables mail transactions among all central and local government officials throughout the country.

- The mailing function will be offered through the mobile mail app, allowing officials to check their mails even on business trips (service to be launched in early 2018).

Site Map

Mail, schedule, board, knowledge, work manual, community, etc.

User

All officials of the central government ministries

Estimated Development Period

18 months (6 months x 3 phases) (3-phase project)

Estimated Development Cost

USD 5.9 million

Managing Organization

Collaboration Policy Division of
Ministry of the Interior and Security

Access

Internal Use Only

Electronic Human Resources Management System *(e-Saram)*

This is a standard HR management system that supports HR management of ministries and HR policy-making decisions of the Ministry of Personnel Management (MPM), by computerizing the entire personnel administration, ranging from appointment to retirement of public officials, in all administrative institutions.

System Features

Standard HR affairs management for each ministry

The system helps the electronic processing of HR affairs of each ministry, regarding personnel management, remuneration, and service (leave, overtime, business trip, travel expense calculation, etc.)

Decision-making support for HR policies

The system supports decision-making of HR policies, such as management of senior executives, HR screening and government personnel appointment of MPM, by using the data and statistics of the standard personnel management system.

Personalized service for public officials and administrative manpower

The system allows public officials and administrative workers to check their HR score cards, apply for education/training, leave and business trips, and check monthly salaries.

e-Saram mobile service

Personalized services are also provided on mobile.

Site Map

Personnel records, organizational and performance evaluation, salary, service, education and training, certificate issuance, senior executive management, HR screening, government personnel appointment, statistical analysis search, and link to other systems

User

Central government

Estimated Development Period

24 months

Estimated Development Cost

USD 9.3 million

Managing Organization

Director for ICT Management of
Ministry of Personnel Management

Access

Internal Use Only

National Human Resource Database

This human resource information management system collects and manages information on public official candidates, in order for government offices to appoint and employ qualified persons for key positions.

System Features

Registration and management of HR information

- The system offers functions of registration and management of HR information (career experiences, educational background, news articles, and multimedia data).
- Such registration and information updates are done by the candidates themselves through access to the website or by data interconnection of related systems.

Search, inquiry and recommendation

- The system offers search and inquiry functions, including natural language search, on a large pool of human resources.
- It also enables recommendation management for talent recommendations for various positions of the government.

Citizen recommendation

The system enables the citizens to participate in further developing the national talent pool by recommending new and competent human resources.

Site Map

HR information management, search and inquiry, management of HR of interest, recommendation management, citizen recommendation, performance management, key talent management, candidate management, current status and statistics

User

Central government, local governments, public institutions and citizens

Estimated Development Period

12 months

Estimated Development Cost

USD 1.4 million

Managing Organization

Talent Information & Acquisition Bureau of Ministry of Personnel Management

Access

http://www.hrdb.go.kr

Digital Mayor's Office

This system integrates and visualizes, on a real-time basis, 10 million pieces of data in 167 systems (on open data, transport operations and information and integrated safety management) handled by the Seoul Metropolitan Government, as well as the information of 800 CCTVs installed in critical areas out of some 4,000 CCTVs in Seoul.

System Features

Policy support through integration and visualization of major governance data

The system integrates, structuralizes and visualizes the governance data dispersed in different departments so the policy-maker (mayor) can make scientific and reasonable decisions based on data.

Provision of real-time information and data

The system allows real-time monitoring of information on all disasters, accidents, safety and traffic situations in Seoul on a large interactive screen, and the mayor can give real-time orders to workers in the field through voice or video telecommunication.

Prompt sharing of governance affairs with the citizens

From December 2017, information on key policies and projects will be shared with the citizens real time, which will enhance the responsibility and transparency of the city government administration.

Site Map

- Information on city safety (fire, disaster, and accident), air and water quality, and prices
- Real-time public opinions (through civil petitions and government news)
- Project list and details of the Seoul Metropolitan Government
- Voice and video call to relevant fire or police stations in case of disaster or emergency

User

Mayor of Seoul (to be open online to citizens and Seoul government workers in 2017)

Estimated Development Period

9 months

Estimated Development Cost

USD 0.5 million

Managing Organization

Data & Statistics Division/ Information System Planning Bureau of Seoul Metropolitan Government

Access

Large Touch-Screen (3.63mx1.67m) in City Mayor's Office

e-Government ensuring public safety and order

Judicial Affairs / Public Order

Maintaining the social security and Public Order is an important duty of a government. In order to realize such values, the Korean government is handling business processes ranging from legal information guides to case filing and proceeding all through the e-Government systems. The online provision of these services contributes to better efficiency and fairness of criminal and judicial affairs.

34 Korea Information System of Criminal Justice Services (KICS)
35 Constitutional e-Court System 36 Automated Immigration Clearance System (SES)
37 Immigration Information System 38 National Law Information System
39 Integrated Service for Emergency Hotlines 40 National Forensic Information System (NFIS)
41 Probation Information System 42 Cyber Probation Office
43 Sex Offender Alarm System

Korea Information System of Criminal Justice Services (KICS)

This system is a portal for citizens offering comprehensive criminal justice information, including information on court trials and investigations of the Ministry of Justice, Prosecutors' Offices, National Police Agency, and Korea Coast Guard, through the Internet and mobile.

System Features

Shared use of computerized information among criminal justice agencies

The system interconnects criminal justice information of the National Police Agency, Prosecutors' Offices, courts and the Ministry of Justice to provide a wide range of services.

Progress check on criminal cases

Users are able check the progress of their criminal cases 24/7 on the portal without having to visit relevant offices.

Paperless case handling

The system offers electronic summary proceedings for some of the cases including unlicensed or drunk driving and ensures fully electronic handling of such proceedings.

Site Map

Case check, fines inquiry, court records and notice search, service request, and criminal victim support

User

Criminal and justice agencies and the citizens

Estimated Development Period

74 months

Estimated Development Cost

USD 73.6 million

Award/Recognition and Export

- Minister's Award in Administrative System Improvement Competition, organized by the Ministry of the Interior and Safety (2013)

Managing Organization

Office of Criminal Justice Information System of Ministry of Justice

Access

http://www.kics.go.kr

Constitutional e-Court System

This system enables users to file constitutional adjudication requests, obtain documents and view e-records via PC or smartphone anytime, from anywhere.

The system also establishes an e-court environment, which allows the use of multimedia equipment such as cameras and large-screen monitors, for e-records and precedents search activities in the courtroom and provides real-time videos through the course of a trial.

System Features

Electronic processing of constitutional adjudication

- The system allows the online/electronic submission of documents for constitutional adjudication requests.
- Constitutional adjudication documents are viewed on the website (e-delivery).
- Case information and e-files collected throughout the entire process of adjudication are registered into the system for electronic management.

Establishment of the e-court environment

- Electronic equipment, such as cameras and large-screen monitors, are introduced in courtrooms.
- Courtrooms undergo renovation to accommodate electronic features.
- The e-court operation system provides functions of record retrieval and video service.

Data center and other infrastructure building activities

Site Map

- Online request for adjudication (e-document submission), e-delivery, and Internet record view
- Adjudication progress and decisions
- Operation of e-court decisions and pleadings using multimedia equipment
- Video service on sentencing, pleading and other procedures of constitutional adjudication available on the Internet

User

All citizens including claimants and attorneys-at-law, Constitutional Court staff

Estimated Development Period

24 months

Estimated Development Cost

USD 4.6 million

Award/ Recognition and Export

- A project for building an informatization system of Constitutional Court of Mongolia (2017 KOICA ODA project)
- Constitutional e-Court system in Kyrgyzstan (2019 KOICA ODA project application)

Managing Organization

Information Technology Division/ Information & Materials Bureau/ Department of Court Administration of Constitutional Court or Korea

Access

https://ecourt.ccourt.go.kr

Automated Immigration Clearance System (SES)

This cutting-edge immigration system uses the automatic immigration clearance system of Korea, called Smart Entry Service (SES), which allows travelers to register their passport and biometric information (fingerprints and facial images) in advance and handle the immigration process by themselves at the Smart Entry Service auto-gates.

System Features

Non face-to-face immigration clearance

The system ensures simplified immigration procedures, where travelers can use automated equipment for identification and quickly finish the immigration process without facing immigration inspectors.

International sharing

The system is shared with other countries operating automated immigration clearance systems; in particular, cooperation for its shared use is increasing with the United States, Hong Kong and Macau.

Site Map

SES-GE (Global Entry of the US) application, SES-e-Channel (Hong Kong) application, and SES-APC (Macau) application

User

Korean nationals and foreigners

Award/Recognition and Export

- UN Public Service Award (2007)

Managing Organization

IT Strategy and Management Division of Korea Immigration Service

Access

http://www.ses.go.kr

Immigration Information System

This is a comprehensive immigration administration system that provides a wide range of services and information, from immigration inspection and control over foreigners' stays to border management and life information for foreigners.

Korea Visa Portal

Life information for foreigners, Hi Korea

Immigration & Social Integration Network, Soci-Net

System Features

Immigration inspection using biometric information (ICRM)

The system detects foreigner identity mismatches using biometric information such as fingerprints and facial images.

Fast immigration clearance through auto-gates (SES)

The system completes the immigration clearance of each Korean national in an average 15 seconds on average, without face-to-face inspection.

Safe border management through passenger verification in advance (i-PreChecking)

The system receives and analyzes passenger information in advance, notifies airlines of whether the passengers are entitled to have boarding passes issued, and blocks the boarding of passengers liable to committing crimes in advance.

Foreigners' stay management and provision of life information (Visa Portal and Hi Korea)

- Korea Visa Portal handles visa applications and issuances for foreigners.
- Hi Korea is a portal that offers life information for foreigners.

Site Map

E-Visa application/ status check/ issuance, e-application, guide and application for social integration program and international marriage information guidance program

User

Central and local governments, foreigners, citizens

Award/ Recognition and Export

- UN Public Service Award (2007), WITSA Global ICT Excellence Award (2017)

Managing Organization

IT Strategy and Management Division of Korea Immigration Service

Access

Korea Visa Portal : http://www.visa.go.kr

Hi Korea : http://www.hikorea.go.kr

Soci-Net : http://www.socinet.go.kr

National Law Information System

This system provides services where citizens can conveniently search and find various legal information about Korea, including acts, treaties, administrative regulations of central government ministries, ordinances and regulations of local governments, precedents, Constitutional Court decisions, and legal interpretations, all at one place.

System Features

Legal information search service
The system offers search service on more than 3.7 million statutes– acts, treaties, administrative regulations and ordinances, Constitutional Court decisions and interpretations.

Information sharing
The system enables information sharing on an open API so that all citizens can use diverse information offered by the center.

Mobile service
The system provides search service on mobile for anyone to check legal information from anywhere.

Site Map
Acts, administrative regulations, local statutes, precedents and interpretations, attachments and forms, school rules and regulations, and other statutes

User
Central and local governments and citizens

Estimated Development Period
36 months

Estimated Development Cost
USD 3.3 million

Award/ Recognition and Export
- Legal information system project is being carried out in Myanmar (as a KOICA ODA project)

Managing Organization
Legislative Information Division of Ministry of Government Legislation

Access
http://www.law.go.kr

Integrated Service for Emergency Hotlines

This system receives citizens' accident or crime reports through calls to 112.
It promptly dispatches the police (local police officers or detectives) to the scenes for necessary actions and situation control.

System Features

112 report→dispatch→completion all processed at once
(Reception) Reports are received through wired/wireless phone calls, text messages, video calls or videos (Call-back system operated for abandoned calls).
(Directive) Reports are directed to relevant police or departments for immediate dispatch.

Real-time monitoring of patrol car status and dispatch on the digital map
The instant dispatch system (IDS) is operated for finding jurisdiction, patrol car location, and case information on the digital map.

Use of mobile devices, improved efficiency
- "112 reporting system for mobile devices and patrol cars" is developed and used.
- The navigation function helps police officers to immediately locate the scenes and dispatch.

Emergency reporting through 112 Emergency App
- Emergency text/voice call reporting can be made from all smartphones.
- Reporter information (photo and address) registered in the App helps the automatic display of the information and automatic location tracking.

Site Map
- 112 system : 112 situation center status, reception status, directive/completed directive, supervision, callback, multi-media report reception, PolMap (map), case search, standard questionnaire
- 112 system for mobile : Call reception/processing, map, board, etc.
- 112 system for tablet : Call reception/processing, map, board, etc.
- 112 Emergency App : 112 emergency report, 182 police consultation, safe return home service

User
Citizens

Estimated Development Period
24 months

Estimated Development Cost
USD 46.3 million

Award/ Recognition and Export
- A project for export to Angola currently under implementation by KT (project period December 2015 ~ December 2017)

Managing Organization
Crime Prevention Policy Division, Information and Communication Office of National Policy Agency

Access
Multi Channel (Call, App, SMS)

National Forensic Information System (NFIS)

This system receives evidences for interpretation and analysis, and writes and sends out analysis reports on criminal and accident investigations based on the request of national institutions or local governments.

System Features

Transparent analysis
The system writes analysis reports after receiving requests and evidences and ensures transparent analysis through internal approval process and authenticity verification.

Interconnection with external systems
The system supports a fast and accurate analysis process through the interconnection with the government-wide business process management system called On-nara BPS and other information systems for forensic investigations.

Analysis information search
The system provides a search function for analysis request information and reports as well as analysis statistics for service users' convenience.

Site Map
Analysis request reception, evidence transfer, analysis report writing, report approval, report delivery, analysis information search, statistics, performance report and evaluation

User
Staff of National Forensic Service

Estimated Development Period
12 months

Estimated Development Cost
USD 0.6 million

Award/Recognition and Export
- Part of 2016 e-Government export systems (forensic BPR/ISP consulting for Mongolia)

Managing Organization
Research Planning and Coordination Division of National Forensic Service

Access
Internal Use Only

Probation Information System

This is a support system for probation duties, which manages the attendance of persons on probation who are obliged to provide community service, undergo education or other impositions for efficient management of execution.
The system also manages written investigations as requested by courts, Prosecutor's Offices, juvenile correctional institutes and prisons.

System Features

Execution management
The system performs execution management and attendance check regarding community service, education and impositions of persons on probation.

