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The Nexus Between Civil Registration and Social Protection Systems: **Five Country Practices**



SOUTH KOREA



Prepared by Hee Joon Song



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Resident Registration System for Social Protection in South Korea

Hee Joon Song



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4.1 Introduction

Civil registration and vital statistics (CRVS) systems play a critical role in ensuring individual rights as well as access to justice and social services. By law, these systems provide a universal, ongoing, permanent, and mandatory recording of a person's vital events. Using a comprehensive and efficient resident registration system, South Korea reached universal birth registration several decades ago. This tool makes possible universal coverage that leaves no one behind.

Korea's CRVS systems are made up of three elements:

- Family Relationship Registration;
- Resident Registration (RR); and
- Population Change Survey.

The Family Relationship Registration system confirms family links between individuals. It refers to activities to verify and record vital events such as birth, death, marriage, divorce, and adoption.

The *Resident Registration Act* and Population Change Survey Regulation under the *Statistics Act* were legislated in 1962.

- RR is a national identification system that aims to confirm people's residential status and the migration of the population by registering residents living in a certain place for more than a month.
- The Population Change Survey Regulation is the main instrument for compiling monthly changes of the population. After the Korean War ended in 1953, South Korea faced an urgent policy need to control social instability caused by threats and infiltrations by North Korea. Also, the government needed to manage the mass migration of the labour force: the launch of the consecutive Five-Year Economic Development Plans meant workers were moving from rural agricultural areas to urban industrial areas.

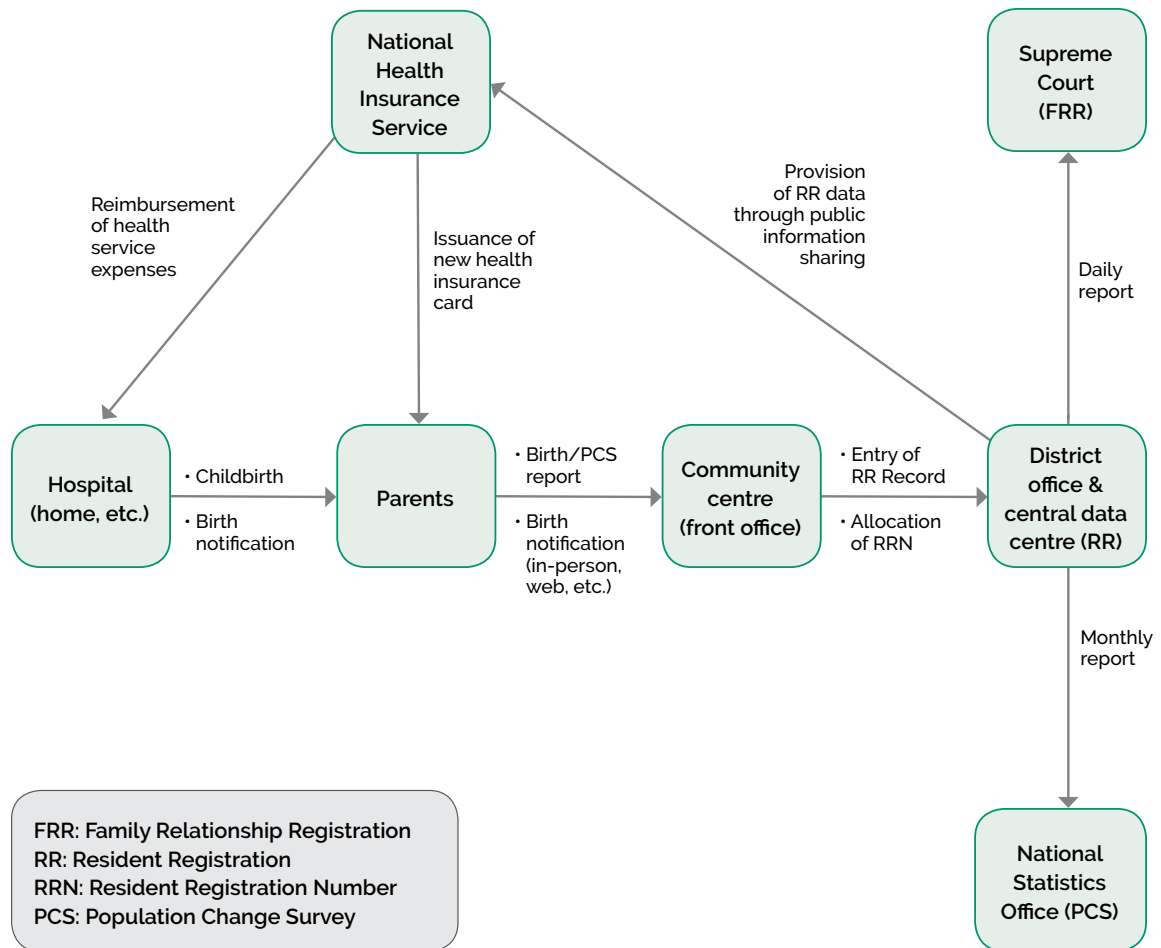
The Population Change Survey is a national statistics survey. Every month, it collects data on births, deaths, marriages, and divorces from the Family Relationship Registration system, where citizens must report individual changes.

Since they began, the CRVS systems have kept evolving through institutional and technological transformations. These CRVS systems are managed by three authorities. They are subject to different laws, but their operations are closely interrelated. Information on vital events is shared in real time through exclusive government networks. Figure 4.1 shows the birth registration process, which

- creates information on Family Relationship Registration, Resident Registration, and the Population Change Survey at the same community service centre of the local government;
- delivers medical services to a mother and her newborn infant; and
- has the medical expenses of the healthcare institution reimbursed by the National Health Insurance Service.

Figure 4.1:
Birth
registration
process.

Source: Revised
figure from the
World Bank et al.
2016, p. 8.



