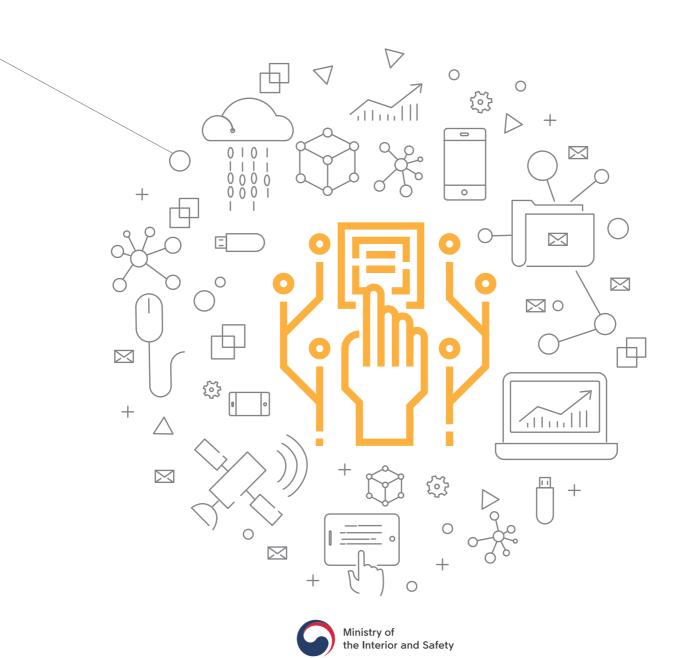
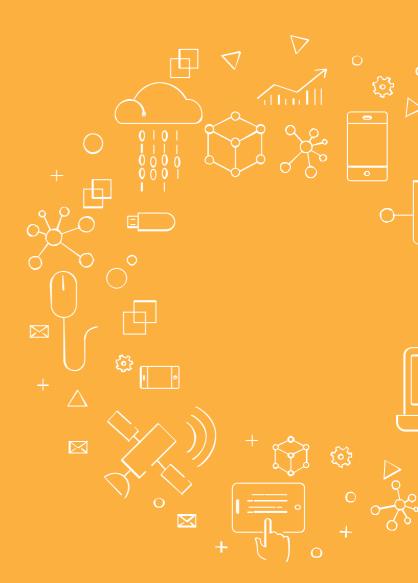
# Korea's 100 Digital Government Services



# Korea's **100**Digital Government Services





The Door to a Better World!

# acknowledged worldwide





















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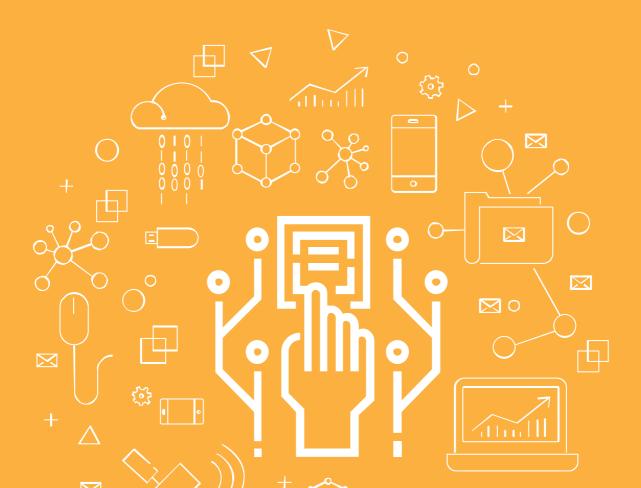


Digital Government serving citizens 24/7

# Citizen-Government Relations

The Digital 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 pay visits to government offices. Korea's Digital Government not only handles these services in a fast manner but also facilitates participation of citizens through information disclosure and opinion gathering, through which the feedback is applied to enhance reliability of policies.

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# **One-stop Civil Service Portal** (Government24)

This government portal provides a single window to all government services and policies of central government agencies, 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 88,000 government services, provides the information by each area, and allows users to search for government services by life cycle and customized government subsidy services (subsidy24).

### Service for citizens

Based on interconnection with government and public services of other institutions, the system offers information on 5,900 types of services, of which 2,500 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

### **Ser** User

Central and local governments, citizens

### Estimated Development Period

24 months USD 16.6 million

### Award/Recognition and Export

UN Public Service Award (2011)

### Managing Organization

Bureau of Government Service Integration of Ministry of the Interior and Safety



https://www.gov.kr (Kor) https://www.gov.kr/portal/foreigner/en (Eng)

**Estimated Development Cost** 

### **MyData in the Public Sector**

The MyData service provides a user's (data subject's) administrative information held by administrative/public institutions to the user or a third party as requested by the user.

### **System Feature**

### **Ensuring Citizen's Data Rights**

The service protects the people's right to monitor and control their personal information.

### **Streamlined Administrative Services**

The service provides all information required for administrative services in the form of 'datasets,' thereby reducing required documents and simplifying public service application process.

### **Safe Data Distribution**

The service allows users to selectively provide the required information for enhanced personal information protection.

### Site Map

52 types of datasets, including policy loans for small businesses (as of August 2022)

### 🔯 User

General public, public/administrative institutions, banks, credit information firms, and credit information controllers, etc.

### Estimated Development Period

Around 28 months (June 2020 and onward, as of October 2022)

### Estimated Development Cost

Around USD 13.7 million (June 2020 and onward, as of October 2022)

### Award/Recognition and Export

N/A

### Managing Organization

Public AI Policy Division of Ministry of the Interior and Safety

### Access

Internal Use Only

### **National Digital Identifications in Mobile Devices**

The ministry offers the mobile ID issuance service to address the issues with the plastic ID.

The mobile ID can be used for a wide range of identification needs both online and offline.

\* Inconvenient to carry around, possible exposure of personal information if misplaced risk of forgery, falsification, tampering, or theft, difficult to use online, etc.



### System Features

### **Integrated Common ID Platform**

All national IDs issued by the government (driver's license, national merit certificate, resident registration certificate, etc.) can be integrated into a single mobile app.

\* (2022) Mobile Driver's License → (2023) Mobile National Merit Certificate → (2024 and onward) Mobile Resident Registration Certificate, etc.

### Mobile ID for Both Online and Offline

The mobile ID can be used for offline (face-to-face) identification and online identification.

### Paradigm Shift: Centralization to Users Autonomy

Privacy concerns can be addressed by allowing the government to issue official IDs while preventing it from interfering with individuals' ID use and authentication processes.

### **Personal Information Protection**

The mobile ID prevents excessive exposure of personal information by allowing the user to disclose the minimum information required.

\* E.g. (convenience store) adult/minor status (car rental) driver's license information (public institutions) resident registration number, name

National Digital Identifications in mobile devices user quide, issuance quide, news, contact us, development support center, theft/loss report

All Koreans eligible for ID issuance including driver's license

### Estimated Development Period

Estimated Development Cost

8 months USD 8.4 million

### Award/Recognition and Export

N/A

### Managing Organization

Access

Digital Safe Policy Division of Ministry of the Interior and Safety

https://mobileid.go.kr (Kor)

### **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 publicdata for citizens.



### Public data disclosure

The system supports fast search for wanted public data from 67,000 datasets in the 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

### Examples of public data use (use cases)

The system shares cases and examples where public data use led to 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

### **麗 User**

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

### Estimated Development Period

USD 3 million 12 months

### Award/Recognition and Export

1st place in 3 consecutive surveys for OECD Open, Useful, and Reusable (OUR) Data Index (2015, 2017 and 2019)

### Managing Organization

Public Data Policy Division of Ministry of the Interior https://www.data.go.kr (Kor) and Safety https://www.data.go.kr/en/index.do(Eng)

Access

### **Online Civil Complaint Center** (Eungdapso)

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



### System Features

### Unified channel for citizen petitions and requests

- Citizens can file petitions 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 are processed.

### Integrated management of petitions and requests

- The system reduces redundant work as it receives and handles multiple petitions all upon a single website.
- The amount of time required for handling a petition decreased by 1.0 day, from 3.8 days before to 3.28 days after system development.
- Improved delay processing rate by 81.1%, from 15.7% days before to 2.97% days after system development.

### Filing petitions or reportings

· Petitions or reportings on all areas-civil petitions, reporting on public official corruption, public interest reporting and human rights violation can be filed.

### Progress and result notification

- 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 is handled is completely open on the system website and SNS.

### Site Map

### Progress and result notification

- 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

### **Emergency Social Media Messages**

• In case of an emergency, official crisis response messages are sent to the citizens registered at Eungdapso.

### **Civil Petition Cases**

• The system offers information on similar civil petition cases that citizens request disclosure.

### **Best Practices of Administrative Improvement**

• The system publishes best practices among administrative services developed by the city.

### **Civil Petition Guidebook**

• The guidebook provides an overview of the civil petition process and offers instructions on petitioning and the required documents.

### **Eungdapso Civil Petition Statistics**

• The center provides statistics on civil petitions by application type, area, and institution in charge.



Citizens and city government officials

11 months USD 0.7 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

https://eungdapso.seoul.go.kr (Kor)

### **Passport Information Comprehensive Administration System(PICAS)**

This is an information system that real-time handles the entire process of electronic passport issuance online and operates.

### System Features

### Simple application process using ICT

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

### Issuance of passports meeting international standards

The system reinforces identification process with 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; 252 local governments and 181 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 Government24, 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

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

24 months

USD 12.9 million (network and equipment cost excluded)

### Award/Recognition and Export

N/A

### Managing Organization

Passport Division of Ministry of Foreign Affairs

Internal Use Only

### **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.



### 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 already disclosed information at the homepage of each institution.

### Information disclosure in its original form

The system provides 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 on 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).



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 scholarship/research or corporations or groups operating local offices in Korea)



### Estimated Development Period



### 🖏 Estimated Development Cost

2005~2021

(phased development and functional upgrade)

USD 15.8 million (mainly for system construction)



### Award/Recognition and Export

N/A



### Managing Organization



Information Disclosure Policy Division of Ministry of the Interior and Safety

https://www.open.go.kr (Kor)

### **Public Information Sharing System**

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



### 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.

Information required for handling 3,199 businesses, including passport issuance application and welfare benefit application (as of August 2022)

### 殿 User

Public service officials in administrative and public institutions

### Estimated Development Period

72 months USD 69.1 million

### Award/Recognition and Export

N/A

### **Managing Organization**

Digital Resource Policy Division of Ministry of the Interior and Safety

https://www.share.go.kr(Kor)

### 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.



### **One-Stop Processing**

Civil petitions and proposals received on e-People are referred to the most appropriate institutions for one-stop processing. Service satisfaction and operation are evaluated for improved service quality .

• The system is integrated/linked with the government-wide portals run by the government and around 1,100 institutions including all administrative agencies (central government agencies, local governments, education offices, and overseas diplomatic offices), the judiciary, and key public institutions.

### **Use of Smart Information Technologies**

The system applies smart information technologies to suggest the relevant institutions for a given civil petition based on analysis of civil complaint cases; provide information on similar cases so that the user can resolve the issue without filing a civil petition; and provide various information after the petition has been processed including subsequent changes in the relevant systems or policies and follow-up actions.

### **Big Data Analysis Service**

The system analyzes big data on petitions and proposals, and shares the findings with the relevant institutions to prevent further petitions and facilitate early resolution of existing petitions, and supports policy and institutional improvements.

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

Public officials and citizens

### **Estimated Development Period**

(Initial development) Around 50 months (Reconstruction) Around 17 months

### Estimated Development Cost

(Initial development) USD 9 million (Reconstruction) USD 8.3 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 (2011.6.)
- E-People system development in Tunis (2016.1. ~ 2018.3.)