Remote attendance check
When executing orders of public service and education in cooperating institutions, the system allows the Cyber Probation Office to take a photo of each person on probation, and sends the photo to officers for remote attendance check and execution control.

Certificate service
Upon request of the persons on probation who had completed duties of community service, education and other impositions, the system issues relevant certificates, such as the certificate of community service.

Site Map
Execution of community service, education and other impositions, unmanned/remote attendance check, certificate issuance, social resources management, written investigations reception, and newsletter management

User
Central government and staff of probation offices under the Ministry of Justice

Estimated Development Period
9 months

Estimated Development Cost
USD 0.2 million

Managing Organization
Crime Prevention Informatization Center of Seoul Probation Office, Ministry of Justice

Access
Internal Use Only

Cyber Probation Office

This probation business system takes photos and remotely checks the attendance of persons on probation, who are obliged to provide community service and undergo education to prevent recommitting of the crimes and follow such orders in cooperating institutions. It also performs remote management of progress reports written by members of *"Beopsarang"*, a private voluntary organization that cooperates with the Ministry of Justice.

System Features

Remote execution service

The system helps cooperating institutions to take photos of persons on probation who are obliged to provide community service or undergo education, and notifies local probation offices on their attendance and execution.

Remote probation service

- Members of *"Beopsarang"*, a private group of volunteers who provide counseling, job opportunities and financial assistance to criminals including those on probation, interview juveniles on probation, write reports (progress reports) and remotely register the information into the system.
- Probation officers review the progress reports received in the system and use them for guidance and surveillance.

Site Map

Attendance check and photo-taking on persons on orders of community service or education, and *"Beopsarang"* members' writing and submitting of progress reports

User

Officers of institutions cooperating on community service and education and members of *"Beopsarang"*

Estimated Development Period

9 months

Estimated Development Cost

USD 0.1 million

Managing Organization

Crime Prevention Informatization Center of Seoul Probation Office, Ministry of Justice

Access

https://www.cpo.go.kr

Sex Offender Alarm System

This system allows a real-time search on the presence and personal information (photo included) of sex offenders in specific areas or in the vicinity of users' home or workplace through the website or mobile application.

System Features

Real-time provision of personal information of sex offenders

Personal information of sex offenders is provided real time in 8 categories-name, age, photo, registered address and living address, physical information, crime summary, sexual criminal history, and electronic monitoring.

Sex offenders' personal information search

- **Map-based search :** A click on the map provides sex offender information in the area.
- **Condition search :** Keyword search provides sex offender information that meets the search condition.
- **Mobile :** Voice and text information on the presence of sex offenders around the user's location is delivered through smartphone, even on the move, based on time settings (every hour, 12 hours and 24 hours).

Sexual crime prevention and safety information

The system provides information on various policies and guidelines, including emergency measures in sexual crimes, guardians' action guide, victim protection and support schemes, and victim support facilities.

Site Map

Personal information of sex offenders, correction request and results, request for online notice and results, sexual crime prevention and safety information

User

Citizens and central government

Estimated Development Period

12 months

Estimated Development Cost

USD 1.1 million

Managing Organization

Children and Youth Protection from Sexual Crimes Division of Ministry of Gender Equality and Family

Access

https://www.sexoffender.go.kr

e-Government creating values with spatial information

Land / Transport / Ocean

The geospatial information is influential to all areas of the politics, public administration and education, and therefore must be managed at the national level. Korea has established the infrastructure for national spatial information to utilize for land development and transport planning and provided the information open for all citizens to easily access. Such spatial information serves as a foothold for achieving the “smart nation” in the age of the Fourth Industrial Revolution.

Land / Transport / Ocean

46 Architectural Administration System *(Sae-um-teo)*

47 Korea Land InformationSystem (KLIS)

48 National Real Estate Information System

49 Korea National Spatial Data Information Portal

50 General Information Center on Maritime Safety and Security (GICOMS)

51 Marine Environment Information System (MEIS)

52 Intelligent Transport System (ITS)

53 Transport Advice on Going Anywhere (TAGO)

54 Traffic Monitoring System (TMS)

55 Seoul Transport Operation Information Service (Seoul TOPIS)

56 Passport Information Comprehensive Administration System (PICAS)

57 Driver’s License Information System

Architectural Administration System *(Sae-um-teo)*

This is a national standard system for Internet-based easy and convenient processing of affairs regarding architectural and housing administration and services in Korea (covering authorization/ permit → commencement of construction → sale → completion of construction (approval for use) → demolishing).

System Features

No visit, no paper
This system saves approximately USD 930 million each year from 100% electronic handling of business process without requiring visits to administrative offices.

Non-stop flow of administration
The system ensures business continuity and efficiency in terms of architectural and housing administrative procedures.

Government policy-making and building lifecycle management information
- Real-time architectural and housing information and statistics are used in government policy-making.
- The system promotes informatization of building lifecycle management, from planning→construction→management→demolition.

Site Map
- Application and processing of administrative services for architecture (permit, commencement of construction and approval for use)
- Application and processing of administrative services for houses (permit, commencement of construction and approval for use)
- Inquiry and issuance of building register
- Statistics on architecture, houses and building register
- Architect management

User
Central and local governments, citizens, architects, and related organizations

Estimated Development Period
48 months

Estimated Development Cost
USD 27.8 million

Award/Recognition and Export
- President's Award in Innovative Brand Competition (2007)
- Prime Minister's Award in Korea e-Government Competition (2007)
- Best Demonstration Stand Award in e-Challenge 2009 (2009)

Managing Organization
Green Architecture Division of Ministry of Land, Infrastructure and Transport

Access
https://www.eais.go.kr

Korea Land Information System (KLIS)

This is a foundation system for real estate administration of the Ministry of Land, Transport and Infrastructure, 17 provincial and metropolitan governments, and 228 local governments.
It handles land administrative affairs, provides real-time information on land administration to outside institutions, and provides services for citizens through the Internet.

System Features

Business management for land administration
The system produces and manages information on 5 areas of land administration-licensed real estate agents, real estate development business, development charge, land transaction, and real estate brokerage.

Service for citizens
The system provides 28 types of online application services regarding real estate affairs like brokerage business registration and change or license re-issuance, as well as a search service for information on real estate brokerage and development businesses.

Spatial information use
The system deploys property and spatial information, owned by the National Spatial Data Infrastructure Center, to support land administrative affairs in government ministries.

Site Map
- Licensed real estate agents : Registration of successful examinees in qualifying examination and license issuance
- Real estate development business : Management of real estate development businesses, business records and experts; management of cost raised by land price increase caused by land development (development charge)
- Land transaction permit : Seller/buyer management, permit issuance
- Real estate brokerage business : Management of brokerage businesses, agents, employees; registration certificate issuance

User
Central and local governments, citizens

Estimated Development Period
14 months

Estimated Development Cost
USD 1.2 million

Managing Organization
National Spatial Data Infrastructure Center of Ministry of Land, Transport and Infrastructure

Access
Central & Local Government (Internal Sites)
Citizens (Open to the public through web)

National Real Estate Information System

This system integrates individually-operated real estate information systems and connects to cadastral and real estate information of local governments in order to produce and share policy and statistical information for administrative and policy affairs in the central and local governments and public institutions.

System Features

Original real estate information
The system collects and renews original real estate information of local governments nationwide and provides search and viewing service.

Service for citizens
The system provides services like "Find my ancestors' land" and "Find my land" for citizens.

Statistics on real estate policies
The system produces statistics on real estate policies, including statistics on land/ house/ mountain ownership through monthly/ quarterly/ semi-annual/ annual DW/DM.

Administrative support
The system provides support for administrative affairs regarding real estate registration numbers of associations and foundations, other than corporations, 11 surveying businesses (surveyor, equipment, engineers, etc.), and management of the old land cadaster.

Mobile service
The system operates a mobile application called Smart Land Information, which allows real estate information search on mobile devices.

Site Map

Computerized cadastral data and policy information, real estate policy statistics, services for citizens ('Find my ancestors' land' and 'Find my land'), proprietorship information, old land cadaster search, surveying business management, public compensation information, and Smart Land Information

User

Public officials in central and local governments

Estimated Development Period

12 months

Estimated Development Cost

USD 2.8 million

Managing Organization

National Spatial Data Infrastructure Center of Ministry of Land, Transport and Infrastructure

Access

http://nsdi.go.kr
http://www.onnara.go.kr

Korea National Spatial Data Information Portal

This system is a hub of spatial information that interconnects, shares and integrates national spatial data in order to prevent redundant development of spatial information in each institution or for each business and to solve the issue of data discordance.

System Features

Integration of national spatial information (data collection and provision)
The system collects and integrates national spatial data produced by central government ministries, public institutions and local governments to provide to users (64 information systems of 28 institutions are interconnected).

Quality management of national spatial information
The system reviews the quality of national spatial information in terms of recency, schema, and metadata-space consistency.

Spatial information search and analysis
The system provides functions of spatial information search and analysis based on the information service framework, map presentation using map (spatial information), and analysis and comparison of land policies and images needed for aerial image-based decision making.

Site Map

Information use, policy support, spatial information list management, operational support, quality monitoring

User

Public officials in local governments and workers of related institutions

Estimated Development Period

48 months

Estimated Development Cost

USD 8.8 million

Managing Organization

National Spatial Data Infrastructure Center/ Director General for Spatial Information Policy/ Housing and Land Office of Ministry of Land, Transport and Infrastructure

Access

www.nsdi.go.kr
(National Spatial Gateway)
https://map.vworld.kr

General Information Center on Maritime Safety and Security (GICOMS)

This system collects information on marine safety, piracy, and operation data of Korean ships based on the ship location and provides the information to government institutions or industry workers for use in preventing marine accidents and improving the salvage system.

System Features

Vessel Monitoring System (VMS)
The system receives ship operation data sent out from the automatic identification system (AIS) or long range identification and tracking (LRIT) system installed in ships: and displays the information on the electronic navigation chart.

Ship Security Alert System (SSAS)
Using satellite signal, the system receives alerts sent from ships having pirate, terrorist or other security attacks and spreads the information to relevant institutions.

Integrated database on ship information
The system enables a one-stop shop search on ship registration, inspection, and business data through integration of information from individual systems.

Site Map
Marine safety information, navigational warning, marine weather information, typhoon information, piracy information, search and management of marine accident information

User
Access to ship operation information and the security alert system is only for national institutions performing relevant duties. Other marine safety information is available for ship business operators and industry workers.

Estimated Development Period
12 months

Estimated Development Cost
USD 2.8 million

Award/ Recognition and Export
- Maritime Electric Highway (MEH) established (2010~2012)

Managing Organization
Maritime Safety Management Division of
Ministry of Oceans and Fisheries

Access
http://www.gicoms.go.kr

Marine Environment Information System (MEIS)

This system provides a comprehensive array of marine environment information services, and supports scientific and integrated decisions for developing, enforcing and evaluating marine policies. It serves as the integrated foundation for server and information interconnection among relevant institutions.

System Features

Provision of marine environment observation data
The system provides marine environment observation data produced by the Ministry of Oceans and Fisheries, Korea Marine Environment Management Corporation, National Institute of Fisheries Science, Korea Hydrographic and Oceanographic Administration, Korea Coast Guard, Korea Meteorological Administration, and Ministry of Environment.

Provision of various forms of processed data
The system provides Water Quality Index (WQI), Ocean Data View (ODV), time-series service on environment management sea area, and their original data.

Provision of laws, policies and knowledge information on marine environment and publications
The system provides laws and policies on marine environment, marine environment references, environment management sea area information, and Korea Marine Environment Yearbook.

Site Map
Beach environment information, original observation data of marine environmental measuring network/ automatic water quality measuring network, survey data of National Institute of Fisheries and Science and Korea Hydrographic and Oceanographic Administration, observation data of Korea Meteorological Administration and Ministry of Environment, and references on marine environment

User
Citizens and marine environment policy makers

Estimated Development Period
36 months

Estimated Development Cost
USD 3 million

Managing Organization
Marine Environment Policy Division of
Ministry of Oceans and Fisheries

Access
http://www.meis.go.kr

Intelligent Transport System (ITS)

This system collects and processes nation-wide transport information for provision to the public (via website, mobile app and open API) and performs the top-level functions in the national transport management framework

System Features

Provision of nation-wide integrated transport information
The system provides integrated transport information of expressways, national highways, and urban roadways of both the public and private sectors.

Real-time transport information service for citizens
The system provides estimated travel time between cities, real-time accident information, detour information and more.

Provision of transport information on open API
Contents and data are provided on open API for anyone to use and develop transport information.

Site Map

Nation-wide traffic map, traffic flow information, CCTV imagery information, accident information, estimated travel time between cities, and detour information

User

Central and local governments, citizens

Estimated Development Period

24 months

Estimated Development Cost

USD 1.5 million

Managing Organization

ITS and Road Safety Division of Ministry of Land, Infrastructure and Transport

Access

http://www.its.go.kr

Transport Advice on Going Anywhere (TAGO)

This system provides safe and convenient public transport information to citizens by integrating nation-wide public transport information, such as express/inter-city/intra-city/town bus, air, rail, marine and subway.

System Features

Collection and provision of integrated public transport information
The system collects information on public transport such as bus, air, marine and rail and provides the information to the general public through an open API.

Public transport information guide
The system provides information on related websites as guidance on how to use diverse means of public transport.

Provision of technical and legal information
The system provides information on related technical standards, laws and regulations, and methods of interconnection.

Site Map

Request to use open API, related information search, and interconnected institution search

User

Citizens and private-sector businesses

Estimated Development Period

72 months

Estimated Development Cost

USD 20.6 million

Managing Organization

New Transport Development Division of Ministry of Land, Infrastructure and Transport (operation commissioned to Korea Transportation Safety Authority)

Access

http://www.tago.go.kr

Traffic Monitoring System (TMS)

This system analyzes the traffic volume on national expressways, national highways, state-funded local highways and general local highways to provide basic data required for road traffic administration, including road planning, construction and maintenance, and for research and studies.

System Features

Data collection
The system collects data from the equipment installed on roads to collect traffic information.