Parents must register their child within 30 days of the birth with a certificate of live birth, or birth notification, issued by a doctor at the community service centre for the birth address (the parents' current address). When a birth report is entered into the Family Relationship Registration system, the infant receives a unique and permanent Resident Registration Number (RRN) and is recorded as a household member of the parents in the regional Family Relationship Registration and RR databases. The information is transmitted through the exclusive government networks and backed up in the national databases of the Supreme Court, the Ministry of the Interior and Safety, and the National Statistics Office. The Ministry runs GOV24 (upgraded from Minwon24), a nationwide web portal for integrated civil services related to RR information. Other vital events, like death, marriage, and divorce, are processed in similar ways. Once the RRN is allocated to a person, it serves as the person's unique identification number for life.

The government operates the registration system for aliens who intend to stay for more than 90 days from the date of entry, based on the *Immigration Act*. The Regional Immigration Service issues an Alien Registration Certificate with a 13-digit Alien Registration Number to the alien who files for registration. The Alien Registration Service is processed through the integrated e-Government service.¹ An alien with granted status of stay as an employed person is eligible for the National Health Insurance Service and other social programs, using his or her Alien Registration Certificate and Number.

4.2 Identification for social protection

4.2.1 Changing the purposes of the Resident Registration system

Since 1962, the primary purpose of the Resident Registration (RR) system has shifted flexibly to meet policy needs. The original purpose of the RR system in the 1960s was to control social security and monitor the migration of rural and agricultural populations to urban and industrial areas.

In the 1980s, the main function of the RR system changed: the goal was now to efficiently manage the RR affairs that were fundamental to other administrative tasks. In 1987, the government started national priority databases like RR, real estate, automobile, and finance to streamline and automate the administrative processes. For example, developing national databases made it possible to enforce transactions of commercial banks with customers under their real names and register real estate under an actual titleholder's name. This helps to prevent financial crimes and enhance administrative transparency.

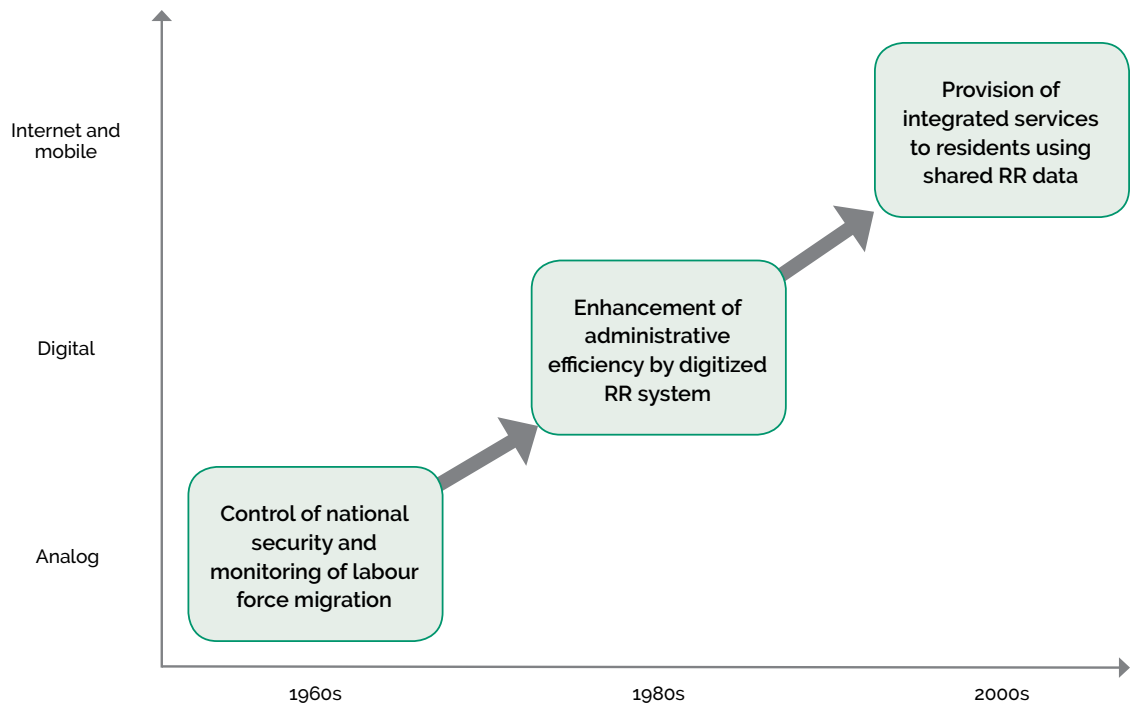
In the 2000s, the government became able to provide personalized services to residents at any time, in any place, through e-Government systems. The RR information linked to social welfare programs is essential when it comes to quickly identifying needy residents in welfare blind spots and delivering the proper services to them. The purpose of the *Resident Registration Act* (Article 1) changed from "to manage administrative affairs properly and simply" in 1968 to "to promote convenience in the lives of residents and to properly manage administrative affairs" in 1997.

Figure 4.2 shows the changes in the RR system's policy purposes. The primary goal has shifted from controlling national security and monitoring the rural labour force's migration in the 1960s to making government administration more efficient through building key national databases in the 1980s. When the government began to develop nationwide eGovernment systems in the 2000s, the RR information became the prime object of sharing among institutions so they could provide Internet-based integrated services. The RR system is now a primary tool for providing various social welfare services to citizens in a seamless way.

1 Hi Korea. E-Government for foreigners. hikorea.go.kr

Figure 4.2:
Changing
purposes of
the Resident
Registration
system.

Source: Author



4.2.2 Life-cycle protection from cradle to grave

Once a new birth is registered and the person is given a Resident Registration Number (RRN) in the Resident Register, he or she receives various public services using RR information throughout the life cycle, from childhood to the senior years. Local government pays a number of childbirth subsidies and childcare benefits. The GOV24 system provides people with convenient access to one-stop services for all births. Here are a few examples of administrative activities and public services linked to the RR system:

- Newborns: RRN, birth subsidies, and benefits;
- Children: Vaccination notices for infants, childcare fees support, notice of elementary school enrollment (age 7);
- Teenagers: Notice of middle and high school enrollment (age 13), National ID card (over age 17);
- Youth: Permission to vote in elections (over age 19), opening of bank accounts and mobile phone subscription, transmission of high school records to colleges;
- Adults: Employment (health insurance, pension, employment insurance, etc.), notification of taxes owed, house leasing for the poor; and
- Seniors: Payment of national pension, medical care service, free transit pass.