### Managing Organization

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

https://www.epeople.go.kr (Kor) https://www.epeople.go.kr/petition (Eng)

### **Mobile Voting System** (mVoting)

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



### Mobile voting system

It is a simple mobile voting system open to anyone who accesses the app or homepage and goes through the authentication process through phone 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 like festivals, conferences, trainings,
- Employee voting: Polls organized by the Seoul government asking for their 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



### 殿 User

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





12 months

USD 0.16 million



### **Awards and Evaluation Results**

- Received the Grand Prize in the public service category at Digital Chosun "App Award Korea 2014." (April 3, 2014)
- Selected as a leading project for Government 3.0; received a government commendation (December 2014)
- Selected as a finalist at "Smart City Expo Award" in Barcelona (November 19, 2015)
- Case study presentation at "Berlin Metropolitan Solution 2016" (June 1, 2016)
- Case study presentation for delegates from Sidoarjo, Indonesia (September 2016)
- Case study presentation on participatory e-government in Eindhoven, Netherlands (EU World City Project) (November 2017)
- Selected as a finalist at IDC Smart City Asia Pacific Awards Finalist (September 2019)
- Named Administrative K-Wave Content by the Ministry of the Interior and Safet (December 2020)

### Managing Organization



Access

Digital Planning Division of Seoul Metropolitan Government

https://mVoting.seoul.go.kr(Kor)

### **Virtual Assistant Service for Citizens**

This virtual assistant service for Citizens (GoodPy) sends notifications concerning individual administrative matters and responds to questions via commonly used mobile apps in Korea(Naver App, KakaoTalk, Toss).





### Notifications via private-sector apps

Users can sign up for the GoodPy through commonly-used private sector apps and receive notifications about such things as COVID-19 vaccination schedules, driver's license renewals, national scholarship applications and more from different agencies with a single request. Fines or penalty payments can also be submitted as required.

### User authentication via private sector services

A selection of simple private-sector authentication tools is offered on the website to enhance user convenience.

### Chatbot service

A one-stop channel offers guidance on inquiries in 23 different sectors, including those regarding recreational forests and the Personal Information Protection Act. The service also provides customized services such as inquiries on Personal Customs Clearance Codes and expected severance pay for public officials.

### **Integration with AI Speakers**

The service offers audio quidance on 5,000 different types of civil inquiries in response to simple commands, enabling those who are digitally left behind, such as the elderly and the disabled, to have easy access to civil services.



Notification Service, Chatbot Service, User Guide, Service Center



Central governments, Public Institutions, Citizens





36 months

USD 15 million



### Award/Recognition and Export

N/A





Public AI Policy Division of Ministry of the Interior and Safety

https://www.ips.q





Digital Government enhancing efficiency of public administration

# Common base for public administration

The key enabler ofital DigGovernment development in Korea is 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 management.

Any duplicated systems are integrated and more administrative information is shared in order to improve expertise and efficiency of public administration.

26 Administration Information System for Local Governments (Saeol)

27 e-Government Standard Framework

28 Electronic Human Resources Management System (e-Saram)

29 Government Enterprise Architecture 30 Government Public Key Infrastructure System

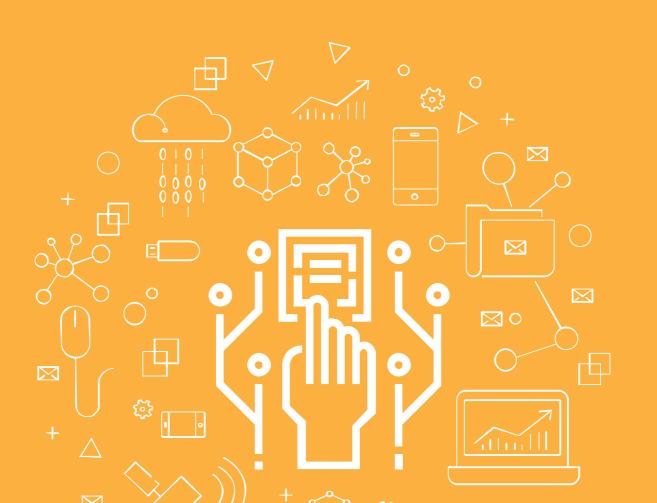
31 Government Workflow Management System (Onnara Document System)

32 National Human Resource Database

33 ONBook 34 National Information Resources Service (NIRS)

36 Onnara Knowledge Management System

**37** Resident Registration Information System



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

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

### 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 forinheritance 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.

Local governments

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

### **Estimated Development Period**

**Estimated Development Cost** 

36 months USD 118.4 million

### Award/Recognition and Export

N/A

### **Managing Organization**

Regional Digital Service Division of Ministry of the Interior and Safety

Internal Use Only

### e-Government Standard Framework

This framework defines an open software standard for the development, operation, and management of application programs used by government agencies. It implements common modules in advance and shares them to improve interoperability and maintenance, and prevents technology and/or vendor lock-in.



### Open-source-based system

The system builds on about 50 open-source software including Spring Framework.

The system saves development costs by reusing common modules.

### Interoperability

The system applies standard development environment and development framework to ensure interoperability and quality.

### **Fair competition**

The system provides equal opportunities for small and large vendors alike by utilizing open and free frameworks.



### 🗟 Site Map

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



National ICT project managers and service developers





60 months

USD 15 million

### Award/Recognition and Export

- Export to 17 countries 33 systems 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 Organization of the Year/ Technology Leadership Award/ Government Transformation of the Year in FutureGov 2010



### 📺 Managing Organization

Digital Service Policy Division of Ministry of the Interior and Safety



https://www.egovframe.go.kr(Kor) https://www.egovframe.go.kr/eng/main.do (Eng)

### **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.

### Standard HR affairs management for each ministry

The system helps 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 for 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 managementsy stem.

### Personalized service for public officials

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.

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

Central government

24 months USD 8.3 million

### Award/Recognition and Export

Ranked 1st in the electronic public official HR management category in the 2019 International Civil Service Effectiveness Index (InCiSE, UK)

### **Managing Organization**

Director for ICT Management of Ministry of Personnel Management Internal Use Only

### **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.



### Information resource registration and 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 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 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, policy information and guidelines, and EA education management

### 殿 User

Central government bodies, legislative/ judicial/ constitutional institutions, local governments, public institutions

Estimated Development Cost

USD 1 million 10 months

UN Public Service Award (2013)

### Managing Organization

Digital Service Policy Division of Ministry of the Interior and Safety

https://www.geap.go.kr(Kor)

### **Government Public Key Infrastructure System**

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



### Support for digital signature certificate management

- The system verifies identities of public officials, issues and operates certificates for individuals for handling administrative affairs.
- Issue and administer certificates for institutions and servers to prevent forgery and falsification of electronic documents and data and ensure safe data transmission

### Web Trust 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

### 殿 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 ex changing digital documents with administrative institutions (corporations), institutions (corporations) using the Public Information Sharing System

### **Estimated Development Period**

18 months USD 4.6 million

### Award/Recognition and Export

N/A

### **Managing Organization**

Digital Safe Policy Division of Ministry of the Interior and Safety

https://www.gpki.go.kr (Kor)

### **Government Workflow Management System**(Onnara Document System)

The Government Workflow Management System (Onnara Document System) is a digital document approval system used by public officials at all central government ministries and local governments. It improves work efficiency by ensuring effective and rapid processing of administrative tasks and provides transparent policymaking by allowing users to register, manage, and share policymaking processes with digital documents.



### **Built on Cloud Platform**

The Onnara Document System is optimized for central administrative agencies and local governments. It has been developed on a cloud platform to support collaboration and sharing among government organizations and ensure flexible utilization of system resources.

### Collaboration Support and Data Sharing-Based Services

With features such as inter-agency approval, task blog, and dialogue-based UI, the Onnara Document System supports expanded collaboration among users and agencies. It stores all documents in a single integrated pan- government repository, thereby offering data sharing-based services.

### Use of Open Technology Standards

The system did away with non-standard technologies (e.g. ActiveX) and replaced them with web standards to prevent reliance on specific operating systems or browsers for improved accessibility. The system also ensures the preservability of documents by producing them in open formats (e.g. odt, pdf)

### 🔳 Site Map

Electronic Approval, Memo Report, Task Management, Instructions, MyPage, Meeting Management, Task Schedule, My Department, Task Takeover, Suggestions, Alert Messages

### 級 User

Officials at central administrative agencies and local governments

3 years USD 16.66 million

### Award/Recognition and Export

N/A

### Managing Organization

Director for Data and Information Management of Ministry of the Interior and Safety

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 update is done by the candidates themselves through access to the homepage 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 recommendation 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.

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

Central government, local governments, public institutions and citizens

### **Estimated Development Period**

**Solution** Estimated Development Cost

12 months USD 1.2 million

N/A

### **Managing Organization**

Talent Information & Acquisition Bureau of Ministry of Personnel Management

https://www.hrdb.go.kr (Kor) Https://www.hrdb.go.kr/enIntro/retrieveHRE 0101001.do (Eng)

### ONBook

A secure and highly portable office laptop capable of accessing both the government's intranet and the Internet and providing the same environment as the office anywhere, anytime

### Improve Organizational Culture and Lead Social Changes through Smart Workplace

- Offers work environment and mobility by providing data access regardless of time and space (allows for administrative outreach services)
- Offers various types of smart work environments for increased efficiency. E.g. free seating, etc.

### Create Added Value in Carbon Neutrality, etc. and Reduced Administrative Costs

- Replacing two PCs (PC for the intranet/PC for the Internet) with a single ONBook reduces the relevant costs and creates indirect value added, such as the opportunity costs of transitioning to a smart workplace.
- ONBook consumes far less power than the conventional PCs, thereby contributing to carbon neutrality and promoting the state's responsibility for the environment.

### Ensure Security by Applying 'Gooroom\*' Platform with the Latest Security Technologies

\* An open source solution supports full-disk encryption, secure booting, operating system protection, execution file verification, VPN preverification, zero trust, etc.



### 翠 User

Central and local governments, public institutions

### **Estimated Development Period**

െ Estimated Development Cost

5 months USD 0.7 million (per 1,000 people)

### Award/Recognition and Export

Grand Award in Government Transformation Competition, organized by the Ministry of the Interior and Safety(2022)

### Managing Organization

Smart Workplace Division of Ministry of the Interior and Safety

### **National Information Resources Service** (NIRS)

A government-exclusive data center shared by over 50 government agencies, with innovative management and security systems to enhance efficiency and safety of digital government services.

### System Features

### Conversion to an intelligent cloud computing center

By converting central government work systems to G-Cloud, an exclusive cloud platform for government use, different ministries share a common information system and have flexible access to information resources, reducing costs and increasing resource utilization.

### Stable and efficient operation of the Digital Government system

With the use of an independently-developed integrated operation automation system (nTOPs, national Total Operation Platform System) and a big data log analysis system (nSIMS, National Security & Information Management System) and through the replacement of outdated equipment and failure response simulation training, the system provides more stable services.

Through standardizing information resources and enhancing resource utilization, system operation and management efficiency have improved and system construction costs reduced by 30%. The Vulnerability Assessment Management System, which automates security vulnerability checks, that used to be done manually, significantly reduces the time needed to assess security vulnerabilities in the entire system from 70 days to 7 days.

### Strengthening response to cyber threats

An AI-based intelligent security system has been developed, incorporating key fourth industrial revolution technologies such as AI, Big data, and security technology.

By design, AI will learn massive amounts of security data and monitor anomalies so as to predict and prevent not only known forms of security attacks but also new ones, thereby safequarding the national information system from various cyber threats that are increasingly advanced, intelligent, and diverse.