Traffic data analysis and provision
- The system provides statistical analysis on the current status of nationwide traffic condition, by each road type, and permanent traffic volume.
- It offers statistics on traffic volume of each road type.

E-map search service
For the sake of web user convenience, the system supports yearly traffic information search and download of selected areas on the e-map.

E-book service
The system provides the e-book version of Annual Traffic Volume Reports.

Site Map
Traffic volume statistics and analysis, traffic information search and download using e-map, and e-book versions of Annual Traffic Volume Reports

User
Central and local governments, citizens

Estimated Development Period
24 months

Estimated Development Cost
USD 13.9 million

Managing Organization
Korea Institute of Civil Engineering and Building Technology

Access
http://www.road.re.kr

Seoul Transport Operation Information Service (Seoul TOPIS)

This cutting-edge traffic information system integrates and manages transport information (traffic flow and unexpected incidents) of the megacity Seoul with 10 million population, provides and analyzes a wide range of transport information, and facilitates citizens' travel convenience and policy-making.

System Features

Integrated transport management
The system takes control of real-time traffic conditions and unexpected incidents and provides information on traffic flow, public transportation, road CCTV images and parking via web, mobile and VMS.

Bus operation information
The system manages the operation data of about 9,000 buses using real-time GPS, monitors the allocation interval, non-stop operation and sudden acceleration/deceleration, and provides bus arrival time and subway information on web, mobile and BIT.

Automated control
The system regulates illegal parking and bus-only lane violations through CCTV cameras and automatically imposes fines.

Big data analysis
The system uses big data on the 5-year accumulated traffic data to offer traffic forecast service, and uses information on transport cards and public transport operation to support scientific development of transport policies.

Site Map
Information on traffic flow, public transport (bus/subway), parking, unexpected incidents like traffic accidents/events/rallies, car-sharing, bicycles, pedestrian accidents, and traffic forecast service

User
Citizens, public officials of government ministries and Seoul government, private businesses, etc.

Estimated Development Period
Phased upgrade since first launched in 2005

Award/ Recognition and Export
- 2013 ITS Local Government Award (ITS World Congress, Tokyo, 2013.10)

Managing Organization
Traffic Information Division, City Transportation Headquarter of Seoul Metropolitan Government

Access
http://topis.seoul.go.kr

Passport Information Comprehensive Administration System (PICAS)

This is an information system that handles the entire process of electronic (biometric) passport issuance online and operates 24/7 in Korea and abroad.

System Features

Simple application process using ICT

The system replaces certificate document submission with real-time data sharing among ministries, enabling the retrieval of resident registration information of the Ministry of the Interior and Safety; identity information of the National Police Agency; and military service information of the Military Manpower Administration.

Issuance of passports meeting international standards

The system reinforces the identification process with a real-time electronic identification function and digital photos taken by overseas diplomatic offices to meet the passport standards as defined by ICAO.

Combination of centralized and decentralized methods

Korea Minting, Security Printing and ID Card Operating Corporation (KOMSCO) takes charge as the only passport manufacturer in Korea to secure quality consistence; 248 local governments and 175 embassies and consulates overseas receive applications and issue passports to enhance accessibility and convenience of citizens.

Diverse utilization of collected passport information

Passport information is also provided to other institutions for use in immigration in the Ministry of Justice, lost passport identification in Interpol, passport information verification in Gov24, and emergency contact of Korean nationals residing abroad.

Site Map

All procedures related to passport management – passport issuance application and examination, payment receipt and revenue management, issuance and reading, delivery and distribution, certificate issuance, inventory management of blank passports and consumables, change of stated information, and statistics

User

Central and local governments, embassies and consulates abroad, and KOMSCO

Estimated Development Period

24 months

Estimated Development Cost

USD 14.4 million
(network and equipment cost excluded)

Managing Organization

Passport Division of Ministry of Foreign Affairs

Access

Internal Use Only

Driver's License Information System

This system provides administrative service on license acquisition and management and other online services for convenience of the citizens

System Features

Management of driver's license

- The system provides administrative service on the entire process of obtaining a driver's license.
- It offers driver's license renewal and issuance service based on system interconnection with the National Police Agency.

Paperless service for citizens

The system enables paperless service for citizens through the interconnection to public information and services of other organizations.

Online service

- The system provides information on the process of driver's license application, examination videos and notice.
- It offers 10 major services for user convenience, including reservations for exam applications.

Site Map

Application for driver's license examination, student license issuance, application for driver's license issuance, driver's license information search, examination information, and service for citizens

User

27 examination offices and the citizens

Estimated Development Period

20 months

Estimated Development Cost

USD 4.6 million

Managing Organization

IT Operation Division of Road Traffic Authority

Access

https://dls.koroad.or.kr

e-Government enhancing financial transparency

Finance / Statistics

The Growth of the national economy requires change and innovation in financial management. Korea has built a computing system for financial and statistics management, which helps successful financial planning and the effective execution of the plans. The entire process of tax payment, budget execution, national property management and statistics is operated upon e-Government systems, thus enhancing transparency and efficiency of work as well as gaining trust of the citizens.

60 Electronic National Tax System (HomeTax)

61 Digital Budget and Accounting System (dBrain)

62 Korean Statistical Information Service (KOSIS)

63 Nara Statistics System 64 National Property Inspection System

65 Korea Property Information System *(e-Narajaesan)*

66 Local Government Financial Management System *(e-Hojo)*

67 Local Tax Affairs Information System of Seoul Metropolitan Government

68 Deposit Insurance Payout System

69 Online Bidding System (Onbid) 70 Credit Recovery Information System (OnCredit)

71 All Public Organization Information In-One (ALIO)

Electronic National Tax System (HomeTax)

This system provides an integrated tax administration service, which allows taxpayers to file and pay taxes and view or receive e-tax invoices and certificates through the Internet from their home or office without having to visit the tax office.

System Features

Tax filing and payment service

- The system enables preparation and submission of various tax returns on PC instead of paper.
- Taxpayers can use the system to pay their taxes without having to visit banks or tax offices.

Search and issuance service

The system provides services regarding tax return and payment, production of materials for assessment, management of e-tax invoices, and document search/issuance.

Certificate issuance service

Users do not need to visit tax offices but can request certificate issuance via the Internet and print out the documents from their PCs.

Document request and submission

The system enables request for or submission of documents, which are administered by the National Tax Service, through the Internet.

Site Map

Search/issuance, document certificates, request/submission, return/payment, consultation/report, etc.

User

Citizens, sole proprietorships, corporations, and tax agents

Award/ Recognition and Export

Awards

- World's first tax agency to receive ISO/IEC 20000 certification (2008)
- Best Practice in Electronic Tax Administration by OECD (2006)

Exports

- Exported to Sri Lanka (2010), Mongolia (2011)
- **2012** : 24 visits to 40 countries-US, Thailand and 11 CIS countries including Uzbekistan, and more.
- **2013** : 15 visits to 17 countries-including Vietnam, Ecuador, Russia, and India
- **2014** : 13 visits to 11 countries-including Germany, China, and Saudi Arabia
- **2015** : 12 visits to 9 countries-including Algeria, Ecuador, China, US, and Uganda
- **2016 (As of June)** : 5 visits to 5 countries-Japan, China, Nigeria, Iran, and Georgia

Managing Organization

Information System Development Office, Information System Bureau of National Tax Service

Access

https://www.hometax.go.kr

Digital Budget and Accounting System (dBrain)

This is a performance-oriented financial management information system (FMIS) that applies the concept of management and competition to the entire process of financial activities, including budget formulation/ execution, accounting, settlement, and performance management. This is a FMIS model recommended by the World Bank.

System Features

Performance-oriented, strategic financial operation framework

The system represents a financial system innovation, where financial resources are strategically allocated and operated for performance.

Real-time business link and flow focused on project management

This system displays all financial information produced through the process of financial affairs and allows real-time monitoring of procedures within the authority of the project manager.

Real-time financial management

All affairs regarding financial income and expenditure are digitized and processed real-time through electronic bill presentment and payment (EBPP) and electronic funds transfer (EFT) technologies.

Provision of analysis information of financial statistics

The system provides a wide range of accurate statistical analysis information by conducting analysis from different perspectives, such as by area, ministry and function.

Site Map

Project management, budget formulation/ execution, accounting, settlement, performance management, procurement (contract), etc.

User

Central and local governments

Estimated Development Period

17 months

Estimated Development Cost

USD 55.6 million

Award/ Recognition and Export

- UN Public Service Award (2013)

Managing Organization

Supervised by Fiscal Information System Division/ Fiscal Innovation Bureau of Ministry of Strategy and Finance
Operated by Korea Public Finance Information Service

Access

Internal Use Only

Korean Statistical Information Service (KOSIS)

This is a one-stop statistical information portal system that integrates all official statistics produced in Korea for users to search the data they want all at once.

System Features

KOSIS statistical database
The system provides official statistics of Korea, including domestic/ regional/ international/ and North Korean statistics.

Visualized statistical contents
The system provides visualized statistical contents for users to easily understand information.

Information sharing (open API)
The system offers a standardized API to allow the statistical information to be used for web or mobile app development.

Mobile service
Services like domestic/ international statistical indicators, "Where I Stand in Statistics," "Men and Women", and web cartoons (webtoons) on statistics are provided on mobile.

Site Map

Domestic statistics, regional statistics, international and North Korean statistics, online publications, webtoon on statistics, UCC, RSS, Open API, integrated search, etc.

User

Citizens

Estimated Development Period

48 months

Estimated Development Cost

USD 14.8 million

Award/ Recognition and Export

- Export to Mongolia (2012), Sri Lanka (2014), and Myanmar (2015)

Managing Organization

Deputy Director General for Statistical Service Policy of Statistics Korea

Access

http://kosis.kr

Nara Statistics System

This is a general-purpose, shared statistical information system that standardizes and streamlines the entire process of statistics preparation, from planning to production, service and data storage.

System Features

KSBPM-based statistics production system
This is a general-purpose statistics production system built upon statistics metadata, which applies the concept of standard process for management and production of national statistics.
* KSBPM: Korea Statistical Business Process Model

Easy and convenient designing of survey forms
This system offers a designing tool, which helps users to make different types of survey forms using templates provided.

Input review and aggregation to improve statistics quality
The system allows users to register rules defined to extract data input errors, and design different forms of statistical tables by themselves.

Diverse survey methods
Diverse survey methods, including CADI, CAPI, CASI, CATI and mCASI are available.

PC-based statistics production system (NARA Pro)
Anyone with a PC can enjoy a broad variety of functions-survey form designing, data collection, data review and analysis-for statistical surveys.

Site Map

Nara Statistics portal, website for statistical surveys, recruitment management, survey form design, surveyee list design, preliminary examination and data input status design, data processing design, data management, statistics metadata management, link to statistical service

User

Institutions preparing official statistics (central and local governments, government/ public corporations and associations), citizens

Estimated Development Period

84 months

Estimated Development Cost

USD 19.9 million

Award/ Recognition and Export

- Patent acquisition (No. 10-168050, registered 2016.11.22)
- Export to Sri Lanka in negotiation (KRW 34 billion)

Managing Organization

Survey System Management Division/ Deputy Director General for Statistical Service Policy of Statistics Korea

Access

https://www.narastat.kr

National Property Inspection System

This is an electronic system for a business process regarding management and inspection of national properties, such as national property confirmation and checkup and measures to preserve rights of ownerless real estate.

System Features

Paralleled operation with a mobile system for field inspection

- A mobile-based system for national property field inspection is established to enhance work efficiency.
- The system constantly examines the measures following national property confirmation and checkup and their implementation.

Developing a database of inspection results

The system builds a database of the results of national property inspection and the current status of unused administrative property ownership so the information can be used for systematic management.

Provision of aerial photo service

The system integrates the aerial photos provided by private sector businesses and the cadastral map provided by the Ministry of Land, Infrastructure and Transportto identify ownerless real estate and preserve relevant rights.

Site Map

Map, national property register, central government agency designation, e-registration entrustment, consultation on gratuitous reversion, consultation of urban management plan, inspection on management conditions, preservation of rights, state-owned buildings, and notice

User

Internal staff, government ministries, public institutions, local governments, citizens

Estimated Development Period

15 months

Estimated Development Cost

USD 0.6 million

Managing Organization

Government Property Planning Division of Public Procurement Service

Access

http://npis.g2b.go.kr

Korea Property Information System *(e-Narajaesan)*

This system integrates national property information for oversight and efficient management of the properties by delegated or entrusted organizations. It also provides services for citizens regarding national property information.

System Features

Business management system

The system integrates 7-step procedures of a national property management lifecycle (planning→acquisition→conversion→operation→development→disposal→settlement).

GIS system

The system achieves immersive geospatial information on widespread national properties including thematic maps on land and buildings, statistical maps and current property information by region to identify usable properties and support decision-making.

Statistical analysis system

The system offers extraction of various structured and user-customized/non-structured statistics, which can be used as the basic data when making national property management policies.

National property portal

The portal satisfies people's right to know by providing national property information to the public, and establishes the foundation for interactive communication with the citizens through features like citizen proposal reception.

Site Map

Management inspection and other duties delegated by the Ministry of Strategy and Finance, register maintenance, basic maps, thematic maps, field survey registration, national property introduction and open information

User

Central government, local governments, and citizens

Estimated Development Period

17 months

Estimated Development Cost

USD 11.1 million

Managing Organization

Supervised by Government Properties Policy Division/ Treasury Bureau of Ministry of Strategy and Finance
Operated by Korea Public Finance Information Service

Access

https://www.k-pis.go.kr

Local Government Financial Management System *(e-Hojo)*

This system manages the whole process of local government financial affairs from financial planning to budget compilation, execution and settlement in an integrated manner.

System Features

Standardization of financial business process

The system standardizes the overall financial management activities of local governments, which had built and operated systems separately before, to improve work efficiency and save costs.

System integration

The system integrates financial affairs between central and local governments and between provincial government and city/town offices based on its connection to local tax and non-tax revenue management systems, in order to improve work speed and accuracy.

Enhanced transparency of local finance

The system supports the computerization and monitoring of major projects, contracts, budget execution and unit price information, improving transparency of financial statistics.