Parents with preschool-aged children receive notices about these services from the local government that has jurisdiction over their RR data. Parents of school-aged children (primary

and secondary school) receive these notices from the local education office. Adults (ages 20 and up) receive them from the local government.

Life-cycle services end when

- a death is registered to the Family Relationship Registration system of the relevant community centre; or
- a cohabiter or caretaker reports the death within a month after learning of it, using a doctor's death notification or a post-mortem examination certificate.

The local government must make the relevant addition, correction, and deletion on the RR records after receiving a report of a resident's death via the Family Relationship Registration system. The information on the death is sent online to all agencies in charge of inheritance, social insurance, commercial transactions, and so on.

4.2.3 Education

Under the compulsory education system of elementary and middle schools, the local government sends elementary school entrance data in the region to the National Education Information System (NEIS) of the Local Education Office. It also sends admission notifications to parents with children at the age of 7 by mail and other communication channels. Figure 4.3 shows the role of students' RRNs in the processes of elementary and middle school education through the NEIS. The RR information is needed for college students to apply for grants, scholarships, and loan programs that the government runs.

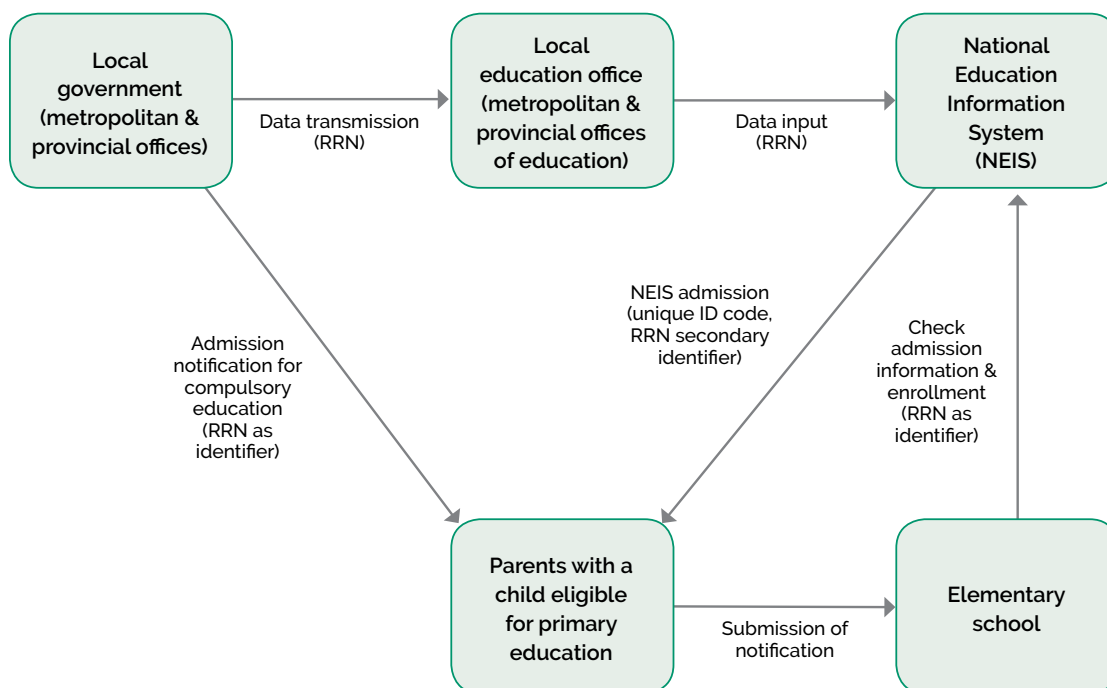


Figure 4.3: The RRN system and elementary and middle school education.

Source: Author

Parents must submit the admission notification they get from the local government to the school their child will enter. The school checks admission and enrollment information that is stored in the NEIS. The child's RRN is a digital identifier for all activities and processes related to the NEIS. Parents can access the home page of the NEIS and ask for information on their children. The NEIS provides information on physical education, school meals and nutrition, medical checkups, and vaccination to parents. It also provides academic grades and records of high school students to universities that need to screen their admission.

4.2.4 Social security services

The Korean government has three kinds of social security services, including four types of social insurance, public assistance, and other social security programs. With the rapid economic growth since the 1960s, the central and local governments have introduced various welfare programs (Table 4.1).

Table 4.1:
Korea's
social security
system.

Source: National
Health Insurance
Service.²

Category	System
Social insurance	<ul style="list-style-type: none"> • Health insurance, long-term care insurance for the elderly • National pension • Unemployment insurance • Industrial accident compensation insurance
Public assistance	<ul style="list-style-type: none"> • Basic living security system • Medical benefit
Social security	<ul style="list-style-type: none"> • Welfare of the aged • Welfare of the disabled • Child and female welfare • Medical, psycho-social assistance

Every citizen who works no less than 15 hours a week at a workplace with more than one employee is required to register for four compulsory kinds of social insurance to get

- medical treatment from the National Health Insurance Service;
- income after retirement from the National Pension Service;
- medical treatment and income for workers who have had industrial accidents; and
- post-layoff re-employment opportunities from the Korea Workers' Compensation and Welfare Service.

An employee is insured as of the first day of work. The employer must report the worker's employment information to the relevant institutions through information systems within 14 days.

² nhis.or.kr/static/html/wbd/g/a/wbdga0301.html

The National Pension Service is a social insurance program that guarantees a stable lifetime source of income for seniors and retirees when they reach the eligible age. (They must have fulfilled their 10-year contribution payment after enrolling in the National Pension Service between the ages of 18 and 60.) Industrial Accident Compensation Insurance compensates for a worker's industrial accident and promotes his or her rehabilitation and return to society. Under this program, persons who are unable to work due to an industrial accident or disease are eligible for government assistance for as long as they need it. To prevent unemployment and facilitate employment, the government provides Employment Insurance that increases the worker's vocational skills development, strengthens occupational guidance, stabilizes his or her life, and promotes job seeking by providing the benefits unemployed workers need.