### Support for IT businesses and international cooperation

Private-public partnerships are reinforced to support global expansion of small-to-medium-sized Korean IT companies.

In addition, a Study Tour Program is offered to domestic and foreign public officials for benchmarking of best practices.

### 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 designated for government use



### 🔛 User

50 government ministries and institutions

### Estimated Development Period



36 months

USD 83.3 million (for 1 center as of 2005)

### Award/Recognition and Export

- DX Leader Award in 2018 DX Summit
- RedHat APAC Innovation Awards 2020 (Digital Transformation/Automation Sector)

### Managing Organization



National Information Resources Service

https://www.nirs.go.kr(Kor) https://www.nirs.go.kr/eng (Eng)

# Onnara 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

#### Open system

Onnara'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
- 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 Onnara mailing system enables mail transaction among all central and local government officials throughout the country.

# 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)

USD 5.3 million

### Award/Recognition and Export

N/A

Collaboration Policy Division of Ministry of the Interior and Safety Internal Use Only

# **Resident Registration Information System**

The Resident Registration Information System integrates and manages the electronic data required for services related with resident registration, seal impression certification, and signature, and provides fast and precise resident administration services by linking with various systems at the central government, local governments, and public institutions.

# **System Features**

### Support for Resident Administration Services for Resident Registration, Seal Impression Certification, and Signature

- The system builds a comprehensive database on resident registration of all Koreans and provides information update services.
- The system offers issuance services for resident registration certificates, seal impression certificates, and signature registration.

#### **Resident Registration Information Services**

- The system uses the administration information sharing system to provide resident registration information services to the central government, local governments, and public institutions.
- The system links with Government24 to process online civil petitions related to resident registration.

### **Knowledge-Sharing Platform Services**

The system offers a knowledge-sharing community function for officials tasked with resident registration services, collects online suggestions for system improvement, provides FAQs for using the system, as well as a search function for services related with resident registration.

# Site Map

Resident registration information, relocation, resident registration certificate access and issuance, signature verification/seal impression certification, data management, voter list, system management, knowledge sharing, etc.

Ministry of the Interior and Safety (informatization project manager) / local governments / Korea Local Information Research & Development Institute (maintenance manager)

# Estimated Development Period

October 2019 to June 2021(Next-generation Resident Registration System Development: Phase 1 and 2)

USD 10.9 million (for Next-generation Resident Registration System Development)

# Award/Recognition and Export

N/A

# Managing Organization

Resident Service Division of Ministry of the Interior and Safety



Internal Use Only

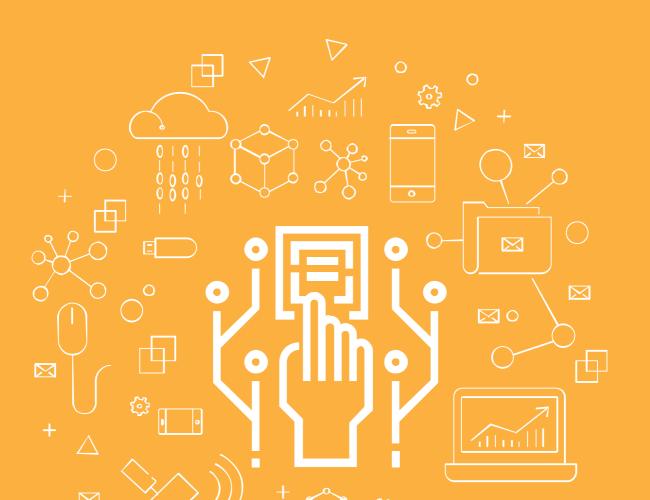


Digital Government ensuring public safety and order

# 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 guide to case filing and proceeding all through the Digital Government systems. Online provision of these services contributes to better efficiency and fairness of criminal and judicial affairs.

40 Automated Immigration Clearance System (SES)
41 Constitutional e-Court System 42 Cyber Probation Office
43 Integrated Service for Emergency Hotlines
44 Korea Information System of Criminal Justice Services (KICS)
45 National Forensic Information System 46 National Law Information System
47 Probation Information System 48 Sex Offender Alarm System



# **Automated Immigration Clearance** System(SES)

Korea Smart Entry Service(SES), an advanced automatic immigration system, uses passengers' biometric information(fingerprints and facial images) and allows the visitors to enjoy faster and more convenie nt immigration process

### 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, Macau, Taiwan and Germany.

# Site Map

SES-GE (Global Entry of the US) application, SES-e-Channel (Hong Kong) application, SES-APC (Macau) application, SES-e-Gate (Taiwan) application, SES-EasyPASS (Germany) application

# 器 User

Korean and foreign nationals

# **Estimated Development Period**

Estimated Development Cost

Begun in 2007, project is still underway. (246 auto gates in operation nationwide)

# Award/Recognition and Export

UN Public Service Award (2007)

# **Managing Organization**

IT Strategy and Management Division of Korea Immigration Service

https://www.hikorea.go.kr (Kor) https://www.hikorea.go.kr (Eng)

# **Constitutional e-Court System**

This system enables users to file constitutional adjudication requests, deliver documents, check case status, and access case records via PC or mobile phone anytime and anywhere.

It also establishes an e-courtroom which allows livestreaming and recording of proceedings using multimedia equipment, such as cameras and large-screen monitors, and electronic searching of case records and precedents.

### **System Features**

#### Electronic processing of constitutional adjudication

- The system allows online/electronic submission of documents for constitutional adjudication requests.
- Users can access constitutional adjudication documents through the webpage (e-delivery).
- Case information and e-files are registered to electronically manage the entire process of adjudication from case filing to final decision.

#### Establishment of the e-court environment

- Video equipment, such as cameras and large-screen monitors, is introduced in the courtroom.
- The courtroom is equipped with IT infrastructure to go paperless.
- The e-Court operation system enables users to access case records and provides video services.

- · Online request for adjudication (e-document submission), e-delivery, electronic access to records
- Checking case status and searching cases
- Technical support for proceedings in the courtroom by using multimedia equipment
- Online video service for the oral arguments and the pronouncement of the final decision

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

24 months USD 4.1 million

# Award/Recognition and Export

- Establishment of e-Court services at the Constitutional Court of Mongolia (2017-2019 KOICA ODA project)
- Constitutional e-Court system in Kyrgyzstan (2019 KOICA ODA project application)

# **Managing Organization**

Information Planning Division of Department of Court Administration of Constitutional Court of Korea

https://ecourt.ccourt.go.kr (Kor)

# **Cyber Probation Office**

This probation business system takes photos and remotely checks attendance of persons on probation, who are obliged to provide community service and undergo education to prevent recidivism and follow such orders in cooperating institutions. It also performs remote management of progress reports written by members of 'Beopsarang', a private voluntary organization cooperating 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 notify 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 of persons on orders of community service or education, and 'Beopsarang' members' writing and submitting of progress reports

# 級 User

Officers of institutions cooperating on community service and education and members of 'Beopsarang'

# Estimated Development Period

USD 0.1 million 9 months

### Award/Recognition and Export

N/A

### in Managing Organization



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

https://www.cpo.go.kr(Kor)

# **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 department 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) as registered in the App helps 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 processing, map, board, etc.
- 112 system for tablet: Call processing, map, board, etc.
- 112 Emergency App: 112 emergency report, 182 police consultation, safe return home service

# 器 User

Citizens

USD 41.6 million 24 months

# Award/Recognition and Export

A project for export to Angola currently under implementation by KT (project period December 2015~December 2017)

### Managing Organization

Situation Control Center of National Policy Agency

Multi-Channel (Call, App, SMS)

# **Korea Information System of Criminal** Justice Services (KICS)

The KICS is a public portal that provides comprehensive criminal justice information via the internet and mobile, including the information on investigations and court proceedings from the National Polic Agency, the Korea Coast Guard, the Prosecutors' Office, the Corruption Investigation Office for High-ranking Officials, the courts, and the Ministry of Justice.

### System Features

#### Joint Use of Electronic Information among Criminal Justice Institutions

The system integrates criminal justice information from the National Polic Agency, the Korea Coast Guard, the Prosecutors' Office, the Corruption Investigation Office for High-ranking Officials, the courts, and the Ministry of Justice for various services.

#### **Criminal Case Progress Search**

Users can use the portal to search the progress of their criminal cases around the clock, without visiting the relevant institutions in person.

#### **Paperless Case Processing**

An electronic system for summary procedures has been established for cases such as driving without license, and driving under influence, for fully electronic processing of the relevant cases.

# Site Map

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

Criminal and justice agencies and the citizens

**Solution** Estimated Development Cost

74 months USD 66.6 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

https://www.kics.go.kr (Kor) https://www.kics.go.kr (Eng)

# **National Forensic Information System**

This system collects, authenticates, and interprets evidence related to criminal investigations and incidents to help draft forensic reports at the request of public institutions such as the National Policy Agency or local governments.

### System Features

### Transparent processing of forensic tasks

Upon receiving a request for authentication and pertaining evidence, the system generates results using forensic equipment, compiling reports through a transparent process using internal electronic signatures and an authenticity verification system.

### Integration with government workflow

This system is integrated with the government-wide task and document management system (Onnara) and the National Police Agency's forensic investigation information system to provide timely and accurate authentication services.

### Forensic information sharing

This system provides information on forensic inquiries, forensic reports and statistics.

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

**Solution** Estimated Development Cost

USD 4.8 million 2 years

# Award/Recognition and Export

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

# Managing Organization

Planning and Strategy Division of National Forensic Service

Internal Use Only

# **National Law Information System**

This system provides services where citizens can conveniently search and find various legal information of 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 4.7 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 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, regulations of public institutions, and other information.

# 殿 User

Central and local governments and citizens

# **Estimated Development Period**

36 months USD 3 million

# Award/Recognition and Export

The Myanmar legal information system project has been completed(KOICA ODA, 2016 ~ 2018)

Law Data Innovation Division of Ministry of Government Legislation

https://www.law.go.kr (Kor) https://www.law.go.kr/LSW/eng/ engMain.do (Eng)

# **Probation Information System**

This is a support system for probation duties, which manages 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.

### **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, 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

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

**Solution** Estimated Development Cost

9 months USD 0.19 million

### Award/Recognition and Export

N/A

# **Managing Organization**

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

Internal Use Only

# **Sex Offender Alarm System**

This system allows 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 are 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, quardians' 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

**Solution** Estimated Development Cost

12 months USD 1 million

### Award/Recognition and Export

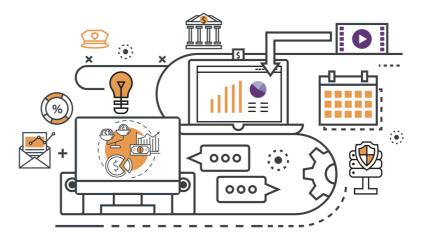
N/A

### 🛅 Managing Organization

Access

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

https://www.sexoffender.go.kr (Kor)



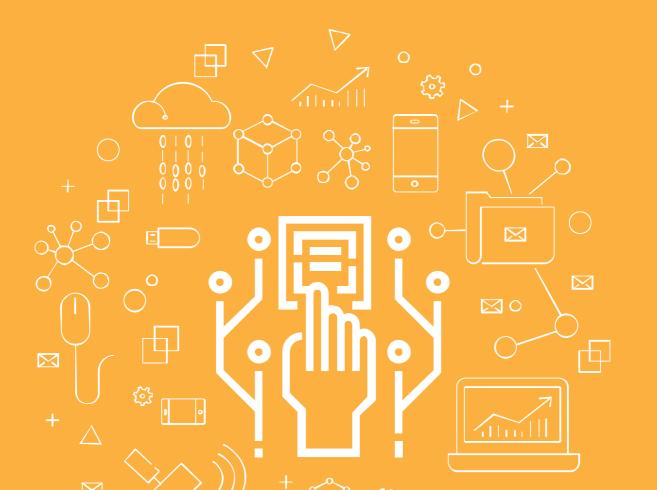


Digital Government creating values with spatial information

# Land / Transport / Ocean

The geospatial information is influential to all areas of the politics, public administration and education and therefore must be put under management 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 4th industrial revolution.