Site Map

Budget management of local governments including compilation, execution and settlement, unit price management of events and festivals, local contracting process management, various local financial statistics

User

Local governments (officials in charge of budget compilation, execution and settlement)

Estimated Development Period

21 months

Estimated Development Cost

USD 22.2 million

Managing Organization

Local Finance Cooperation Division of Ministry of the Interior and Safety

Access

Internal Use Only

Local Tax Affairs Information System of Seoul Metropolitan Government

This system performs efficient management of local tax affairs of Seoul and its 25 districts regarding local tax imposition, payment, and delinquency.
It ensures the flexibility and scalability of local tax administration to adjust to the environmental changes.

System Features

Local tax imposition

The system provides functions of imposition management, bill printing, emailing and SMS sending on 11 local tax items including the property tax.

Local tax payment

The system allows for convenient payment of local taxes anywhere, 24/7, using all types of means including banks, Internet, virtual accounts, ARS, smartphone, convenience store, CD/ATM, etc.

Delinquency management of local taxes

As part of managing local tax defaults, the system secures bonds through the attachment of real estate, bank deposits, salaries, and cars.

Certificate issuance

The system issues certificates confirming property tax payment of public official candidates or citizens, proving there is no default record.

Site Map

System management, general management, imposition management, payment and local tax refund, default management, certification management, approval management, and tax balance management

User

Local governments and citizens

Estimated Development Period

24 months

Estimated Development Cost

USD 4.2 million

Managing Organization

Tax Collection Division/ Finance Bureau of Seoul Metropolitan Government

Access

https://etax.seoul.go.kr or App

Deposit Insurance Payout System

This system supports integrated management of registration and verification of basic insurance payout data, payment of insurance money, and inquiry on unclaimed insurance money when an insolvent financial company undergoes bankruptcy.

System Features

Registration and verification of basic insurance payout data
The system registers and verifies basic data, such as the amount of deposits and loans of a depositor, which is necessary for the calculation of insurance payout.

Automatic calculation of insurance payout
The system performs automated calculation of insurance payout for each depositor.

Inquiry on and payment of insurance money
- Users visit payment agencies (banks) to inquire, request and receive the insurance money.
- Services regarding deposit insurance money inquiry, payment request and reception are provided through the Internet to ensure user convenience.
  - The link to the system's web inquiry service on unclaimed insurance money is provided on the websites of Korea Federation of Banks, Financial Supervisory Service and Gov24.

Site Map
Liquidation cases, liquidation execution, basic data registration, calculation of deposit insurance payout, inquiry on deposit insurance money and request for its payment

User
Korea Deposit Insurance Corporation, financial companies(payment agencies), and depositors of bankrupt financial institutions

Estimated Development Period
12 months

Estimated Development Cost
USD 2.1 million

Award/Recognition and Export
- Consulting on deposit insurance payout system construction for Deposit Insurance Corporation of Mongolia (2016)
- Consulting on deposit insurance payout system construction for subjects to Depositor Protection Fund in Lao PDR

Managing Organization
Office of Information Technology of
Korea Deposit Insurance Corporation

Access
https://dinf.kdic.or.kr

Online Bidding System (Onbid)

This is an online asset disposal system designed to integrate public sale information of different public institutions and allow them to open bids online.
It is a government-authorized information system promoting efficient disposal (sale/ lease) of public properties

System Features

Public sale search and bidding
The system provides bidding notices on sale or lease of national properties and seized assets, for which Korea Asset Management Corporation is entrusted by the government for management and disposal. It also offers information search and e-bidding functions.

Disclosure of government property information
The system provides sale and lease information of public general property items under the management of local governments and state-owned general property items under management of Korea Asset Management Corporation.

Provision of information on public sale
The system provides mailing service on major sale items, Onbid user reviews, columns on real estate and public sale, and legal information.

Mobile service
Users can register, search items, and participate in bids through the mobile app "Smart Onbid".

Site Map
Public sale item search, bid participation, public sale results, e-contract, Onbid user reviews and columns on real estate and public sale, application for education on Onbid use, matching service for items in disuse

User
Central and local governments, public institutions, corporations and citizens

Estimated Development Period
21 months

Estimated Development Cost
USD 6 million

Award/ Recognition and Export
- Minister's Award in 17thDigital Management Innovation Award (2017, Ministry of Science and ICT)
- Minister's Commendation for contributions in information cultural practices in 25th Information Culture Award (2013, Ministry of Science, ICT and Future Planning)
- Prime Minister's Award in 9th Korea e-Business Award (2005, Ministry of Trade, Industry and Energy) and 13 more

Managing Organization
Korea Asset Management Corporation

Access
http://www.onbid.co.kr

Credit Recovery Information System (OnCredit)

This system allows debtors to use the Internet to be informed about debt repayment, search details on debt creation and retirement, and Q&A service on various questions regarding debt management.

System Features

Information on debt repayment
The system introduces debt adjustment programs for credit recovery.

Debt retirement and creation details
The system provides search service on debt retirement (exemption) and creation details regarding credits owned by Korea Asset Management Corporation and National Happiness Fund.

Customer service provision
The system provides information on credit recovery, notices, Q&A on debt adjustment, etc.

Collaboration service with legal partners (lawyers and judicial scriveners)
The system website offers a floor for collaboration with partners helping with legal affairs such as lawsuits on debt adjustment.

Site Map
Debt repayment guide, credit retirement/ debt details search, customer service including the Voice of Customers (VOC), information and document exchange with legal partners (lawyers and judicial scriveners)

User
Citizens (in default) and partners for debt adjustment (lawyers, judicial scriveners)

Estimated Development Period
6 months

Estimated Development Cost
USD 0.3 million (self-developed)

Managing Organization
Korea Asset Management Corporation

Access
http://www.oncredit.or.kr

All Public Organization Information In-One (ALIO)

This system allows citizens to access major management information of all public institutions via the Internet in a comprehensive manner.

System Features

Disclosure of information in 40 categories (89 sub-categories) as of 2017
Public Institutions Steering Committee selects and officially announces major management information that citizens may want to know-number of executives, debt status, fringe benefits, and employment information of each public institution.

- General operational status (13 items)
- Financial information (13 items)
- Information on welfare (2 items)
- Others (12 items)

Site Map
Disclosure information (periodic/provisional announcements), statistics (major/detail), other information (recruitment, procurement and research information)

User
Citizens, the press, public institutions, research institutions, etc.

Estimated Development Period
4 months

Estimated Development Cost
USD 1.1 million

Managing Organization
Public Institutions Management Information Division of Ministry of Strategy and Finance

Access
http://www.alio.go.kr

e-Government ensuring health and happiness of the citizens

Health / Welfare

Health / Welfare

Korea has digitized the work related to health, welfare, pension, and veterans to build closely interlinked welfare networks. The government also analyzes big data on the social security and provides welfare services customized to individual citizens, which helps block the leakage of the welfare budget by reducing blind spots in social welfare management and preventing duplicate or fraudulent benefit payment.

74 Social Security Information System (SSIS)

75 Welfare Information System *(Bokjiro)*

76 Civil Petition System on Food and Drug

77 Food Safety Information System

78 Electronic Medical Record (EMR) Systems of National Hospitals

79 Medical Care Information System

80 Funeral Service Information System *(e-Haneul)*

81 National Pension Information System

Social Security Information System (SSIS)

This is a major social welfare management system of Korea, which performs integrated management of information regarding various social security benefits and their applicants (application, investigation, determination, provision, and management), and supports welfare administration of the central and local governments and public institutions.

System Features

Support for social security affairs in local governments (Haengbok E-eum)

The system integrates and manages all required information on benefits and service beneficiaries for handling social security affairs of local governments.

- It collects 797 types of beneficiaries' income/property data and service records from 61 institutions to provide to local governments.

Support for social security affairs in central government ministries (Government-wide)

The system offers information and business support for integrated management of government-wide social security benefits, service beneficiaries' eligibility information and their benefit records; and information and business support for proper provision and management of social security benefits.

- It supports social security affairs of 22 ministries – Public rental housing program of Ministry of Land, Infrastructure and Transport, national scholarship program of Ministry of Education, allowances for meritorious persons of Ministry of Veterans Affairs, and financially – aided employment project of Ministry of Employment and Labor.

Site Map

- Haengbok E-eum : 112 welfare services including national basic living security and welfare for infants, disabled, and elderly (88 services including the national basic living security provide benefits in cash (KRW 21T as of 2016)).
- Government-wide : Student loan and scholarship aid program, public rental housing, payment of allowances for meritorious persons and prevention of duplicated coverage, welfare service transfer program, guide to welfare information of central and local governments

User

- **(Haengbok E-eum)** 32,000 officials handling social security or welfare affairs in 226 local governments throughout the country
- **(Government-wide)** 1,600 officials in charge of welfare programs in 22 central government ministries and 55 public institutions

Estimated Development Period

24 months

Estimated Development Cost

USD 166.7 million

Award/ Recognition and Export

- UN Public Service Award in 2014
  (in the category of 'promoting whole of government approaches in the information age')

Managing Organization

Division of Welfare Information Planning of
Ministry of Health and Welfare

Access

Internal Use Only

Welfare Information System *(Bokjiro)*

This is a major portal that provides welfare information for citizens in an integrated manner so they can find the service they need, apply for the service online, or request for help with their lives (as of 2014 when the system was redeveloped).

System Features

Welfare service information

The system provides information on welfare services of central government ministries (347) and local governments (6,000), based on which it offers lifecycle-based notification services and customized welfare information.

Online application service

Applications for 16 welfare services can be made online-including infant care fees, pre-school fees, child home-care allowances, elementary/middle/high school students' educational expenses, basic pension and disability pension-and there are constantly increasing services available for online application.

Mobile service

Major services are also available on mobile app for improved user convenience.

Welfare policy information and statistics

The system provides information on welfare issues/news, welfare columns, infographics, social security statistics, neighborhood welfare facilities, etc.

Site Map

Welfare service and information search, online service application and handling, application status check, service guide, help request and details, improper benefit payment report and details

User

All citizens of Korea

Estimated Development Period

10 months

Estimated Development Cost

USD 1.5 million

Managing Organization

Division of Welfare Information Planning of
Ministry of Health and Welfare

Access

http://www.bokjiro.go.kr

Civil Petition System on Food and Drug

This system receives and handles most of the electronic petitions regarding imported food, drug, medical devices and cosmetics, which fall under duties of the Ministry of Food and Drug Safety.

Imported food Drug/Cosmetics Medical devices

System Features

Electronic petition system

- Users can file online petitions through the civil petition windows for imported food, drug and cosmetics and medical devices and receive notifications on the progress and results.
- The system provides permit information and more.

Administrative portal system

The system supports investigation and inspection duties and establishes a framework for approval and administrative traceability.

Information sharing system

The system allows information sharing across different systems, and also performs the monitoring function.

Site Map

- Application for imported food inspection, drug business permission and item license, medical device business permission and item license
- Information on civil petitions

User

- **Electronic petition system :** Application service – importer, pharmaceutical companies, medical device manufacturers / Information–citizens and civil petitioners
- **Administrative portal system :** Application service–public officials

Estimated Development Period

36 months (3–phase development)

Estimated Development Cost

USD 9 million

Managing Organization

ICT Management and Statistics Office of Ministry of Food and Drug Safety

Access

Imported food :
http://impfood.mfds.go.kr

Drug/cosmetics :
http://ezdrug.mfds.go.kr

Medical devices :
http://emed.mfds.go.kr

Food Safety Information System

This system achieves ICT–based integration of food safety information, which had been managed separately by each ministry before, for information sharing without barriers and disclosure of the original information to the citizens.

System Features

Food safety information portal (for citizens)

The system allows users to obtain a wide range of food safety information on a single website–product and company information, neighborhood restaurant information, license and permit information, administrative dispositions, information of food on recall or suspension of sale, and unsanitary food reports.

Integrated food administration system (for public officials of the Ministry of Food and Drug Safety and local governments)

The system is used for handling administrative affairs for food safety in the Ministry of Food and Drug Safety and local governments.

Food information utilization system (public officials of relevant ministries)

The system allows 12 ministries cooperating in food safety management to share the food safety information.

Site Map

Food safety information, dietary life and nutrition information, company and product search, specialized information on food safety, information for food poisoning prevention, civil petitions on food production, and unsanitary food reporting

User

Public officials in charge of food safety management, citizens, food production industry, and food safety specialists

Estimated Development Period

10 months

Estimated Development Cost

USD 9.3 million

Managing Organization

Integrated Food Information Service Division of Ministry of Food and Drug Safety

Access

https://www.foodsafetykorea.go.kr

Electronic Medical Record (EMR) Systems of National Hospitals

These systems store all medical records of national hospitals in an electronic form. There are 5 systems dedicated for the National Center for Mental Health, which treats patients with mental illness; 2 systems dedicated for the National Tuberculosis Hospitals, which treats tuberculosis patients; and 1 system dedicated for the Sorokdo National Hospital, which treats patients with Hansen's disease.

System Features

Provision of functions for medical practice

The systems contribute to reduced length of patients' waiting time, minimized manual work and cost-saving in document management, convenient information storage, easy access of medical personnel to patient's records, and diversified usage of information.

Medical and nursing duties

- Real-time patient information or medical record retrieval and prescription enhance the efficiency of medical treatment and reduce duplicated work.
- Computerization of nurses' manual work enables fast and better quality services.

Treatment support

The systems allow automated input and processing of medical images and examination results.

Hospital administration and assessment

The systems relieve the burden of information management work and instead promote fast reception and assessment of medical expenses.

Site Map

Patients' treatment, nursing, treatment support, administration/assessment, and handling of certificates and medical records

User

Doctors, nurses, workers of supporting departments, and hospital administrators

Estimated Development Period

60 months (phased expansion)

Estimated Development Cost

USD 8.3 million

Managing Organization

Division of Information Management of Ministry of Health and Welfare

Access

Internal Use Only

Medical Care Information System

This is a medical care portal that operates based on the integrated medical care information accumulated through the DW system, provides medical care information on qualifications, follow-up management, and case management to the Ministry of Health and Welfare, local governments, and National Health Insurance Service, and supports streamlined administrative procedures.

