

# Republic of Korea

## Abbreviations

<b>G2B</b>	Government to Business
<b>G4C</b>	Government for Citizen
<b>ICT</b>	Information and Communications Technology
<b>IT</b>	Information Technology
<b>KADO</b>	Korean Agency for Digital Opportunity and Promotion
<b>KISA</b>	National Internet Development Agency
<b>MOIC</b>	Ministry of Information and Communication
<b>MOGE</b>	Ministry of Gender Equality (Former Ministry of Gender Equality & Family)
<b>MOGEF</b>	Ministry of Gender Equality and Family
<b>MOSIP</b>	Ministry of Science, ICT and Future Planning
<b>MOSPA</b>	Ministry of Security and Public Administration
<b>NIA</b>	National Information Society Agency
<b>RoK</b>	Republic of Korea
<b>SNS</b>	Social Network Services
<b>UN</b>	United Nations

## 1 Historical trajectory of e-government in the Republic of Korea

The Republic of Korea's e-government system has demonstrated rapid progress in the past 20 years. The country has ranked first in the UN E-Government Survey as well as E-participation Index between 2010 and 2014.<sup>1</sup> The Republic of Korea's movement toward e-government started in late 1980s with a revolutionary development of information technologies.<sup>2</sup> The historical evolution of the e-government system can be categorized into three stages based on the Internet penetration rate: preparation stage (1987~1995), diffusion stage (1996~2002) and maturation stage (2003~now).<sup>3</sup>

### 1.1 PREPARATION STAGE (1987~1995)

In this period, the basic database for public management was digitalized and back offices of government agencies were aligned for effective public administration. The Republic of Korea's government's movement toward e-government was initiated with the establishment of the Committee on 'Promoting Administration Computerization' under the Ministry of Government Administration in 1975. The committee established the first (1978~1982) and the second (1983~1986) Basic Plans on Administration Computerization to set out priorities for each ministry's administration computerization. Subsequently, an administrative computing

<sup>1</sup> MOSPA & NIA (2014a), Electronic Government White Paper: 2008-2012, National Informatization Society Agency, pp 13-14.

<sup>2</sup> MOSPA & NIA (2014a), op.cit., pp 6.

<sup>3</sup> MOSPA & NIA (2014a), op.cit.

network was built as part of a national basic information system in late 1980s. The first (1987~1991) and the second (1992~1996) Basic Plans on Constructing an Administrative Computer Network were also established by the Committee on Promoting Administration Computerization.<sup>4</sup>

The administrative computing network facilitated automation of the administration; construction of an integrated database on administrative information scattered across all ministries and government agencies; and network-building among government agencies, providing the basis for online public services in the 1990's, as the Internet started to be widely used by citizens. Six focus areas for the administrative computing network included resident registration, property registration, automobile registration, employment, customs and economic statistics, all of which are closely related to the everyday lives of citizens.<sup>5</sup>

## 1.2 DIFFUSION STAGE (1996~2002)

In 1996, one year after the Framework Act on Informatization Promotion (1995) was legislated, the first Basic Plan for Promoting Informatization was established as a national ICT master plan, which prompted line ministries' informatization. The second Basic Plan for Promoting Informatization was established in 1999 and was later developed into the Cyber Korea 21 Initiative in the same year. The initiative aimed to lay the groundwork for a knowledge-based nation through informatization to improve national competitiveness and people's lives. Towards this aim, it set out a number of goals, which included to increase investments

in knowledge-based industries to match OECD member country levels; join the top-ten knowledge-based and informatized nations in the world by 2002; expand Internet infrastructure; improve services for citizens and business; and undertake e-literacy training for citizens.

The initiative recognized e-government as a means for improving national productivity and competitiveness. An online patent registration system, online customs information system and one-stop system for management of international freight were introduced. Also, a super-high speed information and communications network was built in this period to provide high speed broadband services in 1,400 towns all over the Republic of Korea.<sup>6</sup>

As for e-government, the government digitalized its administrative procedures by promoting the use of electronic document approval systems, improving information systems of government agencies, expanding online services, and building an integrated administrative information system for enhanced convenience and efficiency in using government administration services. Also, government ministries and government agencies started to create home pages. Under the Official Information Disclosure Act legislated in 1997, they are obliged to release information on civil affairs and laws/regulations, public announcements and policy reports to the public via their webpages. Subsequently, the government set out the 'e-Korea Vision 2006 Plan (2002~2006)', which aims to improve productivity of all the citizens, industries and the government, and to introduce innovation in administrative services and improve efficiency and transparency of the government. Faced by challenges in inter-ministry coordination and harmonization, the government established a presidential special committee on e-government

<sup>4</sup> MOSIP & NIA(2014b), Achievements of 20 Year's National Informatization. [http://www.nia.or.kr/BBS/board\\_view.asp?BoardID=20111281502566361&id=14452&Order=020101&Flag=100&objpage=0](http://www.nia.or.kr/BBS/board_view.asp?BoardID=20111281502566361&id=14452&Order=020101&Flag=100&objpage=0), Retrieved September 2015, pp 14-15.