The four compulsory social insurance systems have a single portal: Social Insurance Information System. It shares information resources among systems operated by three social security organizations – National Health Insurance Service, National Pension Service, and Korea Workers' Compensation and Welfare Service – and improves social security services for customers.³ Services that the Social Insurance Information System provides include

- electronic submission of an application or claim form;
- registration query on the common web portal;
- one-stop receipt of common online forms a worker uses to declare they are entitled to benefits; and
- information sharing through the database systems that are commonly used in the four insurance systems.

The RRNs of people who are insured offer key data for the four social insurance services. The services share common information and process the customers' business.

4.2.5 Health insurance

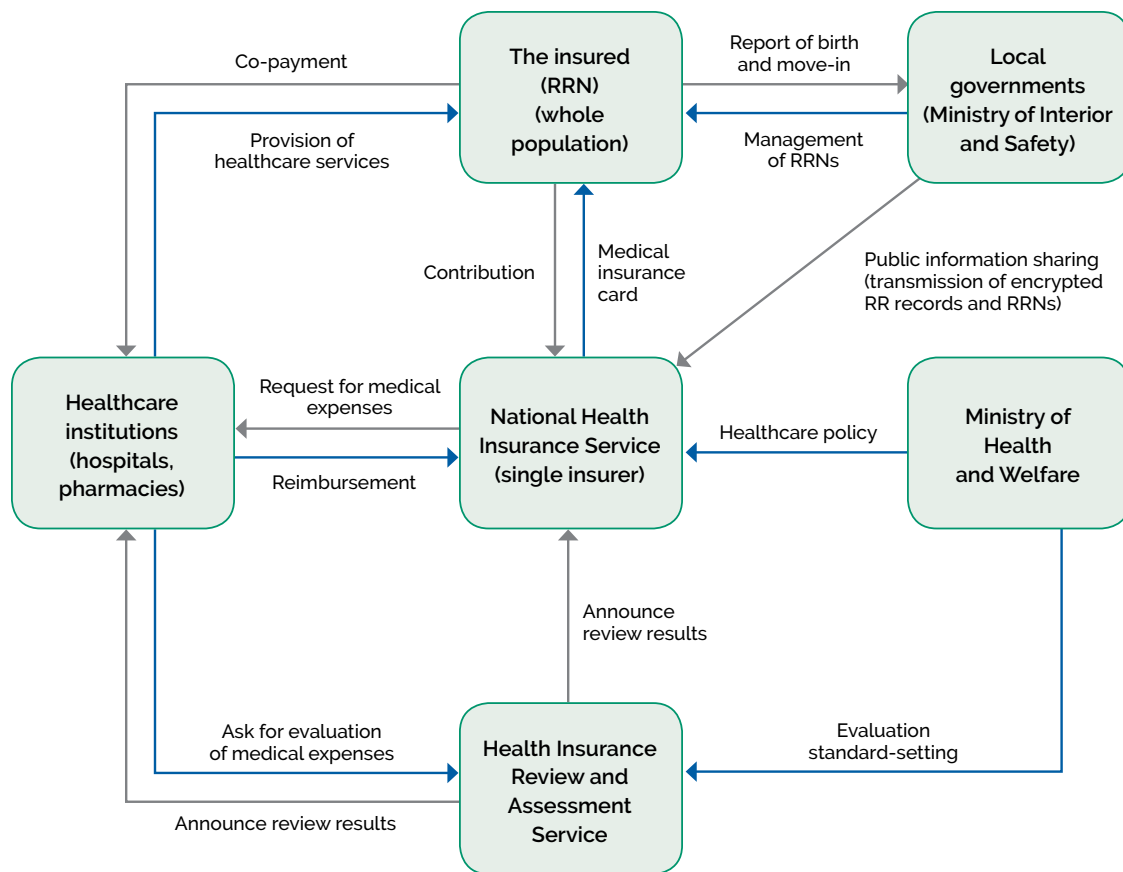
The National Health Insurance offers universal coverage for the whole population. Health insurance policyholders (employee insured and self-employed insured) or their dependents are eligible for National Health Insurance. Every person has a right to receive health insurance benefits and a duty to pay contributions.

Every member of the population – employee insured, self-employed insured, and their dependents – has his or her own unique RRN. This RRN is used to certify the person's identity in every process of health insurance service between the insured, the National Health Insurance Service, the Health Insurance Review and Assessment Service, and healthcare institutions, such as hospitals and pharmacies (Figure 4.4). All health insurance policyholders must pay insurance premiums to the National Health Insurance Service and pay their portion of the insurance payment as co-insurance to the medical service provider.

3 Social Security Information System (SSiS). 2016. 4insure.or.kr/ins4/ptl/Main.do

Figure 4.4:
Governance of
the National
Health
Insurance
System.

Source: NHI
Program. 2010.
National Health
Insurance Service.
nhis.or.kr/static/html/wbd/g/a/wbdgao401.html



As the single insurer, the National Health Insurance Service makes sure that insurance policyholders and their dependents are eligible for benefits. It also imposes and collects all insurance premiums and manages insurance payments to medical service providers. Local government provides the updated data on the encrypted RR records and RRNs of the insured to the National Health Insurance Service through the Public Information Sharing Center. The National Health Insurance Service sends a new medical insurance card to the insurance policyholder as soon as it receives information on the RRN and RR Record of a newborn baby through the Public Information Sharing Center. The National Health Insurance Service also makes insurance payments after the Health Insurance Review and Assessment Service reviews and assesses the proper costs. The Health Insurance Review and Assessment Service determines healthcare service costs and assesses whether the costs are adequate based on the standards the Ministry of Health and Welfare sets. Around 90,000 healthcare institutions throughout the country provide services to patients after checking their RRNs, then ask the National Health Insurance Service to pay medical expenses.

The National Health Insurance Service and Health Insurance Review and Assessment Service use RR data to confirm the insured, deliver notices, and apply for health services. However, information on the individual RRN of the insured person is not sent to the Ministry of Health and Welfare. The Ministry uses only aggregated data to create health policy.