System Features

Qualification management

The system offers search service on a wide range of information-qualifications of 1.5 million recipients, maintenance costs for healthy life, medical expenses for pregnancy and childbirth, and infertility treatments.

Follow-up and case management

- The system provides information required for application of refund, return or approval to extend the benefit period.
- The system offers details and statistics on recipients under case management

Statistics service

The system collects monthly data on the current status of eligible recipients, treatment results, and morbidity statistics for provision.

Site Map

Qualification management, follow-up management, case management and statistics of medical care recipients

User

Ministry of Health and Welfare, local governments, National Health Insurance Service

Estimated Development Period

12 months

Estimated Development Cost

USD 1.9 million

Managing Organization

Department of Insurance Benefits of National Health Insurance Service

Access

Internal Use Only

Funeral Service Information System *(e-Haneul)*

This is the only government-operated funeral service information system, which manages the integrated operation of nation-wide crematorial facility reservations and cremation information, provides information on funeral service facilities, and handles administrative procedures of permission or reporting.

System Features

Comprehensive information on funeral service

- Information on the current status of funeral service facilities and prices of funeral supplies.
- Information on local governments' support for funeral service and provision of education for employees of funeral businesses

Cremation reservation via Internet and cremation information management

- Cremation reservation via PC or mobile
- Integrated management of cremation information of facilities throughout the country.

Provision of death information (200,000 persons on annual average)

The system provides death information to pension and social security institutions in a fast manner to prevent duplicated benefit coverage and leakage of government funds.

Crematorial facility management and funeral service-related administrative affairs

- Administrative affairs regarding funeral service establishment permit/license, management, and burial/cremation report management
- Administrative dispositions regarding management of funeral service establishments

Site Map

- Cremation reservation (mobile), price information on funeral service and funeral supplies
- Funeral service administration (license/permit, administrative restrictions, management of education required by law) and other services for citizens
- Facility operation (reception, redemption, extension), information registration (facility service fees, prices of funeral supplies, death information, employees required to undergo education)

User

Citizens, funeral service establishments and public officials handling funeral services

Estimated Development Period

12 months

Estimated Development Cost

USD 3.9 million

Managing Organization

Division of Senior Support of Ministry of Health and Welfare

Access

http://www.ehaneul.go.kr
http://m.ehaneul.go.kr

National Pension Information System

This is a system for operation of the "National Pension Scheme", which is aimed at promoting the stable livelihood and welfare of the public by providing pension benefits for the old-age, disability, or death.

System Features

Integrated management of national pension

The system performs integrated management of individual consultation records and changes during the period from insured status acquisition to benefit receipt as lifetime history of customers.

Construction and operation of massive amount of data

78.1 billion data, accumulated for 3 decades, including the computerized resident registration data of the Ministry of the Interior and Safety, are used in operation of the national pension work.

Public services

The system offers 24-7 services, such as certificate issuance and estimated benefit inquiry, through interconnection with the website of National Pension Service.

Site Map

Insured status management, collection management, benefit payment management, support for the disabled, and certificate issuance (payment details)

User

Staff of the National Pension Service, insured persons and benefit recipients

Estimated Development Period

24 months

Estimated Development Cost

USD 29.6 million

Managing Organization

Ministry of Health and Welfare

Access

www.nps.or.kr

e-Government serving as the base for
educational and cultural development

Education / Culture

The Korean government is actively using the e-Government systems in implementing and reinforcing the responsibility and publicness of national education. Especially by achieving the educational informatization, where each of the schools, teachers and students can take the lead and participate, Korea has laid the groundwork for becoming an educational powerhouse. It has also developed systems for the integrated management of cultural assets and efficient handling of the related work, further extending its foundation for a cultural powerhouse.

84 National Education Information System (NEIS)
85 Educational Information Sharing System (EDUNET·T-CLEAR)
86 Online Schooling System (Online School)
87 Government e-Learning Platform *(Nara baeumteo)*
88 Digital Administration System on Cultural Heritage
89 Korean Library Information System (KOLIS)
90 Central Archives Management System (CAMS)

National Education Information System (NEIS)

This is a major information system for educational administration in the Ministry of Education, 17 educational offices, and 10,000 elementary and middle schools in Korea.
It handles online affairs regarding faculty HR and salary management as well as students' attendance and grade management, and provides service for students and parents, such as certificate issuance.

System Features

Streamlining of affairs in educational administration

The system brings various administrative procedures of educational institutions and offices online and provides a wide range of functions each year.

Data sharing

- The system provides statistics, collected through its internal business process.
- The system shares and processes data with educational offices and public institutions.

Service for citizens and mobile service

- The system offers 46 service types for students and 59 service types for parents (school meal menu, student records, etc.).
- Key school information, including academic calendar, school newsletter, meal menu, and timetable, is also provided as a mobile service.

Safe and secure information

- The system applies 7-step security measures on the network, servers and user PCs.
- It also requires online certificates to log in and uses separate authorization management framework for each business or menu to ensure that only the authorized uses the service.

Site Map

- 147 types of school affairs, such as management of student grades and records
- 102 types of general administrative affairs, such as management of faculty HR, salary and service
- 16 types of service for citizens, including online poll and certificate issuance.

User

Ministry of Education, educational offices in provinces and cities, schools and parents

Estimated Development Period

24 months

Estimated Development Cost

USD 92.6 million

Award/ Recognition and Export

- Export to Lao PDR (2011) and Mongolia (2013)

Managing Organization

Educational Administration Financial Information Division of Korea Education and Research Information Service

Access

http://www.neis.go.kr

Educational Information Sharing System (EDUNET·T-CLEAR)

This is an integrated support system that provides overall educational information, such as information on educational curriculums, teaching and learning, evaluation, and activity materials, and facilitates collaboration and communication.

System Features

Support for teaching and research activities of teachers

- The system provides teaching materials, such as materials for planning, teaching and learning and research as well as outside materials, which follow the educational curriculum
- It is a centralized, unified original data collection system (reinforcing educational information sharing with local educational offices).

Integrated provision of educational policy information

- The system brings scattered educational policy information together, such as the national curriculum, National Competency Standards (NCS), and the free-semester scheme.
- It also provides information (services, trends and statistics) for educational policies to smoothly settle into the field.

Integrated search on educational information

The system provides materials required for implementing educational policies, like digital textbooks and materials for IT ethics education.

Educational material sharing and communication

The system offers an online community for teachers called *"NanumGongan"* for communication and information sharing.

Site Map

Teaching/ research materials, educational curriculums, free-semester scheme, digital textbooks, cyber learning, software education, research competition, Wedorang (learning community service), teacher training, local educational information service, etc.

User

Elementary and middle school students, teachers and parents

Estimated Development Period

10 months

Award/ Recognition and Export

- Best service in 'Gov 3.0 Service App' of Ministry of the Interior and Safety (2016.12)
- Good Design Award by Ministry of Trade, Industry and Energy (2016.12)
- Public Service Grand Prize in Web Award Korea by Korea Internet Professional Association (2015.12)

Managing Organization

Educational Information Division of Korea Education and Research Information Service

Access

http://www.edunet.net

Online Schooling System (Online School)

This remote schooling system provides online educational programs that are difficult to be operated by schools to ensure students' right to learn and choose subjects. Learning results at the Online School can be applied in the official student records.

System Features

Learning contents developed upon the regular school curriculum

The system provides a wide variety of learning contents on each of the 56 middle school subjects and 45 high school subjects.

Student's learning status monitored by many stakeholders

The system allows many stakeholders–a school teachers, subject tutor helping the student with studies, and educational officers who plan educational policies–to conveniently check the learning status of the student.

Improved user convenience through mobile service

The system also allows PC and mobile-based learning by applying responsive web technology.

Learning activities in the system accepted as regular schooling records

The results of learning on the system are reflected in the official student records.

Site Map

Online course guide, learning status, homework, library, notice, Q&A, SMS, sign up for courses, and class classification

User

Middle and high school students who are enrolled in regular schools but

- Have not completed a certain part of the curriculum due to moving or transfer
- Want to learn subjects that are not available at school

Estimated Development Period

10 months

Estimated Development Cost

USD 0.5 million

Managing Organization

Global and Future Education Research Division of Korea Educational Development Institute

Access

http://onlineschool.or.kr

Government e-Learning Platform *(Nara baeumteo)*

This system offers public officials smart e-learning programs accessible anytime, from anywhere to support their self-improvement. It is a platform shared throughout the entire government, where the central and local educational and training institutions share the learning contents and systems.

System Features

All-In-One service enjoyed anytime and anywhere

- The system provides 24/7 learning contents that can be used freely via PC or mobile anytime, from anywhere.
- Users can search and learn all e-learning courses of central and local educational institutions and complete the courses on the platform in one stop.

Big data-driven service

The system recommends matching courses for the level, sector, job and interest of each public official based on big data analysis.

Flexible and scalable learning platform that is shared government-wide

The system allows all central and local educational institutions (90 institutions) to share the system and contents.

Site Map

e-Learning search/ learning/ completion, big data-based recommendation for each user, collaborative learning (community, blog, knowledge Q&A), and contents and system sharing

User

All public officials (some contents are available for citizens).

Estimated Development Period

36 months

Estimated Development Cost

USD 5.1 million

Managing Organization

Smart Learning Division of National Human Resources Development Institute

Access

http://e-learning.nhi.go.kr

Digital Administration System on Cultural Heritage

This shared system covering the entire process of cultural heritage administration offers digitized administrative procedures and automated records among collaborating organizations, such as the Cultural Heritage Administration, local governments, investigating agencies, and groups owning intangible cultural heritage.

System Features

Collaborative portal
The system collaborates with earth surface inspection and excavation agencies, clinics treating natural monuments and groups owning intangible cultural heritage, to electronically support related business procedures.

Electronic administration
The system ensures online connection of local governments to Cultural Heritage Administration for administrative support.

Administrative portal
The system provides links to various information systems for cultural heritage administration for reservation and information sharing.

Site Map
Designation and revocation, Cultural Heritage Committee, regular investigations, national treasure/ repair and maintenance, alteration of the current state, ground excavation, national intangible cultural heritage, palace and tomb heritage, and natural monuments

User
Public officials of the central and local governments, organizations collaborating in cultural heritage administration

Estimated Development Period
60 months

Estimated Development Cost
USD 3 million

Managing Organization
Cultural Heritage Administration

Access
https://www.e-minwon.go.kr:8443/webs/main.jsp

Korean Library Information System (KOLIS)

This system facilitates various forms of resource management and library affairs of the National Library of Korea. The system was developed as a client-server system in 1999, redeveloped into a web-based one in 2015, and then launched as KOLIS II in October 2016 as an upgraded, extended and user-oriented version.

System Features

Key functions for library affairs
The system performs major library affairs such as resource collection, registration, arrangement, and lending based on the Libraries Act.

Printed and online materials
Librarians follow the integrated format for bibliographic data of Korean Machine Readable Cataloging (KORMARC) for data input and management of printed materials, and Metadata Object Description Schema (MODS) for online materials.

National Library KOLIS II
The system is playing the pivotal role in the national library resource management based on interworking with other information systems – integrated search system of the website (www.nl.go.kr), KOLIS-Net (nation – wide libraries network of holding materials), and the Korean Old and Rare Collection Information System (KORCIS).

Site Map
Collection, registration, organization, arrangement, lending/return, authority management, cover management, content table/abstract management, ISBN management, ISSN management, and subject heading management

User
Librarians of National Library of Korea

Estimated Development Period
10 months

Estimated Development Cost
USD 1.9 million

Managing Organization
Digital Library Planning Division of National Library of Korea

Access
Search : www.nl.go.kr

Central Archives Management System (CAMS)

This is a permanent archives management system of the National Archives of Korea (an institution with the overall control and supervision of public record management of Korea), which manages permanent archives of national significance which need to be preserved for 30 years or more.

System Features

Archives management standard provision
The system adjusts and approves record preservation period for each unit task of government affairs and provides the standard table for search.

Acquisition and registration of records
The system handles the acquisition process of records from archive institutions or registration of records collected from the private sector or abroad.

Record preservation and management
The system performs management of inbound/outbound records, library management, inventory, digitization, description, preservation period re-assessment, and re-classification of records for disclosure.

Perusal and utilization of records
The system offers functions for search and perusal of the archives in their original form.

Site Map
Acquisition, registration, archives management standards, archives organization, library, preservation, preservation media, media recording, description/re-classification, perusal and utilization, search, etc.

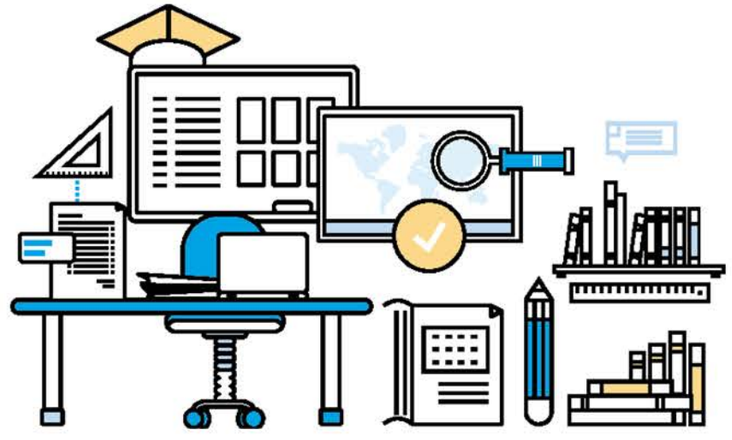
User
Workers who handle archival management affairs in the National Archives of Korea

Estimated Development Period
24 months

Estimated Development Cost
USD 1.9 million (for basic features)

Managing Organization
Archival Information Infrastructure Division of National Archives of Korea under Ministry of the Interior and Safety

Access
Internal Use Only



e-Government supporting growth of businesses

Industry / Procurement / Employment

Korea has built the cutting-edge informatization systems for each industry. e-Government systems are applied to all areas of business activities, including procurement, patent administration, employment and customs clearance. These systems contribute to reducing administrative burden on businesses, saving cost, and improving business competitiveness.