<sup>5</sup> MOSIP & NIA(2014b),op.cit., pp 15.

<sup>6</sup> MOSIPA and NIA (2014b), op.cit.

that comprised vice-ministers of related ministries and civilian experts, and legislated the Electronic Government Act in 2001. The special committee set out 11 focus areas to build an integrated online administration system by sharing administrative information across the ministries. Main achievements during this period include building an online one-stop system for administrative services, including in civil affairs, property and automobile registration (G4C) by integrating databases across ministries; introducing online national tax services; setting up an e-procurement system (G2B); building a national financial information system for real-time monitoring; integrating online systems for four social insurance schemes (health insurance, national pension, workers' compensation insurance and employment insurance).<sup>7</sup>

### 1.3 MATURATION STAGE (2003~NOW)

The Roh Moo-Hyun administration, which came to power in 2003, continued the e-government efforts initiated by the previous administration, and expanded e-government initiatives by digitalizing processes and integrating information systems of government institutions, while improving accessibility of the public information useful to citizens and industry. It announced the administration's vision and principles on e-government and established an e-government road-map. By doing so, it attempted vertical and horizontal integration of government systems among ministries, improving e-participation of citizens and government-wide information sharing. In 2004, the National Government Organization Act was revised to transfer e-government tasks from the Ministry of Information and Communication to the Ministry of Government Administration and Home Affairs, in order to separate the e-government efforts from national informatization efforts. The

Roh Moo-Hyun administration sought networked innovation of service delivery, knowledge for efficiency and transparency in public administration, and citizen participation for realizing sovereignty of the people through e-government.<sup>8</sup> Visible results of this shift include: the establishment of an integrated public administration database to promote ease of delivery of government services to citizens; digitalization of the work process within government, expansion of online G4C services, creation of an online channel/platform where citizens can voice their complaints, and integration of G2C services and the online channel into a governmental web portal.<sup>9</sup>

The next administration of Lee Myung-bak dissolved the Ministry of Information and Communication, transferred tasks on national informatization to the Ministry of Public Administration and Security, and established the Presidential Committee on National Informatization Strategies to integrate efforts for national informatization and e-government. Subsequently, the Framework Act on Informatization Promotion was revised into the Framework Act on National Informatization in 2009, and Electronic Government Act was also revised in 2010 to unify the operational processes for national informatization and e-government efforts.<sup>10</sup> In 2011, the administration established the Smart E-government Plan to advance the government's services by utilizing developed IT technologies and making government services converge for more participation of, and communication with, citizens. With increased service delivery via mobile phones, citizen access to services and information has improved and their online participation in decision making has expanded.<sup>11</sup>

<sup>8</sup> MOSPA & NIA, 2014a, op.cit, pp 17-18.

<sup>9</sup> Kim, Seok-Ju (2007), 'Main Achievements of Roh Moo-hyun Administration's E-government Efforts and Future Tasks', *Journal of Korean Association for Regional Information Society* 10(4): 111-134.

<sup>10</sup> MOSPA & NIA, 2014b, op.cit, pp 37-39.

<sup>11</sup> MOSPA & NIA, 2014a, op.cit, pp 17-18

## 1.4 GOVERNMENT 3.0 AND E-GOVERNMENT

With the advent of smart society,<sup>12</sup> the Korean government launched the Government 3.0 initiative. The initiative is a new paradigm of public administration, where public information is open to, and shared with, the public, and fragmented coordination among various ministries is integrated.

Compared to the government’s past approaches (Government 1.0 and Government 2.0), it is oriented more to the individual citizen, and pursues the value of expanded democracy with proactive release of public information, promotion of active participation of citizens, and more communication and cooperation.<sup>13</sup> In this paradigm, public services are to be delivered in an interactive way and in a personalized manner using the possibilities opened up by the wireless Internet and smart phones.<sup>14</sup> Table 1 highlights the differences between Government 1.0, 2.0 and 3.0.

**TABLE 1**  
**PARADIGM SHIFTS IN PUBLIC ADMINISTRATION**

	<b>Government 1.0</b>	<b>Government 2.0</b>	<b>Government 3.0</b>
Orientation	Government-oriented	People-oriented	Personalized/ Individual citizen-oriented
Core value	Efficiency	Democracy	Expanded Democracy
Participation	Government-initiated mobilization	Limited disclosure and limited participation	Preemptive release of public information, active participation by citizens, openness, sharing information, communication/ interaction and cooperation
Public services	One way	Interactive	Interactive and customized
Means/channel	In person	Internet	Wireless Internet and smart mobile phones

The Government 3.0 initiative set out three strategies: pursuing values of openness, sharing, communication and collaboration; transparency and competence; and citizen-oriented services. It aims to provide public services customized for each citizen and create new employment and new growth industries.<sup>15</sup> The government legislated the Act on Promotion of the Provision and Use of Public Data in 2013, pursuing values of openness and citizens’

<sup>12</sup> Smart Society is defined as a society where advanced ICTs transform the way of working and lifestyles, society and culture (NIA, 2011, cited in Park, Sung-Jung(2013), Future Directions and Issues in Women and Family Policies Services in line with Government 3.0., Korean Women’s Development Institute, pp 9). A smart society is characterized by creation and sharing of new data, new services and opportunities with the use of new data, social interconnectedness, and citizens’ intelligent use of ICTs (NIA, 2010 cited in cited in Park, Sung-Jung(2013),op.cit.).