52 Architectural Administration System (Sae-um-teo) 53 Driver's License Information System
54 General Information Center on Maritime Safety and Security (GICOMS)
55 Intelligent Transport System (ITS) 56 K-Geo Platform
57 Korea Land Information System (KLIS)
58 Marine Environment Information System (MEIS)
59 PORT-Management Information System (PORT-MIS)
60 Seoul Transport Operation Information Service (Seoul TOPIS)
61 Traffic Monitoring System (TMS) 62 Transport Advice on Going Anywhere (TAGO)



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

This is a national standard system for Cloud 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).

### **System Features**

#### No visit, no paper

This system saves a lot of time and cost 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

### Government policy-making and building life cycle management information

- Real-time architectural and housing information and statistics are used in government policy-making
- The system promotes informatization of building life cycle management, from planning > construction > management.

# 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

### 殿 User

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

### **Estimated Development Period**

USD 26.25 million 4 years

### 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)



Architecture Policy Division of Ministry of Land, Infrastructure and approval for use)

https://cloud.eais.go.kr(Kor)

# **Driver's License Information System**

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



### **Driver's License Management**

- Offers services across all stages of driver's license acquisition
- Offers driver's license renewal/issuance services in collaboration with the National Police Agency(NPA)
- Issues Mobile Driver's Licenses

### **Paperless Civil Services**

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

#### **Online Services**

- · Allows users to apply for and reserve driver's license tests and issue physical driver's licenses (and mobile driver's licenses) on web and mobile
- Provides comprehensive information on driver's license including the test process, test videos, a question bank for written tests, notices, as well as the penalty point search function

Driver's license test application, learner's permit issuance, physical driver's licenses (and mobile driver's licenses) driver's license issuance request, drivr's license information search, traffic safety training, traffic safety facility inspection, etc.



27 examination offices and the citizens



### **Estimated Development Period**



20 months

USD 4.1 million

Received the Excellence Award at the 4th Active Administration Best Practice Competition of the Ministry of Personnel Management (MPM) in 2019.



### Managing Organization



ICT Operation Division of Road Traffic Authority

https://safedriving.or.kr (Kor) https://safedriving.or.kr/guide/ rerGuideEng01.do (Eng)

# **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.

#### 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 one-stop shop search on ship registration, inspection, and information 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

# 殿 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**

USD 2.5 million 12 months

# Award/Recognition and Export

Maritime Electric Highway (MEH) established (2010~2012)

# Managing Organization

Access

Maritime Safety Management Division of Ministry of Oceans and Fisheries

https://www.gicoms.go.kr (Kor) https://www.gicoms.go.kr/en/main.do (Eng)

# **Intelligent Transport System** (ITS)

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

### 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.

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

Central and local governments, citizens

# **Estimated Development Period**

24 months USD 1.3 million

### Award/Recognition and Export

N/A

Transport

Smart Road Team of Ministry of Land, Infrastructure and



Access

# **K-Geo Platform**

K-Geo Platform is a cloud-based integrated platform for national geospatial information that integrates, shares, and links the data held by geospatial information producers/managers, offers a system to support decision making based on geospatial data, manages surveying businesses, provides electronic cadastral data, and facilitates joint use of geospatial information for real estate statistics, etc.

### System Features

#### **Geospatial Information Services**

The platform collects and updates the raw real estate information from all local governments to offer search/review services and support policymaking by creating and providing customized policy maps.

#### Service for citizens

The platform provides services like 'Find my ancestors' land' and 'Find my land' for citizens.

#### **Real Estate Policy Statistics**

By building monthly/quarterly/half-yearly/yearly DW/DMs, the platform generates statistics for real estate policies including land ownership status, housing ownership status, and mountain ownership status.

#### **Administrative Support**

The platform supports administrative tasks by providing electronic cadastral data, real estate registration numbers for unincorporated foundations and organizations, information on 11 surveying businesses (surveyor, equipment, technicians, etc.), and managing old land registers.

#### **Mobile Services**

The ministry offers a smart information app on national lands, where users can search real estate information on their mobile devices.

#### Integration with National Geospatial Information (collection/provision)

The platform collets, integrates,\* and provides national geospatial information produced by central government ministries, public institutions, and local governments after inspecting the information for updates, spatial compatibility, etc.

\* Linked with 68 institutions and 143 information systems



Real estates, cadastral/land/spatial data, electronic cadastral data, policy maps, real estate policy statistics, civil services (find my lands / find my ancestors' lands), non-corporation organization information, old land register information; surveying business management, public compensation information, smart national land information, information integration, geospatial information list

### 🔯 User

Central and local governments, Public institutions



Estimated Development Cost

15 months USD 14 million

Award/Recognition and Export

N/A

# Managing Organization



National Spatial Data Infrastructure Center of Ministry of Land, https://kgeop.go.kr (Kor) Transport and Infrastructure

# **Korea Land Information System** (KLIS)

A spatial information system supporting five types of land administration tasks: real estate development, real estate brokerages, development impact fees, certified real estate agencies, and land transaction licenses. The system covers the needs of the Ministry of Land, Infrastructure and Transport, 17 cities and provinces, 228 districts and counties.

### System Features

#### Land administration task support

The system supports five types of land administration tasks concerning real estate brokerages, certified real estate agencies, real estate development businesses, development impact fees, and land transaction licenses, providing services for central government ministries, local governments and public agencies.

#### Civil inquiry services

The system provides an online civil inquiry service through Government24 on six types of real estate-related business tasks, including real estate business registration/modification and broker employment declarations.

#### **Utilization of spatial information**

The system utilizes generated data to produce and provide real estate policy statistics, opening administrative data to the public at all times through API links with the National Spatial Data Infrastructure Portal and Open Government Data Portal.

- · Licensed real estate agents: Registration of successful examinees in qualifying examination and license
- 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
- Land transaction permit: Seller/buyer management, permit issuance
- Real estate brokerage business: Management of brokerage businesses, agents, employees; registration certificate issuance



#### 谿 User

Central and local governments, citizens





14 months

USD 1.08 million



N/A





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

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

# **Marine Environment Information System**(MEIS)

This system integrates and manages marine environment, marine ecology, and marine conservation information. Integrated information provides a comprehensive marine environmental information service to the public and government agencies support scientific integration decisions to develop, implement and evaluate marine policies.

### 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. And provides Water Quality Index (WQI), time-series service on environment management sea area, and their original data.

#### Provision of marine ecology and protected marine area

The system provides marine protected species, national marine ecosystem monitoring program, mud flat ecology, protected marine area, 3D contents service of the marine organisms, spotted seal video service, photos of the marine organisms.

#### Provision of marine conservation

The system provides amount of marine litter collected, marine litter monitoring of the coast, ocean dumping, marine environmental impact assessment.

#### Provision of marine environment information map

The system provides map information such as marine ecology, marine observation data, marine environmental impact assessment, marine litter, coastal thematic maps.

#### Provision of laws, policies and knowledge information on marine environment and publications

The system provides laws, policies, references, research materials, reports, educational materials, publication related to the marine environment, and Dokdo sea lion residual bone 3D video.

# Site Map

Marine environment/Quality management, Marine ecology/Protected marine area, Marine litter, Ocean dumping, Marine environmental impact assessment, Marine environmental information map, Research material, Report, News

# 錣 User

Citizens and marine environment/marine ecology/marine conservation policy makers, workers in the marine environment management industry

# **Estimated Development Period**

36 months USD 2.6 million

# Award/Recognition and Export

N/A

# 🛅 Managing Organization

Marine Environment Policy Division of Ministry of Oceans and Fisheries

https://www.meis.go.kr(Kor)

# **PORT-Management Information System**(PORT-MIS)

PORT-MIS is an information system that electronically processes various marine transport tasks related to sailors and vessels, civil petitions related to port operation, including the processing of cargos and fees incurred by the use of port facilities by vessels entering/leaving trade ports in Korea, and provides various related information.

### Fast Civil Petition Filing/Processing

- When users (shipowners, logistics companies, etc.) request the use of port facilities for entry, exit, or cargo processing, the relevant institutions (Regional Offices of the Ministry of Oceans and Fisheries and port authorities) can use PORT-MIS to process the petitions for fast and convenient civil services.
- The system also provides convenient electronic civil services for marine transport, sailor certificate, vessel registration, and other matters.

#### Convenient Port Facility Fee Payment

The fees and expenses (quay dues, anchorage fees, entry/exit fees, etc.) incurred by the use of various port facilities (dock, anchorage, unloading equipment, etc.) are compiled and notified via PORT-MIS, so as to facilitate payment.

#### **Port Logistics Statistics**

The system offers various information on port operation, including the entry and exit in/from Korean trade ports, volumes of import/export cargos, container processing results, and other nationally approved statistics.

Filing and reception of civil petitions regarding vessel entry/exit, statistical data on vessel entry/exit and cargo transportation, reception and processing of civil petitions related to marine transport businesses, and issuance of seafarer's book and marine engineer license, etc.

# 🕄 User

Ministry of Oceans and Fisheries and affiliates / port authorities / local governments / relevant institutions / shipowners and dealers / port transport business entities / marine transport business entities / seafarers

# **Estimated Development Period**

**Estimated Development Cost** 

USD 14.1 million 37 months

N/A

Port Management Division, Ministry of Oceans and Fisheries

https://www.portmis.go.kr(Kor)

# **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 a population of 10 million; provides and analyzes a wide range of transport information; and facilitates citizens' travel convenience and policy-making.

#### 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

# 殿 User

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

**Estimated Development Cost** 

Phased upgrade since first launched in 2005

### Award/Recognition and Export

2013 ITS Local Government Award (ITS World Congress, Tokyo, 2013.10)

# 📺 Managing Organization

City Transportation Office of Seoul Metropolitan Government

https://topis.seoul.go.kr (Kor) https://topis.seoul.go.kr/eng/english.jsp (Eng)

# **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.



#### 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, 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



Central and local governments, citizens





### **S** Estimated Development Cost

24 months

USD 12.5 million



#### Award/Recognition and Export

N/A



#### Managing Organization



Korea Institute of Civil Engineering and Building Technology

http://www.road.re.kr (Kor)

# **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**

**Solution** Estimated Development Cost

USD 18.54 million 72 months

### Award/Recognition and Export

N/A

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

https://www.tago.go.kr(Kor)





Digital Government enhancing financial

# **Transparency Finance / Statistics**

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 effective execution of the plans. The entire process of tax payment, budget execution, national property management and statistics is operated upon Digital Government systems, thus enhancing transparency and efficiency of work as well as gaining trust of the citizens.