Industry / Procurement / Employment

94 Electronic Customs Clearance System (UNI-PASS)

95 Intellectual/Industrial Property Office Automation System (KIPOnet)

96 Korea Intellectual Property Rights Information Service (KIPRIS)

97 Government-for-Business (G4B) System

98 Employment Information Platform (Work-Net)

99 SME Support Administration System

100 Business Information System for SMEs (Bizinfo)

101 Korea ON-line e-Procurement System (KONEPS)

102 Government e-Shopping Mall

103 RFID-based Public Goods Management System

104 Korea e-Catalog Information System

105 Procurement Procedure Management System

106 Subcontracting Management System for Procurement

Electronic Customs Clearance System (UNI-PASS)

This system automates all customs procedures, for example, export/ import declaration, travelers' customs procedures and tariff payment for electronic processing, without requiring service users to pay visits.

System Features

Fast and safe procedures for customs clearance

The system enables all customs procedures to be done electronically without requiring visits, allows fast processing of customs affairs, and ensures safety with an advanced risk management module (Average time required per procedure: 1.5 minutes for export, 1.5 hours for import).

Integrated and interconnected system

The system provides one-stop shop services on all customs procedures by integrating and interconnecting the Customs Service, related institutions and stakeholders and also offers real-time information on trade and logistics.

Application of international standards

The system applies e-document standards of WCO and UN for worldwide use.

Site Map

- E-Declaration : Electronic declarations on export/ import, refund, freight, airport and seaport surveillance, travelers, FTA and other customs administrative procedures
- Customs Single window : Information on how to fill out application forms, progress check, and verification by head of customs office
- Others : User support regarding e-payment, distribution history reporting, e-commerce reporting, AEO and more

User

Export and import companies, agencies verifying requirements, general (individual) users

Estimated Development Period

18 months

Estimated Development Cost

USD 2.8 ~ 13.8 million

Award/Recognition and Export

Award/ Recognition

- Best customs service quality for 9 consecutive years (2005~2013) in Airport Service Quality (ASQ) of Airports Council International (ACI)
- Best practice in World Bank's Doing Business (2009~2012)
- World Customs Organization (WCO) Innovation Award for Ecuador system(2013)

Export

- Export to countries including Tanzania, Uzbekistan, Cameroon, and Ethiopia, reaching the volume of USD 348.85 million
- [Africa] Tanzania (2011~2012), Cameroon (2015), Ethiopia (2017)
- [Asia] Kazakhstan (2005), Kyrgyzstan (2008), Mongolia (2009), Nepal (2011), Uzbekistan (2014)
- [Latin America] Dominica (2008), Guatemala (2009), Ecuador (2010~2011)

Managing Organization

Information Planning Division of Korea Customs Service

Access

https://unipass.customs.go.kr

Intellectual/Industrial Property Office Automation System (KIPOnet)

This comprehensive industrial property information system digitizes all administrative procedures on industrial property rights, including patent application, examination and gazette publishing.

System Features

E-Application service

The system supports the online process of application affairs, such as form filling, form submission, and fee payment.

Patent administration

The system handles all patent administrative procedures online, including examination, trial and registration of industrial intellectual property rights

Patent information search service

The system offers a service for examiners and citizens to search and view industrial property rights information of home and abroad through the Internet.

Mobile service

Key services are also provided on mobile for user convenience.

Site Map

Industrial property right application, examination progress, patent information management, fee management, certificate issuance, patent information search, etc.

User

Central government and citizens

Estimated Development Period

36 months

Estimated Development Cost

USD 16.8 million

Award/ Recognition and Export

- **Exported to 4 countries for USD 17.9M :** Mongolia (2011, USD 3.4M), Azerbaijan (2013, USD 4.2M), African Regional Intellectual Property Organization (2015, USD 5.8M), UAE (2016, USD 4.5)
  - These are KIPOnet export based on KOICA's ODA fund (except for UAE - 100%financial resources were provided by the UAE government)

Managing Organization

Information & Customer Policy Division/ Information & Customer Service Bureau of Korean Intellectual Property Office

Access

http://www.patent.go.kr

Korea Intellectual Property Rights Information Service (KIPRIS)

This is a major search system for intellectual property rights information, which provides the intellectual property rights information of home and abroad, owned by Korean Intellectual Property Office, for free search and view on the Internet by citizens.

System Features

Information search on intellectual property rights
The system provides 93 million cases of intellectual property rights information of home and abroad, owned by Korean Intellectual Property Office, in categories of patents, utility models, trademarks, and design, along with a service enabling search by category, sentence and more.

Various functions for user convenience
The system offers various functions for user convenience, including online download, mailing service on new information, and API-based patent search.

Information on issues and services regarding intellectual property rights
The system publishes and provides a webzine on intellectual property rights issues, along with various materials for a user guide.

Mobile service
Search service is offered also on mobile for user convenience.

Site Map

Information search and retrieval on intellectual property rights information of Korea and other countries, including patents, utility models, trademarks, designs, trials, research papers and journals (from National Digital Science Library, NDSL), administrative history, etc.

User

Citizens

Estimated Development Period

24 months

Estimated Development Cost

USD 4.2 million
(equipment purchase cost excluded)

Award/ Recognition and Export

- iEco Award for service innovation (2012)

Managing Organization

Information Management Division of
Korean Intellectual Property Office

Access

http://www.kipris.or.kr

Government-for-Business (G4B) System

This system provides easy and convenient services for businesses by integrating administrative services for businesses, which had been operated by different government and public entities.

System Features

Service for businesses
The system provides business information service (4,500 types) dispersed in different government and public organizations and online application and inquiry service (1,500 types).

Integrated portal for business information changes
This system offers an integrated service where businesses can handle necessary procedures (regarding changes in motor vehicle registration, 4 major insurances, patent, etc.) to make changes in their registered information (name, location, and business type) via the Internet all at the same time.

Hub of certificate distribution from test to certification
The system offers a convenient flow of services where businesses can apply for product performance test, inspection and correction, and request for online certificates and print them out (connected to some 270 test institutions).

Site Map

Business service guide and request for service transfer, guide and request for batch changes to registered business information, request for test/ inspection/ performance certificates, integrated application for business counseling, information on business support such as financial aids and bid notices

User

Businesses and citizens

Estimated Development Period

30 months

Estimated Development Cost

USD 14.3 million

Award/ Recognition and Export

- Best practice in e-Government projects of the Ministry of the Interior and Security (2012)
- BestGov 3.0 project by Ministry of Science, and ICT and Future Planning (2014)

Managing Organization

IT Strategy Planning Division of
Ministry of Science and ICT

Access

http://www.g4b.go.kr

Employment Information Platform (Work-Net)

This system or platform is operated by the Ministry of Employment and Labor and Korea Employment Information Service. It offers contents for career or employment support such as public/private job information, employment policy information, job placement, etc.

System Features

Interconnection to job information network of public and private sectors
Interconnected to 31 public and private job search websites, including systems of Ministry of Personnel Management, Human Resources Development Service, Military Manpower Administration and Ministry of the Interior and Safety, Work-Net provides all employment information at a one-stop shop.

Customized job information search
The platform enables customized job search by location, age, salary, working condition, number of employees, etc.

Vocational aptitude and psychological tests
The platform provides a total of 23 types of tests for youths (10) and adults (13), helping them find their vocational preferences, aptitudes and values.

'Work-Net for Youths', customized to young job seekers
The platform provides information targeted toward young job seekers, such as field report from small yet competitive companies, job introduction videos, and guides to writing self-introduction letters and preparing for interviews.

Mobile service
The platform offers services on vocational preference test, resume management, customized job search, and application support particularly optimized for mobile environment.

Site Map

Government/ public institution employment information, employment calendar, youth-friendly/ small yet competitive companies, job information for all (employment trends and guide), vocational tests, job introduction, job opportunities

User

Job seekers (women, middle-aged, youths) and job-offering businesses

Estimated Development Period

13 months for initial development and annual upgrade

Estimated Development Cost

USD 3.8 million
(equipment cost excluded)

Award/ Recognition and Export

- Korea Best Brand Award (2017)
- Korea Consumer Service Satisfaction Award (2017)

Managing Organization

Work-Net Team of Korea Employment Information Service

Access

http://www.work.go.kr

SME Support Administration System

This system performs integrated management of information on SME aid programs of the central and local governments and their beneficiary SMEs, in order to prevent duplicative aid or support and deliver customized policy information.

System Features

Integrated management of SME information
The system registers and manages information on SME aid programs of the central and local governments as well as the beneficiary SME information.

Information objectivity ensured through inter-ministerial collaboration
- The system acquires objective information through inter-ministerial collaboration when collecting beneficiary SME information.
- It collects SME information from National Tax Service (sales, establishment/ closing dates, holidays), Ministry of Employment and Labor (number of the insured workers by the Employment Insurance), and Korea Customs Service (export)

Statistical analysis function embedded
The system is embedded with an analysis function of various statistics using the collected information.

Site Map

- Information search : SME aid programs of central and local governments and application history and management performance of individual SMEs
- Management analysis : Growth rate analysis of sales, employment and export by year, project area and individual SME
- Statistical analysis : Multi-dimensional statistical analysis by program organizer, program area, business history or type, using the database on application history and management performances

User

SME-aid program managers in central and local governments and public institutions

Estimated Development Period

30 months

Estimated Development Cost

USD 18.5 million

Managing Organization

Policy Analysis Division of Ministry of SMEs and Startups

Access

Internal Use Only

Business Information System for SMEs (Bizinfo)

This system collects information on policy schemes for SMEs, conducted by the central and local governments, and provides the information via website and mobile app in a timely, easy-to-understand manner.

System Features

Collection and provision of policy information

The system provides information on support programs, latest policy news and policy briefs (videos) through diverse means such as the website, mobile app, text messages and email.

Feedback within 24 hours

Businesses inquiring about their difficulties are provided with feedback within 24 hours from professionals in the field (certified management consultants, accountants, labor attorneys, etc.).

Provision of additional services

The system offers information on education/ seminars/ exhibitions for SMEs, latest policy news for SMEs, interactive policy search function, and policy comparisons by area.

Site Map

- Information on policies for SMEs (support programs, education/ seminars/ exhibitions)
- Policy measures supporting SMEs and forms for work
- Counseling on business difficulties

User

CEOs and employees of SMEs and venture companies

Estimated Development Period

12 months

Estimated Development Cost

USD 4.6 million

Managing Organization

Policy Analysis Division of
Ministry of SMEs and Startups

Access

http://www.bizinfo.go.kr

Korea ON-line E-Procurement System (KONEPS)

This is a comprehensive online system that performs the overall management of government procurement business, including bidding, contract-signing, and payment regarding commodities, services and construction as needed by the central and local governments and public institutions.

System Features

E-bidding and contract signing

- Supplier companies can participate in all public biddings through one-time registration to the system with their qualification information including their license or permit.
- The whole procedures of procurement are handled online-bid opening, qualification examination, decision of successful bidders, contract signing and payment.

E-payment

The system handles the whole payment procedures-inspection on product/ service/ facility, billing and payment-based on interconnection with the major finance information systems.

Public procurement data sharing and management

The system is connected to the data of 195 credit rating institutions, surety insurance companies and more, to reduce the burden on businesses having to visit and enable paperless information check on public institutions.

Site Map

Bidding notice information, supplier company registration, central government procurement request, bidding participation, qualification examination, contract signing and management, contract information search, inspection, and payment

User

Central government, local governments, public institutions and supplier companies

Estimated Development Period

12 months

Estimated Development Cost

USD 9.2 million

Award/Recognition and Export

Award/ Recognition

- UN Public Service Award (2003)
- Best Model for e-Procurement in UN e-Government Survey (2004)
- Introduced by OECD as a system having a strong pull-through effect on ICT use (2004)
- Recognized as the International standards by UN/CEFACT (2005)
- ISO 20000 certificate from British Standard Institute (2005)
- WCIT Global IT Excellence Award (2006)
- AFACT e-ASIA Award (2007)
- Selected as one of the world's 4 best m-government practices by OECD and ITU in their eports on M-Government (2011)

Export

- **Export to 7 countries :** Vietnam (2008), Costa Rica (2009), Mongolia (2010), Tunisia (2012), Cameroon (2014), Jordan (2015), and Rwanda (2015)

Managing Organization

E-Procurement Planning Division of
Public Procurement Service

Access

http://www.g2b.go.kr

Government e-Shopping Mall

This is an online shopping mall for public e-procurement, where the Public Procurement Service (PPS) signs short-term contracts with suppliers and the central/ local governments and public institutions can search items and make direct purchases. This system aims to support the fast procurement of commercial, quality-assured commodities for the government and public organizations.

System Features

One-click purchase of commodities based on PPS unit price contract
The system enables purchase or sale of commodities on fixed price contracts with PPS, allowing the end-user institutions to purchase commodities more easily.

Fast purchase
End-user institutions can purchase the commodities they need at one click of the KONEPS mall without going through competitive bidding procedures.

Provision of E-Shopping Mall information
The system provides legal information on procurement contracting and the system user manual, which many officials of end-user institutions may want to know.

Site Map

- Search on commodities included in the unit price contract with PPS (search by supplier name, commodity name, product serial number, etc.)
- Search by property information (size, unit, area, certification, etc.)
- Commodity category-based composition of the mall (automobile, PC, furniture, etc.)
- Provision of various certified sections for technology development products and green, eco-friendly products

User

- **Users who can purchase commodities :** end-user institutions registered in PPS (central/ local governments and public institutions)
- **Users who can register commodities :** companies registered as bidder in PPS and signed unit price contracts

Estimated Development Period
12 months

Estimated Development Cost
USD 1.6 million

Managing Organization
E-Procurement Management Division of Public Procurement Service

Access
http://shopping.g2b.go.kr

RFID-based Public Goods Management System

This is a system for real-time, wireless tracking and management of commodities using attached RFID tags for the entire commodity lifecycle of acquisition, custody, use and disposition in order for efficient management of government goods.

System Features

Stocktaking using RFID technology
Stocktaking is done using RFID tags, attached to commodities and scanned by portable readers, which data are transferred for stocktaking and tracking the flow of commodities.

Statistics and register management
This system conducts management of not only registers for commodity acquisition, custody and disposition but also statistics by classification and item using the commodity list numbers as defined by the Public Procurement Service.