4.2.6 Public assistance and social security

A series of family suicide cases in the 2010s, where family members were greatly distressed because of poverty and other hardships, led to much public concern. People urged the government to create measures to tackle social welfare blind spots across the country.

The first measure was to launch the emergency monitor and identify crisis households in blind spots between multiple welfare programs. The government analyzed about 27 kinds of data held by 15 public institutions in charge of electricity, water resources, liquefied natural gas, catastrophe, housing, and more. Officials and social workers of the community service centre reviewed the list of households, using information on households that have not used electricity, running water, and liquefied natural gas, and/or have defaulted on monthly premium payments of health insurance and other kinds of social insurance for several months. By using the RR system, officials and social workers analyzed collected data and identified crisis households. Next, they did an on-site review and decided whether the household qualified for support, what kind, and what amount. Finally, recipients got a package of services tailored to their needs. Figure 4.5 shows the process of identifying welfare blind spots and providing government services.

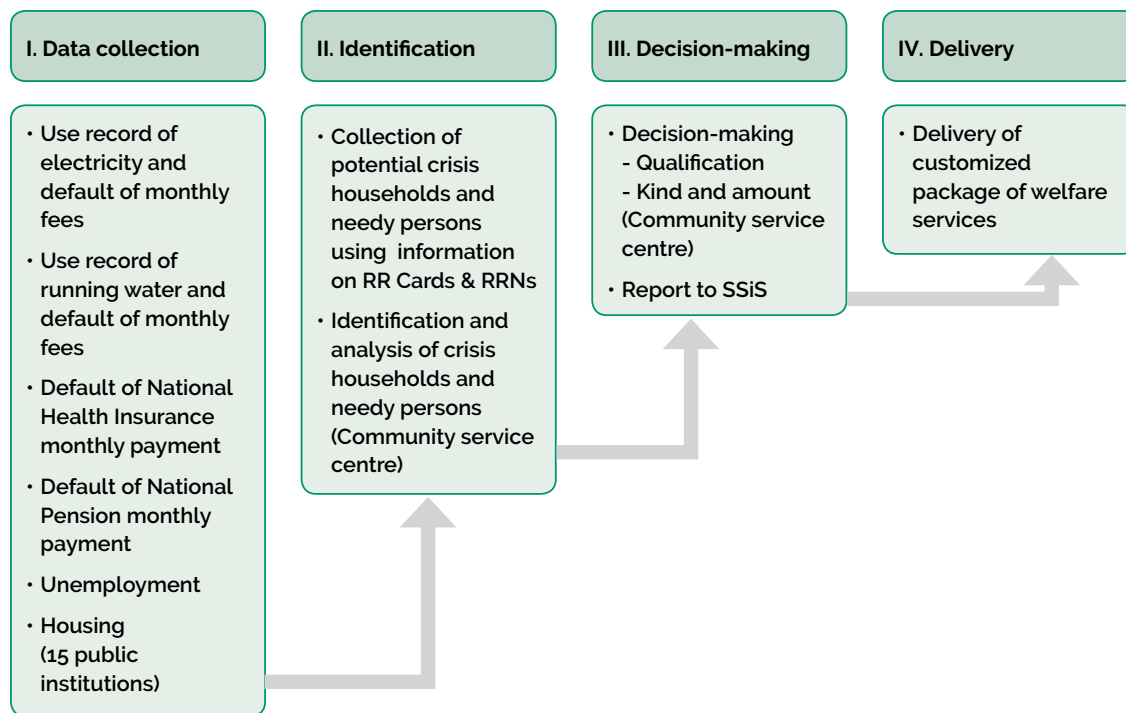


Figure 4.5: Process of identifying welfare blind spots.

Source: Author

The government used the emergency monitoring system of low-income households to identify hundreds of thousands of persons in welfare blind spots in winter, then gave them the assistance they needed, such as heating, electricity, and clothing.

Table 4.2:
Persons in welfare blind spots who were identified by the monitoring system.

Period (November–February)	Persons identified in welfare blind spots, in thousands	Persons assisted by the government, in thousands
2016–2017	532.0	343.0 (64.5%)
2017–2018	599.0	357.0 (59.6%)
2018–2019	685.0	423.0 (61.8%)

Source:
News Briefing,
Ministry of Health
and Welfare,
12 April 2019.

Second, to meet increasing social needs since the 2000s, all levels of government launched a number of welfare programs. Because they were not coordinated, there was some overlap. In 2016, ministries of the central government provided about 300 welfare programs and 243 local autonomous governments ran about 6,000 other programs.⁴ This situation urged the government to close loopholes in welfare budgets due to duplicate applications and illegal recipients on the one hand, and to identify welfare blind spots on the other hand. The Social Security Information Service reported that it recovered \$1.66 hundred million between 2014 and 2017 by cracking down on illegal and duplicate welfare benefit payments.⁵ The Social Security Information Service provides integrated information to central and local governments, social service institutions, social welfare facilities, health institutions, and others. It then supports the implementing of social welfare policies and customized welfare policies.⁶

4.3 Structure and functions of the Resident Registration system

4.3.1 Components of the Resident Registration system

The Resident Registration (RR) system, which the above identification system for social protection relies on, consists of three elements:

- the RR Record;
- a 13-digit RR Number (RRN); and
- a RR Card (National ID card).

When all or some members of a household change their address, the person obligated to report the new address must report it to the community service centre within 14 days of moving in. A resident's move-in report is seen as his or her move-in report for military service

4 Social Security Information Service (SSiS). 2018. Republic of Korea. *The Stepping-Stone Brochure* ssis.or.kr/eng/lay1/bbs/S6T33C35/F/22/list.do?sessionId=TQ7XFawofaN31qGi3jCnrs8sDVE4C1B Sf31i1MkA4x0cVT3dycFlsg799wgajUfo.CAPP02_servlet_WWWEng2

5 Social Security Information Service (SSiS). Republic of Korea. Major Performance. ssis.or.kr/eng/lay1/S6T1066C1067/contents.do

6 Social Security Information Service (SSiS). Republic of Korea. ssis.or.kr/eng/index.do

(notification of conscription and call-up), civil defense, national basic living security, National Health Insurance, and the welfare of disabled persons, including emergency monitoring for social assistance.