66 All Public Organization Information In-One (ALIO)

**67** Credit Recovery Information System (OnCredit)

68 Deposit Insurance Payout System 69 Electronic National Tax System (HomeTax)

70 Korea Fiscal Management Information System (dBrain+)

71 Korean Statistical Information Service (KOSIS)

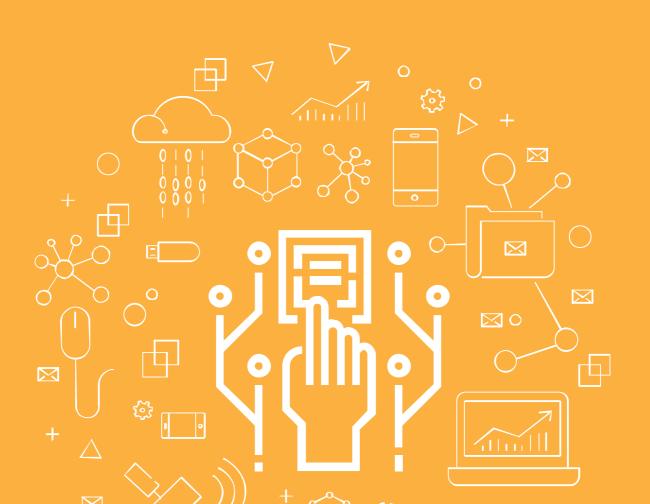
**72** Local Tax Affairs Information System of Seoul Metropolitan Government

73 Nara Statistics System 74 National Property Inspection System

75 Next-Generation Local Government Financial Management

System (Next-Generation e-hojo

76 Online Bidding System (Onbid)



# **All Public Organization Information** In-One (ALIO)

ALIO helps people search and identify key information regarding the management of public institutions.



### System Features

#### Disclosure of Key Management Information of Public Institutions

- The system standardizes and discloses key management information of public institutions over the last five years.
- The disclosed information consists of 41 items including the number of executives and employees, welfare costs, and financial information (as of 2022).

#### Visualized Data for Users' Convenience

The system offers visualized data on the disclosed items regarding the operation, key projects, management performance, and internal/external evaluations of public institutions.

#### Provision and Comparative Analysis of Key Statistical Data

The system provides, and offers comparative analysis features for, key statistical data including the executives and employees, new recruitment, and financial information of public institutions.

#### **Provision of Diverse Public Policy Data**

The system provides various public policy data including laws, regulations, and guidelines on public policies.

# Site Map

About ALIO (introduction to ALIO and the management information disclosure system), management information disclosure (disclosure by institution, by item) statistics (key statistics, statistical analysis, etc.) public policy data (laws/regulations/quidelines on public institutions, public policy data, etc.) news and participation (notices, user guide, etc.)

### 殿 User

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

USD 1 million 4 months

### Award/Recognition and Export

N/A

Public Institutions Management Division of Ministry of economy and Finance

https://www.alio.go.kr(Kor)

# **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.





#### 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 like lawsuits on debt adjustment.



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)



#### 殿 User

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





### Estimated Development Cost

6 months

USD 0.22 million (self-developed)



### Award/Recognition and Export

N/A



#### Managing Organization



Korea Asset Management Corporation

https://www.oncredit.or.kr (Kor)

# **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 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 in the websites of Korea Federation of Banks, Financial Supervisory Service and Government24.

# Site Map

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

# 器 User

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

USD 1.9 million 12 months

# 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 (2017)
- Consulting on deposit insurance payout system construction for Kazakhstan Deposit Insurance Fund(2018)
- Consulting on deposit insurance payout system construction for Indonesian Deposit Insurance Corporation(2019)
- Consulting on deposit insurance payout system construction for Albanian Deposit Insurance Agency(2020)

### 🛅 Managing Organization



Department of IT Strategy and System Operation of Korea **Deposit Insurance Corporation** 

https://dinf.kdic.or.kr(Kor)

# **Electronic National Tax System** (HomeTax)

HomeTax is a comprehensive national tax service that allows users to conveniently file tax returns, pay taxes, obtain certificates, apply for grants, file simplified yearend settlement reports, request cash receipt and electronic tax invoice issuance, and perform other tasks online anywhere, anytime.

### System Features

#### Search/Issuance Services

The system offers various search/issuance services including simplified year-end tax settlement, electronic tax invoice and cash receipt issuance, and tax information search (tax refunds, etc.)

#### Certificate Services

Users can request issuance of tax certificates, print them out, and send them via fax.

#### **Application/Filing Services**

The system offers internet application services for business registration, worker (children) grants, and the filing of taxation documents.

#### Tax Return/Payment Services

The system allows users to file tax returns and pay taxes online.

#### **Consulting/Reporting Services**

Users can ask questions about tax laws and HomeTax, and report tax evasions, etc.

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



Citizens, sole proprietorships, corporations, and tax agents



**Solution** Estimated Development Cost

N/A N/A

### 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)
- Next-generation Tax Information System (NTIS) obtained ISO/IEC 20000 certification (2017)

#### **Exports**

- Sri Lanka (2010), Mongolia (2011), Rwanda (2016), Laos (2016), Indonesia (2020), etc.
- Exported the tax information system development project (USD 126,40 million)

# Managing Organization

ICT Planning Div, ICT Management Bureau of National Tax Service

https://www.hometax.go.kr (Kor) https://www.nts.go.kr/english/main.do (Eng)

# **Korea Fiscal Management Information 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 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 realtime 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 or function.

# Site Map

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

Central and local governments

# **Estimated Development Period**

28 months USD 1,305 million

# Award/Recognition and Export

UN Public Service Award (2013)

# Managing Organization

Access

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

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.





#### **KOSIS Statistical Information**

The system provides nationally approved statistics prepared by statistics institutions, and international and North Korean statistics from international organizations.

#### Visualized Statistics

The system offers easily accessible visualized statistics utilizing the statistical information provided by KOSIS.

#### **KOSIS Sharing Service (Open API)**

The service provides a standardized interface (API) to use KOSIS information on web or mobile app development.

#### **Chatbot Service**

The chatbot service is a dialogue-type AI service that suggests statistical information for users.



Domestic statistics, international and North Korean statistics, easy statistics, online publications, and civil petition guide, about the service, statistics playground, my statistical tables, website links, etc.



### 键 User

Citizens



### Estimated Development Period



### Estimated Development Cost

48 month

USD 13.3 million

### Award/Recognition and Export

Export to Mongolia (2012), Sri Lanka (2014), Myanmar (2015), Azerbaijan (2018), Laos (2019), and Bolivia(2022)



#### Managing Organization



Statistical Service Planning Division, Deputy Director General for Statistical Service Policy of Statistics Korea

https://kosis.kr (Kor) https://kosis.kr/eng (Eng)

# **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 flexibility and scalability of local tax administration to adjust to the environmental changes.



### 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 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

USD 3.7 million 24 months

# Award/Recognition and Export

N/A

# **Managing Organization**

Tax Collection Division/ Finance Bureau of Seoul Metropolitan Government



https://etax.seoul.go.kr or App (Kor) https://etax.seoul.go.kr/english (Eng)

**Estimated Development Cost** 

# **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.



### 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.

### 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, homepage for statistical surveys, recruitment management, survey form design, survey list design, preliminary examination and data input status design, data processing design, data management, statistics metadata management, link to statistical service



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



### Estimated Development Period



84 months

USD 17.9 million

# Award/Recognition and Export

- Patent acquisition (No. 10-168050, registered on November 22, 2016.)
- Sri Lanka CAPI System Development and Operation Support Project (2016)
- Laos Statistical Data Collection System Development Project (2020)

## Managing Organization



Survey System Management Division, Statistical Service Policy of Statistics Korea

https://www.narastat.kr(Kor)

# **National Property Inspection System**

This is an electronic system for 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 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 Transportation to 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 notices

# 綴 User

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

# Estimated Development Period

**Solution** Estimated Development Cost

15 months USD 0.5 million

N/A

# **Managing Organization**

Government Property Planning Division of Public **Procurement Service** 

https://npis.g2b.go.kr(Kor)

# **Next-Generation Local Government Financial Management System** (Next-Generation 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 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 Self-income other than local taxes management systems in order to improve work speed and accuracy.

### Enhanced transparency of local finance

The system supports computerization and monitoring of major projects, contracts, budget execution and financial data, improving transparency of financial statistics.

### A New Local Subsidy System

A system for preventing overlapping and illegal supply and demand of local subsidies and resolving blind spots for subsidy management

### **Local Government Finance Statistics**

It provides a national and international statistical system by securing the accuracy and timeliness of local fiscal statistics.

Management of budgeting, execution, settlement, etc. of local finances executed by local governments, management of local subsidies, portal of local subsidies, and provision of various local financial statistics



Ministry of the Interior and Safety, local governments (officials in charge of budget compilation, execution and settlement), private subsidiaries, the public

36 months USD 53.5 million

N/A

# 📺 Managing Organization

Local Finance Information Service Division of Ministry of the Interior and Safety

Internal Use Only

# **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.

### 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 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

Central and local governments, public institutions, corporations and citizens

USD 5.4 million 21 months

# 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

https://www.onbid.co.kr(Kor)



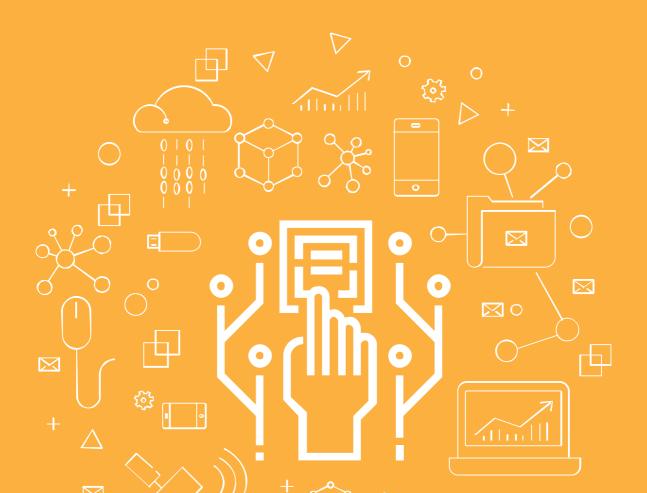


Digital Government ensuring health and happiness of the citizens

# Health / Welfare

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

80 ehaneul system of Funeral service information (ehaneul)
81 Electronic Medical Record (EMR) Systems of National Hospitals
82 Food Safety Information System 83 Medical Aid Information System
84 National Pension Information System
85 Pharmaceutical Integrated Intelligence System
86 Social Security Information System (SSIS)
87 Welfare Information System (Bokjiro)



# ehaneul system of Funeral service information

This is the only government-operated funeral service information system, which manages integrated operation of nationwide crematoria 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.

### Crematoria 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

USD 3.5 million

# Award/Recognition and Export

N/A

# Managing Organization

Division of Senior Support of Ministry of Health and Welfare

https://www.ehaneul.go.kr(Kor) https://m.ehaneul.go.kr(Kor)

# **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.

## Provision of functions for medical practice

The systems contribute to reduced amount 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 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.

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)

USD 7.5 million

# Award/Recognition and Export

N/A

# Managing Organization

Division of Information Management of Ministry of Health and Welfare

Internal Use Only

# **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

# 器 User

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

# Estimated Development Period

Estimated Development Cost

USD 9.3 million 10 months

N/A

# **Managing Organization**

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

https://www.foodsafetykorea.go.kr (Kor)

# **Medical Aid Information System**

This is a Medical Aid portal that operates based on the integrated Medical Aid information accumulated through the DW system, provides Medical Aid information on Eligibility, Follow-up Management, and Case Management to the Ministry of Health and Welfare, local governments, and the National Health Insurance Service and supports streamlined administrative procedures.

### **Eligibility Management**

The system offers a wide range of information - Eligibility of 1.5 million recipients, maintenance costs for healthy life, medical expenses for pregnancy and childbirth, special benefit recipient, etc.

### Follow-up and Case Management

- The system provides information on refund, redemption and approval to extend the benefit period.
- The system offers details and statistics on 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

Eligibility Management, Follow-up Management, Case Management and Statistics of Medical Aid

# 🔯 User

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

# Estimated Development Period

Estimated Development Cost

USD 2.8 million 12 months

# Award/Recognition and Export

N/A

# Managing Organization

Department of Healthcare Financial Support of National Health Internal Use Only Insurance Service

# **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

148.7 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 homepage of National Pension Service.