Examination of commodity management by operating agencies
This system offers functions for inquiry and statistical analysis on the current status of commodity possession by each organization, stocktaking results, and other data for institutional evaluation.

Interworking with dBrain and On-BID
The system interworks with the digital budget and accounting system, dBrain, for management of commodity acquisition and with the electronic commodity disposition system, On-BID, for commodity sale.

Site Map

Tag issuance, stocktaking using RFID readers, commodity register management, commodity statistics, transfer of management to PPS without compensation, and commodity disbursement and return

User

Central and local governments, public institutions, Public Procurement Service, and supplier companies

Estimated Development Period
12 months

Estimated Development Cost
USD 3.2 million (cost for tag attachment and printer purchase excluded)

Managing Organization
Public Goods Management Division, International Procurement & Public Property Bureau of Public Procurement Service

Access
http://rfid.g2b.go.kr

Korea e-Catalog Information System

This system efficiently classifies, identifies and numbers government goods based on particular standards and methods, and efficiently manages the information to promote a nationwide use.

System Features

Management of commodity numbers

Commodity list information (classification and identification numbers) on 3 million government commodities, which are classified using the UNSPSC, are registered and retrieved in the system. The commodity identification numbers are given in as much detail as to determine the model number and manufacturer of the commodity, and properties (size, color, material and purpose of use) are also managed in the system.

Commodity information search function

This system offers a wide range of search functions, including the commodity classification map, search by classification, and search by manufacturer or model.

Basic information on national commodity management and public procurement

- Basic information for managing the process from commodity acquisition to disposition
- Basic information on commodity transaction through e-biddings, e-contracts and shopping malls

Site Map

Commodity(goods) information search, request for commodity registration, request for item change, item registration, item search, item registration progress check, classification change history

User

Government, Public Procurement Service, supplier companies

Estimated Development Period

12 months

Estimated Development Cost

USD 2.8 million

Managing Organization

Public Goods Management Division, International Procurement & Public Property Bureau of Public Procurement Service

Access

http://www.g2b.go.kr:8100

Procurement Procedure Management System

This is a streamlined, efficient government-wide online service system for integrated management of project ordering and receiving process, from project planning to proposal writing, proposal submission and proposal evaluation.

System Features

Proposal request service

The system provides standard templates for ordering institutions to efficiently prepare proposal requests and also provides support services in finding and using high-quality project proposals as well as making statements.

E-proposal and e-evaluation service

- The system allows bidders to submit the electronic version of technical proposals online, which had been in the form of printed materials before.
- The system handles evaluation affairs on all PPS projects (service and goods) within the range of system functionalities in order to ensure fairness and efficiency of technical review of the proposals.

Project management support service

The system offers standard procedures and guidelines for officials with no experience in IT project management to easily perform their duties.

Comprehensive information service

The system provides statistical information on biddings and contracts of all negotiated contract-based projects, as well as information on the latest policies, laws and standards for IT projects.

Site Map

Ordering support, proposal request, proposal, proposal evaluation, project management support, comprehensive information service, notice, bid-open result, and service fee guide

User

Central and local governments, supplier companies, evaluators and citizens

Estimated Development Period

23 months

Estimated Development Cost

USD 6 million

Managing Organization

ICT Contract Division of Public Procurement Service

Access

http://rfp.g2b.go.kr

Subcontracting Management System for Procurement

This is a management system designed to prevent illegal subcontracting activities of principal contractors. This system allows principal contractors to handle the entire subcontracting procedures online, including conclusion of contracts and payment of subcontract consideration, material/equipment prices and service fees.
Public institutions placing orders monitor the whole process online.

System Features

E-Contract system
Principal contractors conducting public works or projects and subcontractors register themselves in the system for online subcontracting procedures.

Payment and monitoring
The system supports e-payment of subcontract consideration, materials and equipment prices and service fees, enabling the client public institutions placing orders to monitor such payment.

Subcontracting records certificate issuance
Upon request of subcontractors, the system allows them to retrieve their subcontracting records and issues online certificates.

Site Map
Contract management, payment, exemption, bank account management, status management, user management, portal management, guarantee certificate management

User
Public institutions, principal contractors, subcontractors

Estimated Development Period
9 months

Estimated Development Cost
USD 0.8 million

Managing Organization
E-Procurement Management Division of Public Procurement Service

Access
http://hado.g2b.go.kr

e-Government protecting safety and lives of citizens

Safety / Environment

Protecting the safety and lives of citizens is the most crucial role of a government. As part of its proactive measures to protect citizens from disasters, the Korean government has developed and operated systems for managing the environment and preparing for disasters. These systems have enabled the prevention of and prompt response to disasters such as forest fire, earthquake, and landslide.

Safety / Environment

110 Korea 119 Multimedia Report Service
111 Disaster Scene Image Transfer and Monitoring System
112 Korea Safety Map
113 Safety Assessment System
114 Earthquake Early Warning System
115 Forest Fire Command Control System
116 Landslide Alarm System
117 Waste Treatment Management System *(Allbaro)*
118 Forest Resources Management System
119 National Forest Management Information System
120 Forest Engineering Management System
121 Forest Projects Management System
122 Forest Projects On-Site Support System
123 Forest Diseases and Pests Management System
124 Roadside Tree Information System

Korea 119 Multimedia Report Service

This system enables those in difficult situations to make calls or vulnerable to safety incidents, including the disabled and foreigners, to make emergency 119 reports via diverse media such as video, text and app.

System Features

Diverse 119 reporting means other than voice call

- **Video report :** The system accepts video reporting, which delivers accurate information of the reporter's location and situations; it can also communicate with the hearing-impaired using sign language.
- **Text report :** Users can make text reporting when in difficult situations to make voice calls or in voice service interruption; attachment of photos or videos facilitates fast and accurate responses.
- **App report :** Reporters can deliver their location information (GPS coordinates) even when they do not know where they are.

World's first emergency system to apply video call (3G and LTE) technology

Easy and convenient not only for those vulnerable to safety but also for the general public

As of 2017, there are more than 400,000 reports filed through this system.

Site Map

119 video report, 119 text report, 119 Internet report, 119 app report, 119

User

Citizens and fire officers

Estimated Development Period

18 months

Estimated Development Cost

USD 2.8 million

Award/ Recognition and Export

- Excellence Award in 2013 Mobile Public Service Competition (2013.12)
- Prime Minister's Award in 2014 Gov 3.0 Competition (2014.11)

Managing Organization

Firefighting Equipment and Aviation Division of National Fire Agency

Access

https://www.119.go.kr or Multi Channel (Call, App, SMS)

Disaster Scene Image Transfer and Monitoring System

This is a monitoring system that transfers (on LTE or 4G) real-time images of disaster scenes, taken by imaging cameras installed in fire engines and helicopters, to the central situation center for monitoring.

System Features

Transfer and monitoring of disaster scene images

- Using the LTE mobile network, the system transfers images without restrictions of distance or location.
- All activities from a fire engine or helicopter dispatch to arrival to the scene are monitored at the central situation center.
- Images on indoor scenes where a fire engine or helicopter cannot reach are taken by mobile devices and sent to the central situation center through a smartphone app.

System configuration

- **Imaging cameras :** Remote pan-tilt-zoom (PTZ) cameras are installed in dispatched fire engines and helicopters (Camera operation on 615 fire engines, 28 helicopters and 195 mobile devices).
- **Image collection system :** This system collects and stores images transferred on LTE from dispatched vehicles or aircrafts.
- **Monitoring system :** This system performs image show, screen division, camera control, stored image play, etc.

Site Map

Fire engine dispatch image, mobile scene image, helicopter dispatch image, image monitoring, and remote (PTZ) camera control

User

Central and local fire officers

Estimated Development Period

12 months

Estimated Development Cost

USD 1.2 million (with 100 cameras)

Award/ Recognition and Export

- Part of e-Government export systems-application submitted (2016.12)

Managing Organization

Firefighting Equipment and Aviation Division of National Fire Agency

Access

Shared vision from Remote Cameras in Central Situation Center

Korea Safety Map

This is an easy-to-understand map system accessed through the Internet and the mobile app, which provides integrated disaster and safety information of different ministries so that citizens can cope with disasters or safety issues in their daily lives.

System Features

Thematic map service on 8 safety areas

The system integrates information on potential risks in daily lives of citizens into 8 areas (security, transport, disaster, customized information*, facility, industry, public health, and safety accident), and displays the information on the digital thematic map (2D/3D) through the Internet or the mobile app.

* Customized information means safety map information customized to women or children, who are vulnerable to safety issues, that is offered based on comprehensive analysis of relevant data, including crimes and transport safety.

Safety facility information service

The system allows users to find locations and contact numbers of major safety facilities, such as public facilities including the police and fire stations and emergency facilities like shelters and hospitals.

Safety report information service

The system displays potential risk information, as reported by citizens through the 'SafePeople' web/app and 'Safety Monitoring Volunteers Group', on the map for users to be aware of.

Site Map

Thematic map on safety areas, safety facility information, safety report information, Safety Index by local government

User

Citizens

Estimated Development Period

60 months (2013~2017)

Estimated Development Cost

USD 7.9 million

Managing Organization

National Disaster Management Research Institute under Ministry of the Interior and Safety

Access

http://www.safemap.go.kr

Safety Assessment System

This system collects and standardizes various safety statistics and measures Local Safety Index for each local government. This promotes safety competition among local governments and contributes to a reduced number of deaths caused by safety accidents.

System Features

Safety Index information

The system provides national/public statistics on 7 safety areas (fire, traffic, suicide, infectious disease, crime, safety accident, and natural disaster) and Safety Index ratings.

Safety assessment

The system performs safety assessment using indicators or spatial data.

Safety improvement consulting

The system recommends projects for safety improvement.

Site Map

- Safety indicators (management, search, analysis)
- Safety index (management, search, analysis)
- Safety assessment (indicator assessment, spatial assessment, self-assessment)
- Consulting (recommending safety improvement projects)
- Information sharing
- Operation support

User

Public officials of central and local governments

Estimated Development Period

60 months (2013~2017)

Estimated Development Cost

USD 1.8 million

Managing Organization

National Disaster Management Research Institute under Ministry of the Interior and Safety

Access

Internal Use Only

Earthquake Early Warning System

This system analyzes the time, location and scale of earthquakes by using the P-waves only (P-waves spread about 1.73 times faster than S-waves).

System Features

Early analysis of earthquakes
The system uses real-time observation data and automatically analyzes earthquakes that cannot be forecasted.

Real-time monitoring through observatories
The system monitors the real-time status of each earthquake observatory to find any data abnormalities.

User notification service
The system automatically delivers the analyzed results to users based on certain standards.

Site Map
Real-time earthquake observatory monitoring, earthquake status monitoring, early analysis of earthquakes, and earthquake information delivery

User
Central and local governments, citizens

Estimated Development Period
60 months

Estimated Development Cost
USD 4.6 million

Managing Organization
Earthquake Information Technology Team, Earthquake and Volcano Center of Korea Meteorological Administration

Access
Internal Use Only

Forest Fire Command Control System

This is a system for the integrated control of fire prevention and firefighting status. It supports step-by-step disaster control activities based on the standard procedures to cope with forest fires, and minimizes harm to human lives and property using the latest ICT applied for real-time detection and spread prediction.

System Features

Prevention and preparation
The system provides forest fire prediction information by converging big data on weather information with forest geographic information.

Response
- The system provides intelligent search function on geographic information for the analysis of the situation around the fire, and reporting function for sharing information on time-based control measures taken and damage status.
- The system detects forest fire using satellite information.

Recovery
The system provides forest fire statistics and the function of damage reporting.

Site Map
Forest fire report management, damage reporting, fire prediction, past fire outbreak analysis, firefighting equipment management, contact information management, SMS sending, and fire watcher search

User
Korea Forest Service and its affiliated agencies, local governments, related organizations, research institutions and citizens

Estimated Development Period
12 months

Estimated Development Cost
USD 1.9 million

Managing Organization
ICT Management and Statistics Division and Forest Fire Prevention and Control Division of Korea Forest Service

Access
Internal Use Only

Landslide Alarm System

This system analyzes landslide prediction information and informs the citizens and public officials of the results in order to minimize the damage of human lives and properties.

System Features

Production and provision of landslide prediction information

The system provides landslide prediction information for each town or village by considering the rainfall distribution with the geological features and measuring the soil moisture index, which is the amount of rainfall infiltrated into soil.

Provision of action guide on erosion and statistics

The system offers useful information such as the landslide action guide for each season, current status of landslides occurrences, definition of landslides, etc.

Mobile service

The mobile landslide information app provides landslide prediction information and real-time alerts on the user's location.

Site Map

Landslide risk map search, landslide prediction information and alert search, citizens' action guide search, landslide statistics search, etc.

User

Central and local governments, citizens

Estimated Development Period

12 months

Estimated Development Cost

USD 1.2 million

Managing Organization

Erosion Control Division, Forest Protection Bureau of Korea Forest Service

Access

http://sansatai.forest.go.kr

Waste Treatment Management System *(Allbaro)*

This is an IT-based, comprehensive waste management system that transparently manages the real-time process of waste discharge, transport and treatment via the Internet; and integrates life cycle management of wastes, including reduction of waste generation, recycling, and proper treatment.

System Features

Electronic waste transfer system

Waste discharge, transport and treatment reports are filed electronically, and e-receipts are used for waste transfer.

System interconnection

To improve user convenience, the system is interconnected to large-scaled treatment facilities, marine waste information system of Korea Coast Guard, local government administrative information system(Saeol) of Ministry of the Interior and Safety, e-payment system of Ministry of Environment, employment and labor management system of Ministry of Employment and Labor, and UNI-PASS of Korea Customs Service.

Provision of statistical information

The system provides environmental industry information, statistics, recyclable resources, and market trends. It also provides construction waste statistics, analyzed based on the accumulated transfer data of wastes.

Mobile app service

The system provides key services through its mobile app for convenience of users who have difficulty finding Internet access.

Site Map

Recycled aggregates, waste reduction information, waste statistics, customer support (manual/ Q&A/ reference), My *Allbaro* (membership sign-up, log in), etc.