The local government prepares, keeps, manages, and preserves the RR Record for each individual and each household along with a logbook by household in RR databases. While the individual RR Record card contains information on 11 items – such as the head of household's name and relationship with the individual, move-in and move-out dates, and reason for the move – the household RR Record card includes eight items, such as the head of household's name, household number, and cohabiter. The databases are sent to the central database system for permanent backup, which is done by the Ministry of the Interior and Safety.

The 13-digit Resident Registration Number (RRN) is a unique registration number that the government issues to a resident. The RRN contains information on certain physical characteristics, like date of birth, gender, and region of birth or registration. It has description, verification, and authentication functions to validate a person's identity, because no two persons have the same RRN.⁷ The RRN is valid for life; it can be changed only in exceptional cases.

As with the national identity card, the RR Card verifies that a person is a resident who is registered in a specific local government area. The local government issues an RR Card to every person in the area who is at least 17 years old. It contains the person's name, RRN, address, identification photo, and right thumbprint. Submitting information on blood type is optional. When a resident applies for the RR Card, 10 fingerprints are collected and stored in the databases of the National Police Service. Some non-governmental organizations opposed the collection of 10 fingerprints, which might infringe upon human rights. The Constitutional Court, however, ruled that “fingerprint is neutral bio-information that does not represent personal characteristics since it cannot be used to determine and judge the personality, physical attributes or socio-economic status of an individual” and, therefore, “the collection of ten fingerprints for criminal investigation only does not infringe a person's right of self-determination regarding personal information protection.”⁸

Public agencies, social organizations, and business entities use the RR Card to verify a person's identity when receiving a civil petition, issuing a certificate to recognize the qualification of a person, or verifying a person's identity for any other reason. When arresting a criminal or performing his or her judicial duty, any police officer may demand that a person show his or her RR Card if it is needed to verify his or her identity or place of residence. For convenience, it is recommended that residents carry their RR Card with them. If a person loses the RR Card, his or her RRN and other sensitive information may be leaked. In contrast, instructions on the Social Security Card in the United States, for example, say “do not carry this card with you” and “keep it in a safe place.”

7 Song, Hee Joon et al. 2007. A Study on the Development of Resident Registration Systems (Korean version), Research Report, Ministry of the Interior and Safety, p. 54.

8 Constitutional Court, 26 May 2005 and 28 May 2015.

4.3.2 Resident Registration system and e-Government

Since the 2010s, South Korea has been known for keeping its leading edge in e-Government readiness, according to the United Nations e-Government Survey. The Korean government developed information systems in four steps:

- First, the government left ministries and agencies to introduce their own computer systems within their jurisdiction from the late 1960s to the early 1980s. This led to numerous "islands of automation," which limited horizontal collaboration and information sharing.
- Second, the government began to launch the first National Basic Information System Project in 1987. It aimed to develop six priority databases for public administration: the RR, real estate, automobile, employment, statistics, and the Population Change Survey in the early 1990s. As high-speed broadband networks became available, the government launched automated CRVS tasks linked to all levels of government.
- Third, the government started key e-Government projects that provided front-office services online in the early 2000s. Minwon24, upgraded to GOV24⁹ in 2017, was set up as a government-wide portal that provided online services, including about 5,300 kinds of guides, 3,000 kinds of applications, and 1,000 kinds of issuance through public information sharing systems that were linked to the websites of public institutions. Also, the government developed the National Health Insurance and Social Security Information systems since the 2000s.

The Public Information Sharing Center is the outcome of the whole-of-government approach to e-Government. Data-owning and data-using agencies share legally designated public data in an encrypted format through the Public Information Sharing Center. In this case, a personal information controller has a duty to safely keep RRNs using encryption so they are not lost, stolen, divulged, forged, or altered. Figure 4.6 shows a rapid increase in residents' use of the Public Information Sharing Center for their civil applications for 10 years. In 2018, the Public Information Sharing Center (726 million) was used around 12 times more than in 2009 (61 million). The RR Record, Family Relationship Registration,¹⁰ building and house registration, land registration, and local tax are ranked as the top five among 166 kinds of shared information between 35 data-owning agencies and 744 data-using agencies.¹¹ An increase in the use of the Public Information Sharing Center means fewer paper documents are needed to check that an applicant is eligible by identifying his or her residential, familial, and financial information. When a using agency shares administrative information that contains personal information through the Public Information Sharing Center, it must obtain the applicant's prior consent so he or she knows the purpose, object, and scope of sharing information. If an applicant does not consent

9 GOV24. Official portal of the Korean government. gov.kr

10 The Supreme Court provides an online guide to Family Relationship Registration through the GOV24 portal and issues Family Relationship Registration certificates online through the electronic Family Relationship Registration System, not through the Public Information Sharing Center, to separate legislative, administrative, and judicial powers. efamily.scourt.go.kr

11 Public Information Sharing System. share.go.kr/main_www_2018.jsp

to the service agency using the Public Information Sharing Center, he or she must file, in person, relevant paper documents to the agency, which is a waste of time and money. Every citizen has the right to request access to the records of the using agency and to know the purpose, object, scope, and time of sharing his or her personal information through the Public Information Sharing Center to prevent data leaks and abuse by irrelevant agencies.