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

# 殿 User

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

# Estimated Development Period

**S** Estimated Development Cost

USD 26.6 million 24 months

# Award/Recognition and Export

N/A

# 📺 Managing Organization

Access

Ministry of Health and Welfare

https://www.nps.or.kr (Kor) https://www.nps.or.kr/jsppage/english (Eng)

# **Pharmaceutical Integrated Intelligence System**

The Pharmaceutical Integrated Intelligence System is an integrated information system designed to provide the public with accessible and convenient information as well as data-based administrative services by harmonization with the international standards for pharmaceutical safety management and government-wide collaboration.



## Pharmaceutical Safety Nara (for public)

A public service website that offers information on pharmaceutical permissions, safe use, safety notice, and the filing of electronic civil petitions.

### Pharmaceutical Administration Service Portal (for MFDS officials)

An administrative system for drug safety management including clinical trial approval, permit examination, and administrative dispositions.

## Pharmaceutical Information Utilization Portal (relevant institutions and organizations)

A system jointly used by central government agencies, local governments, and subsidiary institutions to achieve full-cycle drug safety management through government-wide cooperation and information sharing.

# 🗃 Site Map

Electronic civil petition/report, pharmaceutical information and public notifications/notices/alarms, safe use information, and public data/information



Public officials related to drug safety/general public/pharmaceutical companies/experts, etc.



Estimated Development Cost

45 months USD 18.3 million

Award/Recognition and Export

N/A



Pharmaceutical Policy Division of Ministry of Food and Drug Safety

https://nedrug.mfds.go.kr (Kor)

# **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 1283 types of beneficiaries' income/property data and service records from 92 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 53 ministries - Public rental housing program of the Ministry of Land, Infrastructure and Transport; national scholarship program of the Ministry of Education; allowances for meritorious persons of the Ministry of Veterans Affairs; and it- aids the fiscal and employment projects of the Ministry of Employment and Labor.

# Site Map

- Haengbok E-eum: 112 welfare services including national basic living security and Basic pension, welfare for infants, disabled, and elderly (89 services including the national basic living security provide benefits in cash (KRW 38T as of 2021).
- · 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

- (Haengbok E-eum) 40,000 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 Cost

24 months USD 150 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

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).



### Welfare service information

The system provides information on welfare services of central government ministries (363), local governments (4,000), and private citizens (300), based on which it offers lifecycle-based notification services and customized welfare information.

### Online application service

Applications for 29 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 increased 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



All citizens of Korea





### **Estimated Development Cost**

10 months

USD 1.3 million



# Award/Recognition and Export

N/A



## Managing Organization



Division of Welfare Information Planning of Ministry of Health and Welfare

https://www.bokjiro.go.kr(Kor)

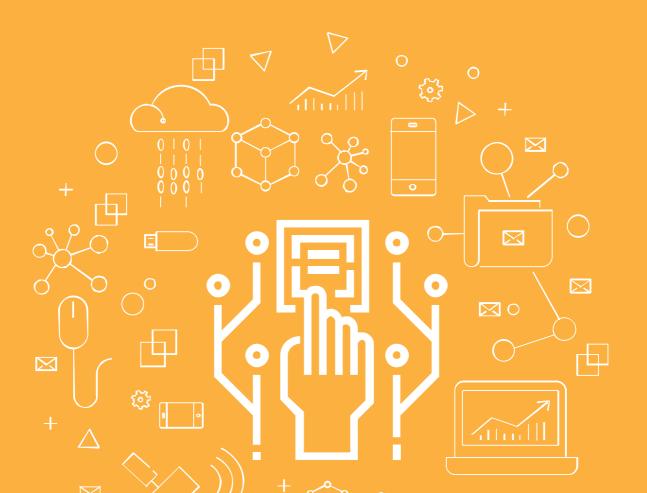


Digital Government serving as the base for educational and cultural development

# **Education / Culture**

The Korean government is actively utilizing the Digital 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 established the foundation for becoming an educational powerhouse. It has also developed systems for integrated management of cultural assets and efficient handling of the related work, further extending its foundation for a cultural powerhouse.

90 Central Archives Management System (CAMS)
91 Digital Administration System on Cultural Heritage
92 Educational Information Sharing System (EDUNET T-CLEAR)
93 Government e-Learning Platform
94 Korean Library Information System (KOLIS)
95 National Education Information System (NEIS)
96 Online Schooling System (Online School)



# **Central Archives Management System** (CAMS)

A system that manages nationally significant archives which need to be preserved in the long-term of the National Archives of Korea, which directs and supervises public records management of Korea.

### Records retention schedule management

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

### Acquisition and registration of archives

The system functions as the acquisition process of records from public records centers and registration of collections.

### Functions for analog records

The system performs management of retrieval/return of records, inventory, RFID creation and management, functions related to records de-oxidation, binding, digitization, objects selection, status management etc.

## **Functions of archives management**

The system's functions include archives description, appraisal, and re-classification of records for disclosure, long-term preservation; management of information packages, and so on.

Acquisition, registration, archives management standards, archives organization, library, preservation, preservation media, media recording, description/re-classification, records and information service, search, etc.

Employees of the National Archives of Korea and Agencies users for records service

# **Estimated Development Period**

**Estimated Development Cost** 

24 months

USD 1.6 million (for basic features)

N/A

# **Managing Organization**

Digital Records Innovation Division of National Archives of Korea

Internal Use Only

# **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.



### **Portal for Collaboration**

The system serves as a channel for processing tasks related to cultural heritages among partner institutions, including application for field excavation permits by constructors, management of discovered artifacts by field excavation/survey institutions, and the tasks performed by the Offices of Cultural Properties Appraisal at airports and ports.

### **Electronic Administration**

- · Personnel at the Cultural Heritage Administration and local governments can use the system to carry out tasks related to cultural heritages.
- The system can be used for online processing of more than ten types of tasks, including the management of information on designated/registered cultural heritages; field excavation and survey of buried heritages; government subsidies for cultural heritage; maintenance and repair; status change; and Cultural Heritage Committee.

### **Administrative Portal**

The system serves as a task portal for CHA personnel, offering various functions including integrated login, sharing of administrative tasks, and communication functions

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



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





# **Solution** Estimated Development Cost

60 months

USD 2.6 million



### Award/Recognition and Export

N/A



## Managing Organization



Cultural Heritage Administration

https://www.e-minwon.go.kr:8443/webs/ main.jsp (Kor)

# **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.

## 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.
- 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 'Nanum Gongan' for communication and information sharing.

# Site Map

Teaching/ research materials, educational curriculums, free-semester scheme, digital textbooks, Cyber Learning System, AI-SW education, research competition, Wedorang (learning community service), teacher training, local educational information service, etc.



Elementary and middle school students, teachers and parents



10 months

# Award/Recognition and Export

- Good Content Service Grand Prize of Ministry of Science and ICT(2019. 12.3)
- 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 Service Division of Korea Education and Research https://www.edunet.net (Kor) Information Service

# **Government e-Learning Platform**

This platform helps public officials pursuing self-development by providing smart e-learning content accessible regardless of time and place. It is a government-wide platform where the education and training organizations of central government ministries, local governments, and public institutions can access learning content and systems at a single site.



### All-In-One Service, Anywhere, Anytime

- Allows users to access learning content via PC and mobile anywhere all-year-round.
- Search, access, and complete all e-learning courses offered by central/local education/training organizations in one-stop.

### **Learning Services Tailored to Learners**

- Curation feature: selects/suggests monthly based content across different themes, and provides information on popular courses
- · Offers a virtual assistant for personal learning to facilitate participation in online learning (new course alarm, learning motivation, etc.)

### Flexible and Scalable Government-Wide Learning Platform

Offers features that allow education and training organizations (154 organizations) of central government ministries, local governments, and public institutions to use various systems and content

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

# 器 User

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

36 months USD 4.5 million

N/A

# **Managing Organization**

Smart Learning and R&D Division of National Human Resources **Development Institute** 

https://e-learning.nhi.go.kr (Kor)

# **Korean Library Information System** (KOLIS)

This information system supports the management of various materials and various library tasks at the National Library of Korea. First developed as a C/S based system in 1999, KOLIS was redeveloped into a web-based system in 2015.

It was revamped into a user-centered system in October 2016, and remodeled into a cloud-based integrative data management system with new online (digital) material management functions (collection, registration, organization, and preservation). The remodeled system went into operation in May 2022.



### 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)

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 homepage (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, Preservation, ISBN/ISSN Management, Present Condition and System Management.



Person in charge of National Library of Korea



**Solution** Estimated Development Cost

14 months USD 1.06 million

N/A

# 🛅 Managing Organization

Digital Initiatives Division of National Library of Korea

https://www.nl.go.kr(Kor) https://www.nl.go.kr/EN (Eng)

# **National Education Information System** (NEIS)

This is a major information system for educational administration in the Ministry of Education, 17 educational offices, and 12,000 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.

- 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 only the authorized can use the service.

- 154 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
- 18 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

**Solution** Estimated Development Cost

24 months USD 83.3 million

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

# Managing Organization

Access

Education Administration Division of Korea Education and Research Information Service

https://www.neis.go.kr (Kor)

# 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 38 middle school subjects and 67 high school subjects.

## Student's learning status monitored by many stakeholders

The system allows many stakeholders-a school teacher, subject tutor helping the student with studies, 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.



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



### 翼 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

USD 0.41 million



## Award/Recognition and Export

N/A

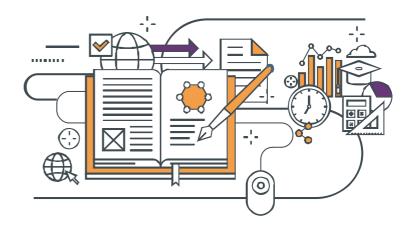


## **Managing Organization**



Future Education Research Division of Korea Educational Development Institute

https://onlineschool.or.kr (Kor)





Digital Government supporting growth of businesses

# Industry / Procurement / Employment

Korea has built the cutting-edge informatization systems for each industry and achieved the Digital Government that supports businesses. Digital Government systems are applied to all areas of business activities, including procurement, patent administration, employment and customs clearance, contributing to reduced administrative burden on businesses and cost-saving and further leading to improved business competitiveness.

100 Business Information System for SMEs (Bizinfo)

101 Electronic Customs Clearance System (UNI-PASS) 102 Employment Information Platform (Work-Net)

103 Government e-Shopping Mall 104 G4B Government For Business

 $105 \ {\it Intellectual/Industrial Property Office Automation System (KIPOnet)}$ 

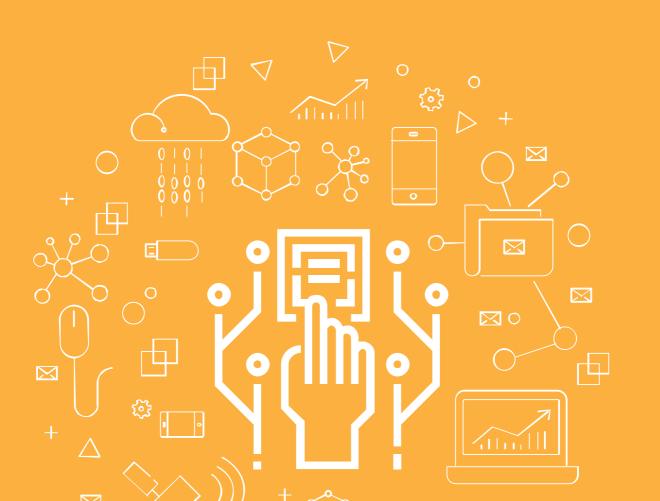
106 Korea e-Catalog Information System

107 Korea Intellectual Property Rights Information Service (KIPRIS)

108 Korea ON-line E-Procurement System (KONEPS) 109 Procurement Procedure Management System

110 RFID-based Public Goods Management System 111 SMEs Integrated Management System

112 Subcontracting Management System for Procurement



# **Business Information System for SMEs** (Bizinfo)

Bizinfo is a government-wide policy portal offering comprehensive and integrated information on various policies implemented by central government agencies, local governments, and public institutions.