User

Ministry of Environment and Korea Environment Corporation (as managers), citizens (as waste dischargers)/ transporters/ treatment business operators)

Estimated Development Period

24 months

Estimated Development Cost

USD 1.9 million
(USD 3.2 million/year for maintenance)

Award/ Recognition and Export

- Commendation for export to Vietnam as an e-Government system (2016)

Managing Organization

Korea Environment Corporation

Access

https://www.allbaro.or.kr

Forest Resources Management System

This system supports administrative procedures for forest resource management in the field, such as afforestation, forest-tending, felling and sale, and manages forest project history using GIS.

System Features

Field support for forest resource management

The system standardizes the process of field work from project planning to follow-up management to achieve system-based performance.

Forest project design and automated cost estimation

The system automates complex calculations in collecting survey results, printing the results writing reports, and estimating project costs.

Accumulation and use of basic forest project data (field survey note data)

The system serves a foundation for big data use by accumulating all basic data (field survey note data) for implementation of forest projects.

Site Map

Afforestation, forest-tending, felling(harvest), sale of products

User

Korea Forest Service and its affiliated agencies

Estimated Development Period

36 months

Estimated Development Cost

USD 2.3 million

Managing Organization

ICT Management and Statistics Division and Forest Resources Division of Korea Forest Service

Access

Internal Use Only

National Forest Management Information System

This is a comprehensive management system that provides GIS-based forest compartment status information, forest management plans, analysis, reporting and evaluation information to support the sustainable management of national forests.

System Features

Management planning and real-time monitoring support

- The system supports the planning of forest management by compartment and changing of the plans.
- The system offers diverse analytical functions for decision-making in forest management by using data on forest types, soil, volume, and project performances.

Business process system interconnection to manage the history of national forest management

- The system simplifies the process of performance management by interconnecting the integrated forest resource management system (for afforestation and forest tending) and the forest public works management system (for forest roads and erosion control).
- The system provides information on national forest management plans by interlinking business process systems.

Site Map

Establishment of management plans, revision of management plans, management analysis, management performance reporting, management evaluation, and income-related work

User

Korea Forest Service and its affiliated agencies

Estimated Development Period

24 months

Estimated Development Cost

USD 1.4 million

Managing Organization

ICT Management and Statistics Division and National Forest Estate Management Division of Korea Forest Service

Access

Internal Use Only

Forest Engineering Management System

This system handles history information on plans, management (planning, execution and supervision) and maintenance of forest engineering projects, such as forest road construction and erosion control work.

System Features

Standardization of on-site procedures

The system standardizes and handles business procedures of managers who work on site, from planning to maintenance, repair and inspection management.

Automation of forest engineering service expenses

- The system performs cost control and automated expense calculation for each stage of feasibility review, project planning, execution and supervision.
- It extracts quarterly/annual reports, provides links to the e-document approval system and SMS, and retrieves records on completed projects.

Interworking with the Forest Service Management System

The system receives details of project management from service contractors upon contract signing and registers such information in the Forest Service Management System for facilitated process.

Site Map

Forest engineering project (forest road construction and erosion control) planning, execution, supervision, and maintenance

User

Korea Forest Service and its affiliated agencies

Estimated Development Period

24 months

Estimated Development Cost

USD 0.9 million

Managing Organization

ICT Management and Statistics Division, Timber Industry Division and Erosion Control Division of Korea Forest Service

Access

Internal Use Only

Forest Projects Management System

This is a system where service companies contracted to provide forest engineering service in forest road construction or erosion control projects register and manage their service progress and outcomes. The system is operated in connection with the Forest Engineering Management System.

System Features

Step-by-step project management

The system standardizes the business process of planning, execution, supervision, and maintenance to increase the efficiency and accumulate data for project management.

Integrated information system accessible by service companies

As an integrated system for a broad range of forest projects (forest road construction, erosion control, afforestation, and forest tending), the system offers convenient access by service companies.

System built upon spatial information

Project outcomes and performances can be registered into the system as spatial data, establishing a history management framework.

Automated planning

The system allows planning procedures, for example, making output statements and specifications to be automated, and ensures convenience in the planning work.

Site Map

Support for procedures of planning, execution and supervision in carrying out forest projects such as afforestation, forest tending, forest road construction, erosion control, and forest surveys

User

Forestry cooperatives, forest professional engineers, forest engineering service companies, and forest enterprise corporates

Estimated Development Period

24 months

Estimated Development Cost

USD 0.9 million

Managing Organization

ICT Management and Statistics Division of Korea Forest Service

Access

http://fbiz.forest.go.kr

Forest Projects On-Site Support System

This system integrates and operates various information on documents and devices required for work on forest sites, such as paper maps, paper survey notes, cameras and GPS, into a single mobile device, and supports a wide range of on-site business process.

System Features

Smart aerial photos

- The system integrates GPS or paper-based location functions into a mobile device.
- It identifies location, measures GPS areas, stores maps, and measures distances and areas.
- It also provides thematic maps used in aerial photos or other on-site works.

Smart field survey note

- The system transforms paper-based field survey into mobile electronic notes (21 types).
- Any redundant procedure on site, such as documentation of paper-based survey notes, is automated on mobile devices, further reducing the work load onsite.
- The system automatically reviews any data errors caused by manual input and ensures data accuracy.

PC-based program

The PC-based program is directly connected to mobile devices for data transfer and supports mobile app upgrades.

Site Map

Forest survey, standard lot diameter measurement, afforested area survey, forest damage assessment, forest product measurement, forest disease and pest survey, landslide vulnerable area survey, forest purchase review report, status survey on forest lease, and unauthorized occupation area survey

User

Korea Forest Service and its affiliated agencies

Estimated Development Period

24 months

Estimated Development Cost

USD 0.6 million

Managing Organization

ICT Management and Statistics Division of Korea Forest Service

Access

On-Site Inspection with Mobile devices (Tablet, Smartphone)

Forest Diseases and Pests Management System

This is a system for the efficient prevention of damages from the rapidly increasing forest diseases and pests and integrated map-based management of disease/ pest outbreaks, control measures and other general affairs.

System Features

Integrated management of business process regarding forest diseases and pests

The system provides support services for policy-making on step-by-step coping actions in the field such as preventive observations, investigations, planning of control measures, control projects, and reporting.

Monitoring service on disease/ pest outbreaks and control

The system provides the current status information on pine wilt diseases and manages outbreak and control of general diseases and pests by using GPS coordinates provided by related institutions and local governments.

Mobile service

The system allows users to report and provide information on forest diseases and pests to enhance their on-site response capacity.

Site Map

Investigations on disease/pest outbreaks, planning and conducting control measures, sample analysis, report management, transportation prohibited zones, current status of diseases and pests, and disease and pest information

User

Korea Forest Service and its affiliated agencies, local governments, related organizations, research institutions and citizens

Estimated Development Period

12 months

Estimated Development Cost

USD 0.9 million

Managing Organization

ICT Management and Statistics Division and Forest Health Protection Division of Korea Forest Service

Access

Internal Use Only

Roadside Tree Information System

This system allows the integrated management of information on individual roadside trees as well as facility, damage and spatial information, through the works of local government officials.

System Features

Information on the current status of individual roadside trees

The system provides information on the current status, landscaping, management, facilities and damages regarding each individual roadside tree, and allows the location management of trees using spatial information (GIS).

Spatial information on areas where management is needed

The system allows information management on priority control areas, damaged areas and green ways, along with the function of spatial information editing.

Real-time update of roadside tree conditions

The system allows contracted companies for roadside tree management service to input data so that the information can be immediately updated.

Site Map

Current status of roadside trees, roadside tree spatial service, current status of control areas, spatial service construction management on control areas, construction company management, and roadside tree statistics

User

Korea Forest Service and its affiliated agencies, local government officials, and workers of contracted roadside tree management companies

Estimated Development Period

18 months

Estimated Development Cost

USD 0.9 million

Managing Organization

ICT Management and Statistics Division and
Urban Forest and Landscape Division of Korea Forest Service

Access

Internal Use Only

e-Government contributing to information diffusion and sharing

Communication / Infrastructure

Advancement in the information and communication technologies has led to the rapid development of the Internet, information processing, communication and transport technologies. Utilizing such technologies, Korea is developing systems for closing the digital divide between urban and rural areas, while expanding the information infrastructure for radio wave management, digitization of mail distribution and data sharing.

128 Information Network Village (Invil)
129 Open Data Portal
130 Radio Wave Management and Control System
131 Internet Post Office (ePOST)
132 Postal Logistics Information System (PostNet)

Information Network Village (Invil)

This system facilitates the broadband Internet use in farming, fishing, and mountain areas, which are likely to be neglected from informatization. It offers e-commerce features and various information contents.

System Features

Income increase
The system allows a direct transaction through e-commerce (on goods and experiences).

Community facilitation
The system is used as a tool for facilitating the resident communities with Invil news, webzine, and messenger functions.

Digital divide closure
It contributes to closing the digital divide by providing ICT educational contents for rural residents.

Mobile service
Major services are also available on mobile for user convenience.

Site Map
Invil introduction, Invil news, Invil learning, Invil finder, Invil service, Invil shopping, Invil experience

User
Citizens

Estimated Development Period
24 months

Estimated Development Cost
USD 6.5 million

Award/ Recognition and Export
- UN Public Service Award

Managing Organization
Regional Informatization Division of
Ministry of the Interior and Safety

Access
http://www.invil.org
(invil.com, tour.invil.com)

Open Data Portal

This system offers all public data generated, acquired and managed by public institutions through a single portal, ensuring easy and convenient use of public data for citizens.

System Features

Public data disclosure
The system supports a fast search for wanted public data from 23,000 datasets in form of file data, open API and visualized contents.

Application for provision of public data
The system also offers a window for citizens to apply for provision of public data other than the data disclosed already.

Examples of public data use (use cases)
The system shares cases and examples where public data use led to the development of startups, web/apps and various services.

Site Map
Dataset (file data, open API, standard data), application for data provision, use cases, information sharing

User
Citizens (data-using businesses, developers and the general public), central and local governments

Estimated Development Period
12 months

Estimated Development Cost
USD 3.3 million

Award/ Recognition and Export
- 1st place in 2 consecutive surveys for OECD Open, Useful, and Reusable (OUR) Data Index (2015 and 2017)

Managing Organization
Public Data Policy Division of
Ministry of the Interior and Safety

Access
http://www.data.go.kr

Radio Wave Management and Control System

This system comprehensively measures radio spectrums and their direction for efficient management of radio waves as the major source for the 4th industrial revolution.

System Features

Status survey on radio frequency use
The system provides information on the radio frequency use and occupancy rates by specific condition (frequency, time, intensity, etc.) as measured based on the ITU-R recommended guidelines.

Detection of unauthorized radio stations
The system provides unauthorized radio frequency information by interconnecting to the radio stations authorization database and comparing the result of radio spectrum measurement against the authorization data for the band.

Radio direction finding
The system locates the source of radio waves using a 3-way detection method connecting the fixed station, mobile station and control system, and visualizes the direction with electric field strength on e-map.

Site Map
Radio spectrum measurement and analysis, radio quality measurement, status survey on radio frequency use, detection of unauthorized radio waves, and radio direction finding

User
Public officials in charge of spectrum monitoring

Estimated Development Period
6 months

Estimated Development Cost
USD 0.6 million

Award/ Recognition and Export
- Export to Lao PDR (2011) and Mongolia (2013)

Managing Organization
Radio Planning Division of
Central Radio Management Service

Access
On-Site Inspection with Specialized Vehicle

Internet Post Office (ePOST)

This is a post office on the Internet, where all affairs regarding postal administration are handled online and more than 800,000 users visit every day.

System Features

e-Green posts
A customer registers the contents of a post on the Internet, and ePOST reproduces the contents in the form of a real post and delivers to the receiver.

ePOST shopping service
The system achieves one-stop shop online shopping for agricultural, livestock and fisheries products through post offices, distribution networks and call centers throughout the country, which all perform product consultation, order reception and distribution.

Inquiry service
The system allows customers to request parcel/EMS/post shipping, track shipment, and find postal codes and other inquiries.

Postal service on smartphone
Customers can use mobile postal service on their smartphones no matter what time or where they are.

Site Map
- Postal service : e-Green posts, cards for congratulations and condolences, stamps, etc.
- Request and tracking : Resale phone application, parcel/EMS, track-tracing, postal code finding, etc.
- Shopping service : Local specialty product sale, post office life mart, B2B, etc.

User
ePOST members : approximately 2.9 million

Estimated Development Period
10 months

Estimated Development Cost
USD 6.4 million (minimum, subject to change depending on scale)

Award/ Recognition and Export
- UPU EMS Gold Level (2007~2016)
- World Parcel Award (2006, 2010)

Managing Organization
Korea Post

Access
http://www.epost.go.kr

Postal Logistics Information System (PostNet)

This system is optimized for handling postal affairs, performing integrated management of the entire process of postal logistics, from collection to carriage and delivery.

System Features

Real-time handling of postal items

The system integrates the entire process of postal logistics from collection to carriage, delivery and track-tracing and handles near 4 billion postal items per year on a real-time basis.

Automated facilities and converged information systems

- Based on the information generated in the process of collection, postal items are automatically classified into different categories, which are then managed in the information system.
- Automatic collection and delivery services are achieved through the convergence of the system with automatic collection machine or the smart locker system.

Web-based real-time handling

- The system automatically relays the information generated in the collection stage to the carriage and delivery stages, enabling the real-time track-tracing service.
- It also provides delivery notifications and results through the Internet or smartphone.

Site Map

Integrated collection, parcel/EMS, carriage management, delivery management, track-tracing, sales management, postal data warehouse (DW), call center, situation control, etc.

User

42,000 workers in 3,500 post offices and 31 mail centers in Korea

Estimated Development Period

10 months

Estimated Development Cost

USD 54.6 million (minimum, subject to change depending on scale)

Award/ Recognition and Export

Total export USD 36.2M

- USD 6.2M in 2008 (to Kazakhstan and East Timor), USD 0.9M in 2009 (to Kazakhstan), USD 9.4M in 2013, USD 0.2M in 2016, USD 19.4M in 2017 (to Malaysia)

Managing Organization

Korea Post

Access

Automated Postal Item processing center
Delivery Status : www.epost.go.kr or SMS, App