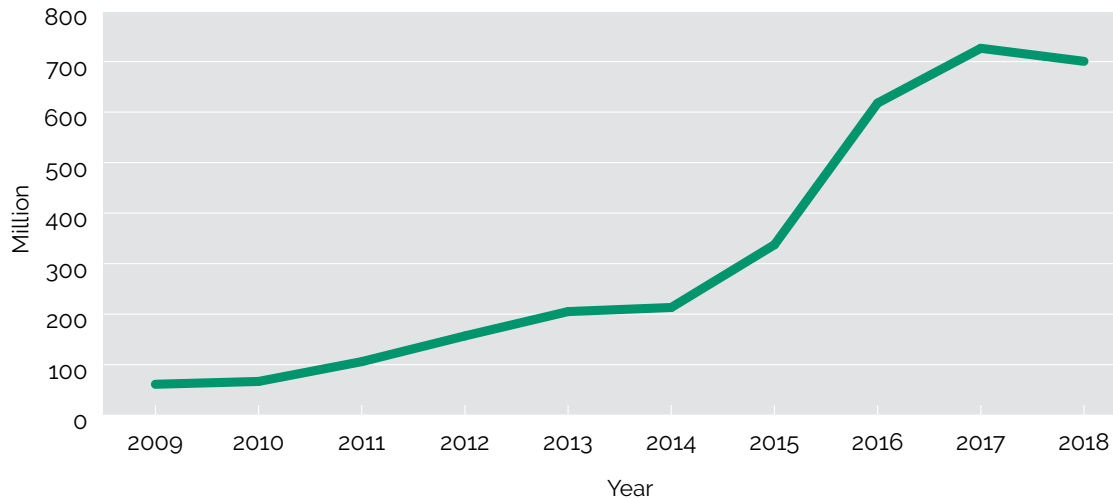


Figure 4.6: Annual changes of numbers using the Public Information Sharing Center system. (Unit: use case)

Source: www.index.go.kr/potal/main/EachDtlPageDetail.do?idx_cd=1025

- Finally, the government recognizes the rapidly changing environments of e-Government, such as artificial intelligence, the Internet of Things (IoT), cloud computing, big data, 5G networks, and so on. The government plans to use these hyper-connecting technologies to provide personalized services to residents and reduce welfare blind spots.

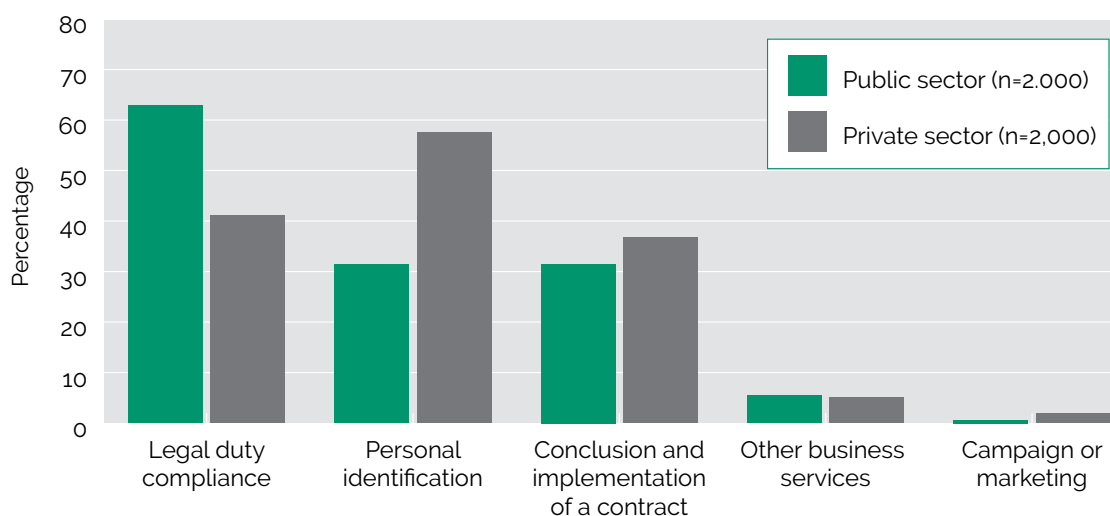
To avoid abuse of the RRN and other personal information by public institutions, user agencies should get the prior consent of the RRN owner so he or she knows the reason for sharing the information. Also, any person has the right to request access to information on the user agency, the reason for sharing the RRN, and when the information is shared.

4.3.3 The RRN as sensitive personal information

The RRN is classified as sensitive personal information. It is personally identifiable information whose use is strictly limited by Acts concerning the RR system. The RRN was, however, a convenient tool for digital identification in the 2000s, as e-Government and e-commerce in society rapidly expanded. Figure 4.7 shows a contrasting pattern of the primary usage of the RRN between the public and private sectors. While the most frequent use in the public sector is to comply with legal duties (62.8 percent), personal identification (57.5 percent) is the most frequent use in the private sector.

Figure 4.7:
The uses of
the RRN in the
public and
private sectors
(percentage).

Source: *Personal Information Protection Commission, 2014.*



An RRN contains information that describes a person's biological characteristics, such as age and gender. It is used to verify his or her identity by combining a unique name and specified address. It provides the authentication function of the person that verifies his or her unique and exclusive identity online. Because of the RRN's functions, illegal or improper collection and use of RRNs that were not under the government's strict regulation caused frequent financial frauds and crimes, raising serious concerns among the public. The government revised all Acts containing RRN-related information in the 2010s in a way that restricts the use of RRNs in order to strengthen personal information protection in the public and private sectors.

First, the *Personal Information Protection Act* introduced a new Article 24-2 to strictly limit the processing of RRNs. A personal information controller should not process any RRN, except in any of the following cases: (1) where any Act and Presidential Decree require or permit the processing of RRNs in a concrete manner; or (2) where it is deemed explicitly necessary for protecting from impending danger, the life, body, and property of a data subject or a third party.

Second, although the RRN usually used to be valid for life, the newly revised RR Act (Articles 7-4 and 7-5) now permits the local government to promptly change the applicant's RRN – through the examination and resolution of the Committee for Change of RRNs – when he or she receives the application of a person who suffers or is likely to suffer any danger or injury to safety, health, or property due to revealing his or her RRN. Around 1,100 persons of 1,770 who requested the change of their RRNs due to voice phishing, theft, and abuse of RRNs, injury to safety, or damage to property, were permitted to do so during the last three years.¹²

¹² Resident Registration Number Change Committee. rrncc.go.kr/frt/main.do

Third, the *Act on the Promotion of Information and Communications Network Utilization and Information Protection* states that except for the following cases, a provider of information and communications services is not permitted to collect and use users' RRNs:

1. where the provider is designated as the identification service agency;
2. where collection and use of users' RRNs is authorized by statutes; and
3. where the Korea Communications Commission makes a public announcement for the provider of information and communications services who inevitably collects and uses users' RRNs for his or her business purposes.