\* Legal basis: Article 79, subparagraph 2, Small and Medium Enterprises **Promotion Act** 



# System Features

### **Policy Delivery System**

The system collects various information on SME policies from various institutions and delivers them via various media including websites, email, apps, and quizzes.

### **Policy Information**

Public notice of support programs, systems, policy news, and legislative and administrative notices/public notifications

### Other Services

Training/seminar/exhibitions, public notices for recruitment of resident companies, video conference rooms, document forms for businesses

### **Open Data**

The ministry is expanding its delivery channels for policy information in collaboration with the private sector (startups and banks) and public institutions.

# Site Map

Support program notices, training/seminar/exhibitions, policy news

# 殿 User

SMEs/small businesses/personnel in charge of support programs

12 months USD 4.1 million

# Award/Recognition and Export

N/A

# Managing Organization

Access

Korea SMEs & Startup Institute of Ministry of SMEs and Startups

https://www.bizinfo.go.kr (Kor)

# **Electronic Customs Clearance System** (UNI-PASS)

This system automates all customs procedures like 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
- Others: User support regarding e-payment, distribution history reporting, e-commerce reporting, AEO and more



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



18 months



## **Estimated Development Cost**

USD 2.5 ~ 12.5 million



### Award/Recognition and Export

## Award/Recognition

- Rated No. 1 in customs office satisfaction survey by Airports Council International (ACI) for 11 consecutive years
- Ranked as a model case in the World Bank's Doing Business index (2009~2012)
- Received the World Customs Organization (WCO) Innovation Award for the Ecuador system (2013)
- Ranked 1st in implementation of the UN Treaty for Digital Trade Facilitation (2019)
- Unipass obtained International Organization for Standardization certification (ISO 20000) for 16 consecutive years (2021)

### **Export**

- USD 264.58 million export to 16 countries (Tanzania, Uzbekistan, Cameroon, Ethiopia, etc.) between 2005 and 2002
- [Africa] Tanzania ('11~'12), Cameroon ('15), Ethiopia ('17,'19), Ghana ('18, '21~'22), Algeria ('18), Madagascar ('22)
- [Asia] Kazakhstan ('05), Kyrgyzstan ('08), Mongolia ('09), Nepal ('11), Uzbekistan ('14), Tajikistan ('19)
- [Latin America] Dominican Republic ('08), Guatemala ('09.'22), Ecuador ('10~'11), Paraguay ('20)



## **Managing Organization**



ICT and Data Planning Division of Korea Customs Service

https://unipass.customs.go.kr (Kor) https://www.unipass.or.kr (Eng)

# **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.

### Interconnection to job information network of public and private sectors

Interconnected to 23 public and private job search website, 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 one stop shop.

## Customized job information search

The platform enables customized job search by location, salary, working condition etc.

### Vocational aptitude and psychological tests

The platform provides a total of 19 types of tests for youths (7) and adults (12), 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, quide 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

Job information, job calendar, AI job suggestion, youth-friendly small giant enterprises, All About Jobs (job trend information, job-finding guide, etc.) vocational aptitude and psychological tests, occupation information, employment welfare policies, government/public sector job information, HR information

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

13 months for initial development and annual upgrade

USD 3.4 million(equipment cost excluded)

# Award/Recognition and Export

N/A

# Managing Organization

Work-Net Team of Korea Employment Information Service



https://www.work.go.kr (Kor)

# **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 purchase.

This system aims to support 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

- 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.)
- Themed malls by product category (remicon, asphalt concrete, PC, furniture, etc.)
- Provision of various certified sections for technology development products and green, eco-friendly products

# 巖 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

USD 1.4 million 12 months

# Award/Recognition and Export

N/A

# Managing Organization

E-Procurement Management Division of Public Procurement Service

https://shopping.g2b.go.kr (Kor)

# **G4B Government For Business**

An information system that handles complaints about corporate support online in one place



# System Features

# Corporate information change service

This is a service that can collectively process notifications to administrative agencies that are required when changing company information (name, address, etc.).

## Application/Inquiry/Issuance Service

Online work request and document issuance service for various reports issued by companies

# Site Map

- Business Information Update: The system updates the business information as requested by enterprises (trade name, location, vehicle registration information, etc.)
- Application/Search/Issuance: The system offers security measures for test reports as requested by the issuing institutions (prevention of forgery/falsification)
- Issuing Institution Search Users can search for information on issuing institutions that utilize G4B

# 🔯 User

Public institutions, general companies, etc.

# Estimated Development Period

Estimated Development Cost

30 months USD 19.1 million

# Award/Recognition and Export

N/A

### 

Korea SMEs & Startup Institute of Ministry of SMEs and Startups http://www.g4b.go.kr (Kor)

# 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.



### **E-Application service**

The system supports 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.

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



Central government and citizens

ស៊ី Estimated Development Cost

36 months USD 15.08 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

https://www.patent.go.kr (Kor)

# **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 nation-wide 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

# 🔯 Use

Government, Public Procurement Service, supplier companies

# Estimated Development Period

Estimated Development Cost

12 months USD 1.16 million

# Award/Recognition and Export

N/A

# Managing Organization

Access

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

https://www.g2b.go.kr:8053 (Kor)

# **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.



## Information search on intellectual property rights

The system provides 120 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 user guide.

### Mobile service

Search service is offered also on mobile for user convenience.

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 SCIENCE ON), administrative history, etc.



Citizens



24 months

USD 3.7 million (equipment purchase cost excluded)

iEco Award for service innovation (2012)

## Managing Organization

Information Management Division of Korean Intellectual **Property Office** 



http://www.kipris.or.kr (Kor)

# Korea ON-line E-Procurement System (KONEPS)

This is a comprehensive online system that performs 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 227 credit rating institutions, surety insurance companies and more, to reduce the burden on businesses having to pay visits 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



Central government, local governments, public institutions and supplier companies





USD 8.3 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 reports on M-Government (2011)

Export to 7 countries: Vietnam (2008), Costa Rica (2009), Mongolia (2010), Tunisia (2011), Cameroon (2013), Jordan (2015), and Rwanda (2015)



#### Managing Organization



E-Procurement Planning Division of Public Procurement Service

https://www.g2b.go.kr (Kor)

# **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.



#### 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

Central and local governments, supplier companies, evaluators and citizens

23 months USD 5.4 million

Award/Recognition and Export

N/A

## Managing Organization

Access

ICT Contract Division of Public Procurement Service

https://rfp.g2b.go.kr (Kor)

# 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

## **Stimated Development Cost**

USD 2.8 million (cost for tag attachment and printer purchase excluded)

#### Award/Recognition and Export

N/A

#### Managing Organization

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



https://rfid.g2b.go.kr (Kor)

## **SMEs Integrated Management System**

The ministry offers the SMEs Integrated Management System (www.sims.go.kr) for integrated management of information on SME support programs and support history at central government ministries and local governments.

#### System Features

The system collects, integrates, and manages information on SME support programs at the central and local governments and the history and status of those programs, so as to analyze the outcomes of support programs, provide tailored policy information, prevent redundant support to certain enterprises, and prevent overlap of new or revised programs.

- Eligible programs: Programs mainly designed for SME support or programs where SME support takes up 30% or more of the program budget.
- The system has managed around 1,900 SME support programs, around 4.13 million enterprise information, and 18.7 million support history data (between 2010 and July 2022).

#### Key Services (content)

- (Support Program Information) Information on SME support programs across 21 central government ministries and 17 metropolitan local governments (program details, budget, eligibility, etc.)
- (Enterprise Information) Collects and manages additional enterprise information (standard industry classification, key products, etc.) from private credit rating firms (KED and NICE), as well as administrative data that can be integrated with the National Tax Service data on the enterprises selected as beneficiaries of support programs.
- (Support Program Outcomes and Statistics) Provides statistical information (business types, areas, years in business, etc.) based on the collected support history and enterprise information for use in research projects and analysis

## 🗃 🛚 Site Map

- Support History: Users can search for support history information based on program title, ministry (institution) in charge, area, and enterprises.
- Statistical Information: The system analyzes growth in revenues, employment, and export, etc. by year, business area, and enterprise.
- Enterprise Information: Users can search for information on the status of enterprises benefiting from support programs (common information, management performance, support history, certification status, etc.).

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

24 months USD 12.5 million

N/A

## Managing Organization

Korea SMEs & Startup Institute of Ministry of SMEs and Startups

## **Subcontracting Management System** for Procurement

The Subcontracting Management System is aimed to ensure effective subcontracting management and control unfair subcontracting practices.

This system allows principal contractors to handle the entire subcontracting procedures online, including conclusion of contracts and payment of subcontract consideration, materials/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.

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



Public institutions, principal contractors, subcontractors





#### **S** Estimated Development Cost

9 months

USD 0.7 million



#### Award/Recognition and Export

N/A



#### Managing Organization



E-Procurement Planning Division of Public Procurement Service https://hado.g2b.go.kr (Kor)



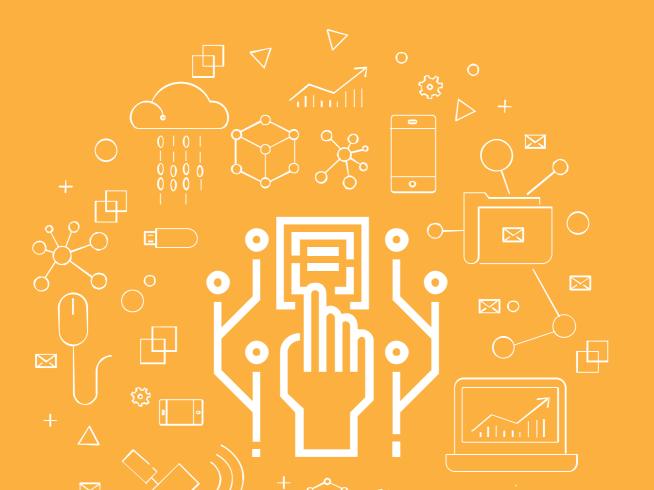


Digital Government protecting safety and lives of citizens

# **Safety / Environment**

Protecting the safety and lives of citizens is the most valuable virtue 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 prevention of and prompt response to disasters like forest fire, earthquake, and landslide.

116 Digital Mayor's Office 117 Disaster Scene Image Transfer and Monitoring System
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# **Digital Mayor's Office**

This system integrates and visualizes, on a real-time basis, 90 million pieces of data in 300 systems (on open data, transport operations and information and integrated safety management) handled by the Seoul Metropolitan Government, as well as the information of more than 50,000 CCTVs.



#### 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, executives) 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 May 2019, information on key policies and projects will be shared with the citizens in real-time, which will enhance responsibility and transparency of the city government administration.