Even where the collection or use of users' RRNs is authorized, an alternative identification method must be provided. The private sector uses the following items as the preferred means of authentication: mobile phone number (62.5 percent), email address (35.3 percent), and digital certification (I-PIN) (20.2 percent). The public sector uses the I-PIN (71.3 percent), mobile phone number (66.4 percent), and accredited certificate (16.3 percent).¹³ See Figure 4.8.

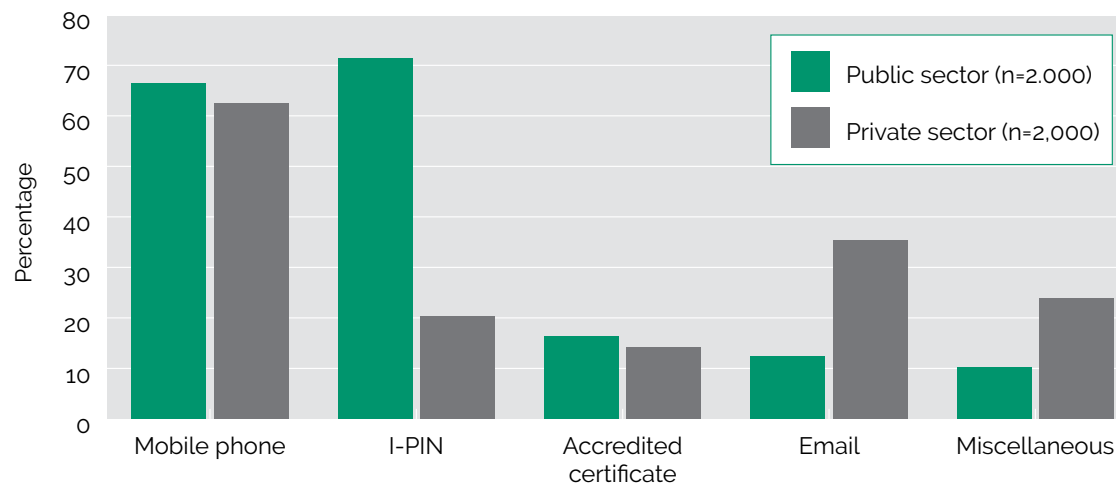


Figure 4.8:
Alternate methods
of digital
authentication
(percentage).

Source: Personal Information Protection Commission, 2019.

13 Personal Information Protection Commission. 2019. 2018 Personal Information Protection Survey Report, p. 43. pipc.go.kr/cmt/main/english.do

4.4 Policy implications

4.4.1 Resident Registration system with universal coverage

The Resident Registration (RR) system of Korea is a national identification system. It offers universal, ongoing, permanent, and compulsory recording of vital events of the whole population. While the basic structure of the RR and work processes between agencies remain almost unchanged, its main purpose has been transformed to meet administrative and social needs: from controlling and monitoring residences and migration of the labour force to national security in the 1960s; to the pursuit of efficiency in RR administration in the 1980s; to providing integrated health and welfare services to residents in the 2000s. As a unique number for each person, the Resident Registration Number (RRN) is valid for life and can be changed only in exceptional cases as stated in the related Acts.

With the *E-Government Act*, the government adopted the principles of e-Government that each administrative agency must observe:

- digitizing public services and making the process more convenient for citizens;
- ensuring that information systems are secure and reliable;
- protecting personal information and privacy;
- sharing administrative information; and
- preventing duplication of investment and improving interoperability.

Nationwide e-Government systems make it easier for public agencies to use the RRN as a key digital authentication tool for sharing information between agencies. This enables the government to reduce duplication and unnecessary paperwork. Hundreds of data-owning and data-using agencies share legally designated public data, such as the RRN, in an encrypted format through the Public Information Sharing Center. This helps them provide integrated services to residents.

4.4.2 Identification tool for social protection

At present, the government of Korea uses the RR system as a prime tool to provide universal services such as health care and social insurance to the whole population. It also uses the RR system to detect, monitor, and protect vulnerable residents in welfare blind spots.

When a new birth is registered in the household's RR Record, the person receives various government services throughout the life cycle, from childhood to the senior years. When a person goes on to the next stage of education, the government assesses his or her qualification for benefits using the RR information. Front-office officials and workers examine and determine a person's eligibility, benefits, and contribution payment using the RRN information. It is linked to all workplaces for four compulsory social insurance systems, including the National Health Insurance System.

Also, e-Government systems strengthen central and local governments' ability and opportunity to prevent welfare budgets from being wasted by duplicate applications and illegal beneficiaries. These systems also identify social welfare blind spots by monitoring low-income households using aggregated RRN data. The Public Information Sharing Center is a valuable system that facilitates complicated inter-agency processes conveniently and simply.

4.4.3 Protection of personal information

In 2016, the Korean government introduced strict legal, administrative, and technological countermeasures to protect personal identification information and attributes. Any person who uses another person's RRN, or any person who shares information about another person's RRN to seek profit, violating the Resident Registration-related Acts, is to be punished by imprisonment or a fine. Public agencies with appropriate legal authority can use RRNs only for strictly limited purposes. The private sector can collect and use RRNs only under even stricter conditions. Since 2015, government officials in charge of Resident Registration, the Public Information Sharing System, and other tasks related to personal information must take special training on protecting personal information. These measures have greatly contributed to reducing infringements on RRN information.¹⁴ The Korean government is now preparing for a legislative measure to respond to the European Union's General Data Protection Regulation, which came into effect in May 2018.

¹⁴ Korea Internet and Security Agency, *2018 Korean Internet White Paper*, p. 96.

Acronyms

CRVS	Civil Registration and Vital Statistics System
IoT	Internet of Things
NEIS	National Education Information System
RR	Resident Registration
RRN	Resident Registration Number
SSiS	Social Security Information Service

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