## Site Map

- Information on city safety (fire, disaster, and accident), traffic conditions, air and water quality, and prices
- Real-time public opinions (through civil petitions and government news, Internet reaction)
- 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, General Manager, Head Manager, Director, Employees, Citizens

## Estimated Development Period

**Solution** Estimated Development Cost

9 months USD 0.4 million

## Award/Recognition and Export

- MOU on Cooperation for the Export of Digital Mayor's Office to Tashkent, Uzbekistan (2017)
- Named Excellent Administrative Service at the 5th Smart City Asia-Pacific Award hosted by IDC (2019)
- Received 'Excellent' rating for the operation of the digital mayor's office in Seoul at CES 2020 (2020)

## Managing Organization

Access

Big Data Division of Seoul Metropolitan Government

http://scpm.seoul.go.kr (Kor)

# **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.

#### 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 fire engine or helicopter dispatch to arrival to the scene are monitored at the central situation center.
- Images of 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 826 fire engines, 19 helicopters and 179 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.

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

## 器 User

Central and local fire officers

Estimated Development Cost

16 months 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



Shared vision from Remote Cameras in Central Situation Center

# **Earthquake Early Warning System**

A system that quickly analyzes earthquakes by using only P-waves when an earthquake occurs and promptly informs the public about the occurrence of an earthquake before the damage-causing S-wave arrives.

(P wave propagates about 1.73 times faster than S wave)

#### System Features

#### Earthquake data collection and earthquake monitoring

Real-time data collection and earthquake monitoring from 360 seismic stations of the Korea Meteorological Administration and related organizations

#### **Automatic analysis**

Through automatic analysis using the multi-analysis EEW system, rapid information(EEW, Early information) according to the magnitude of the earthquake is released at the level of 5 to 10 seconds after the initial observation

#### Earthquake information dissemination

Provides information through various media such as Cell Broadcasting Service, TV subtitles, portal sites, social networks, YouTube, and the KMA Weather Alert app, and provides rapid earthquake information through direct connection between systems.

## Site Map

Seismic stations, Earthquake monitoring, Earthquake analysis, Earthquake Early Warning, Early information, Earthquake dissemination, Cell Broadcasting Service

## 🔯 User

Central and local governments, Educational Institutions, Disaster Management Responsible Organizations, citizens

#### Estimated Development Period

**Stimated Development Cost** 

180 months USD 33.3 million

## Award/Recognition and Export

N/A

## Managing Organization

Access

Earthquake and Volcano Technology Team, Earthquake and Volcano Bureau of Korea Meteorological Administration

# **Forest Diseases and Pests Management System**

This is a system for 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.

#### 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.

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

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

12 months USD 0.8 million

## Award/Recognition and Export

N/A

#### Managing Organization

Forest Health Protection Division, Forest Protection Bureau of Korea Forest Service

# **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

Estimated Development Cost

24 months USD 0.8 million

## Award/Recognition and Export

N/A

## Managing Organization

Access

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

# **Forest Fire Command Control System**

This is a system for 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.

#### 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 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 fires using satellite information.

#### Recovery

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



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



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





12 months

USD 1.6 million



N/A



#### Managing Organization



Forest Fire Prevention and Control Division, Forest Protection Bureau of Korea Forest Service

# **Forest Projects on-site Support System**

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

#### 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 work.

#### 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

Estimated Development Cost

24 months USD 0.5 million

## Award/Recognition and Export

N/A

#### Managing Organization

Access

ICT Management and Statistics Division of Korea Forest Service

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

## **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.



#### 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.



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



Korea Forest Service and its affiliated agencies

**Estimated Development Cost** 

USD 2.08 million 36 months

N/A

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

# **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 citizens can cope with disasters or safety issues in their daily lives.



#### System Features

#### Thematic map service on 6 safety areas

The system integrates information on potential risks in daily lives of citizens into 8 areas (disaster, security, transport, public health, life, and facility), 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, 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

#### Site Map

Thematic map service (safety), risk prevention information, regional safety indexes for local governments, daily safety statistics



Citizens

## Estimated Development Period

60 months (2013~2017)

Estimated Development Cos

USD 7.06 million

#### Award/Recognition and Export

N/A

## Managing Organization

Disaster Prevention and Safety Division of Ministry of the Interior and Safety



https://www.safemap.go.kr (Kor)

# **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 response.
- 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. (More than 830,000 cases per year as of 2021)

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



22 months

Citizens and fire officers





👸 Estimated Development Cost

USD 3.6 million

- 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



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

# **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 landslide occurrences, definition of landslides, etc.

#### Mobile service

The mobile landslide information app provides landslide prediction information and real-time alert 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

Estimated Development Cost

12 months USD 1.08 million

## Award/Recognition and Export

N/A

## Managing Organization

Access

Erosion Control Division, Forest Protection Bureau of Korea Forest Service

https://sansatai.forest.go.kr (Kor)

# **National Forest Management Information System**

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

#### 🗷 System Features

#### Management planning and real-time monitoring support

- The system supports 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

## **疆 User**

Korea Forest Service and its affiliated agencies

## Estimated Development Period

🚮 Estimated Development Cost

USD 1.2 million 24 months

## Award/Recognition and Export

N/A

## Managing Organization

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

## Safe-Net

# (PS-LTE, Publiac Sfety-Long Term Evolution)

As the world's first network to apply public safety LTE (PS-LTE) technology, Safe-Net is a unified nationwide wireless system dedicated for use by police, firefighters and coast guard personnel in major disasters.

#### System Features

#### The world's first disaster response communications network based on 4G technology

Unlike commercial networks, this one enables the use of services specific to disaster responses, including Mission-Critical Push-To-Talk (MCPTT) as well as evolved Multimedia Broadcast Multicast Service (eMBMS) to ease phone network congestion.

#### Decentralization of the operation center

Three separate operation centers located in Seoul, Daegu, and Jeju ensure seamless network operation even during shutdowns or critical equipment failure.

#### Introduction of base station RAN (Radio Access Network)-sharing

Its expanded coverage and secure interoperability are achieved with integrated public networks that use shared frequencies in the 700MHz band, such as maritime and rail networks. Commercial networks (KT, SKT) are available for backup.

#### Compliance with international standards and future scalability

Built-in compliance with international telecommunication standards (3GPP Release 13), the network applies ALL-IPv6, with a basis prepared for future upgrades (3GPP Release 14-15), including Internet of Things (IoT).

## Site Map

Safety-net Introduction, support of the policy, support of the technology, guide, holding facilities and equipment etc.

## 🔀 User

Disaster-Safety related agencies (Police, Firefighters, Local government, Coast guard, Military, Medical Institutions, Electric and Gas related agencies etc.)

## Estimated Development Period

**Estimated Development Cost** 

5years (2015 ~ 2020) USD 319.8 million

## Award/Recognition and Export

N/A

## Managing Organization

Access

Public Safety LTE Maintenance Division of Ministry of the Interior and Safety

https://www.safenet.go.kr (Kor)

# Safety e-Report

Safety e-Report is a platform for safety reports, where citizens report risk factors around them using the app, and the central government ministries, local governments, and public institutions address them (launched on September 30, 2014).



#### System Features

#### Safety Report Platform

The system serves as the integrated portal for all safety reports to central government ministries and public institutions.

- \* Vehicle safety standards, construction/demolition sites, ocean wastes, illegal parking, COVID-19, nuisance report, etc.
- The system also offers self-safety diagnosis features, emergency response information, and safety news.

#### Simple Reporting Process

Safety reports are voluntarily filed by citizens for the public interest of preventing safety accidents and promoting safe living environments. Therefore, anyone can file a report without leaving any personal information except for the mobile number.

\*\* Go to Safety e-Report app or portal - Attach photos (up to four/50MB) or videos (up to 120MB) - Specify the location -Enter description - Submit

#### **Inclusive Safety Practices**

The platform offers inclusive services for senior citizens, people with disabilities, and foreigners so that anyone can file safety reports, including magnifying glass feature, voice input, text reader, and English services.

#### One-Stop Processing

Once a safety report is filed, it is shared with e-People and other civil petition systems to provide the reporting citizen with the progress and answers to the report. If processing is delayed, an on-site inspection is conducted on the relevant institutions for corrective measures and continued follow-up management.

#### **Big Data Analysis**

The platform monitors, manages, and analyzes report processing, statistics, and report trends in real time and share the results with the relevant institutions.



#### Site Map

Safety report, self-safety diagnosis, emergency response guidance, safety information, About Safety e-Report, customer center, etc.



(Report) Citizens / (Processing) central government agencies, local governments, and public institutions





#### Estimated Development Cost

4 months

USD 0.64 million



N/A



#### Managing Organization



Safety Improvements Division of Ministry of the Interior and Safety

http://www.safetyreport.go.kr (Kor) http://www.safetyreport.go.kr/eng (Eng)

# **Waste Treatment Management System** (Allbaro)

This is an IT-based, comprehensive waste management system that transparently manages 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.

#### 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, 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 export/import, waste statistics, customer support (manual/ Q&A/ reference), My Allbaro (membership sign-up, log in), etc.

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

#### **Estimated Development Period**

**Estimated Development Cost** USD 1.9 million

24 months

(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

https://www.allbaro.or.kr (Kor)



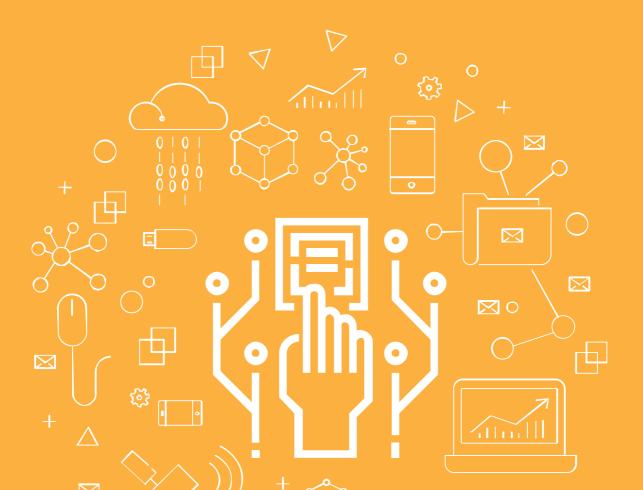


Digital Government contributing to information diffusion and sharing

# **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 gap between urban and rural areas, while expanding the information infrastructure for radio wave management, digitization of mail distribution and data sharing.

134 Information Network Village (Invil)
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136 Postal Logistics Information System (PostNet)
137 Radio Wave Management and Control System



# **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.



#### Income increase

The system allows 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

#### 殿 User

Citizens

#### Estimated Development Period

**Estimated Development Cost** 

24 months USD 5.8 million

#### Award/Recognition and Export

**UN Public Service Award** 

## Managing Organization

Access

Local Community Division of Ministry of the Interior and Safety

https://www.invil.org (Kor) (invil.com, tour.invil.com)

# 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, find postal codes and other inquiries.

#### Postal service on smartphone

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

#### 🗟 Site Map

- Postal service: e-Green posts, cards for congratulations, 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.

ePOST members: approximately 2.74 million

10 months

USD 5.7 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



https://www.epost.go.kr (Kor) https://www.epost.go.kr/main/eng/Enpost\_ Introduction1.html (Eng)

# **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 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 notification and result 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.

## **Salution** User

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

## Estimated Development Period

10 months

## **Estimated Development Cos**

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

#### Award/Recognition and Export

- 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



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

# 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.

#### 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 station's authorization database and comparing the result of radio spectrum measurement against the authorization band data.

#### 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.

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

Public officials in charge of spectrum monitoring

**Estimated Development Cost** 

USD 0.5 million 6 months

## Award/Recognition and Export

Export to Lao PDR (2011), Mongolia (2013), Philippines (2014, ODA)

## Managing Organization

Radio Planning Division of Central Radio Management Service

On-Site Inspection with Specialized Vehicle

# acknowledged worldwide

## Korea's 100 Digital Government Services

42, Doum 6-ro, Sejong-si, Republic of Korea