<sup>13</sup> MOSPA (2014a), op.cit, pp 4-6.

<sup>14</sup> Ibid.

<sup>15</sup> MOSPA (2014), 2013 Government 3.0 White Paper. Ministry of Security and Public Affairs.

right to know.<sup>16</sup> Also, it opened portal websites for release of public data (data.go.kr) and public information (http://open.go.kr) so that citizens can get online access to public information.<sup>17</sup> See Table 2 for key features of Government 3.0.

**TABLE 2**  
**VISION, OBJECTIVES, STRATEGIES AND VALUES**  
**OF GOVERNMENT 3.0**

<b>Vision</b>	<b>Happiness of all the citizens</b>
Objectives	Service delivery customized for each citizen Creation of new employment and new growth industry
Strategies	Transparency Competence Citizen-oriented service
Values	Openness Sharing Communication Collaboration

Kim (2013)<sup>18</sup> summarizes the paradigm shifts from Government 1.0 to Government 3.0 initiatives: “Citizens used to be recognized as mere subjects of authoritative governmental control under the Government 1.0 paradigm, but the Government 2.0 paradigm moved towards recognizing them as customers of public services. The Government 3.0 paradigm goes one step further: it recognizes

citizens as collaborators and seeks to provide public services tailored to each citizen’s needs” (Kim, 2013: 7-8). This paradigm could contribute to enhanced citizen accessibility to public information and promote citizen participation in improving the delivery of public services.<sup>19</sup> Annex I summarizes the key stages in the evolution of the e-government ecosystem in the Republic of Korea.

<sup>16</sup> The Republic of Korea’s government’s movement toward openness and citizen’s right to know had already been initiated in 1990s with the legislation of the Official Information Disclosure Act. Also see Park, Sung-Jung(2013), op.cit.

<sup>17</sup> Park, Sung-Jung(2013), op.cit.

<sup>18</sup> Kim, Sang-wook (2013),The Government 3.0 and a Paradigm Shift in the Information Services. Paper presented at 85th Women’s Policy Forum: The Government 3.0 and Tasks for Policies on Women and Family. Seoul: Korean Women’s Development Institute, pp 7-8.

<sup>19</sup> Park, Sung-Jung, Seon-Mee Shin, Mi-Hye Chang, Seung-Ah Hong, Dongsik Kim & Soyoung Kwon (2014), A Study on the Consumer-Customized Service Strategy for Women and Family Policies Under Government 3.0, Seoul: Ministry of Gender Equality & Family, pp 12.

## 2 A gender analysis of e-government

### 2.1 BRIDGING THE GENDER DIGITAL DIVIDE: A STARTING POINT

The bulk of literature on ICTs and gender highlights that ICTs are a double-edged sword: while they contain great potential for women's empowerment, they can also exacerbate existing inequalities. Recognizing the problem of the gender digital divide, the government started its effort to address the gender digital divide from the late 1990s. The Kim Dae-jung administration (1998~2003) referred to by the sobriquet 'government of the people' was an advocate of women's social participation and strategies for gender mainstreaming, and therefore, it actively supported informatization as an issue of women's human rights.<sup>20</sup>

Before the establishment of the Ministry of Gender Equality in 2001 as a national women's machinery, the Ministry of Information and Communication (MOIC) mainly led informatization programmes for women, based on the Framework Act on Informatization Promotion and the Act on Eliminating the Digital Divide.<sup>21</sup> The programmes tended to be short-term programmes ranging from one or two day trainings to one to two month programmes.<sup>22</sup> Also, the content of the programmes was limited to providing subsidies for ICT training programmes for women and Internet training classes targeting two million house wives in cooperation with Korean Association of

Computer Academy. Local government programmes were initiated as a part of Local Informatization Initiatives supported by the central government, and their activities were limited to providing information related to women's employment, and recruitment and lifestyles; and free computer training courses for women.<sup>23</sup>

Through a cabinet meeting in June 2000, the government established a Plan on Informatization of Ten Million Citizens that further expanded the programme in scale, with ten government ministries, including the MOIC, taking part in it.<sup>24</sup> Around 13.8 million beneficiaries, including housewives, farmers and fishermen and local community members were provided with e-literacy trainings, and 434 thousand housewives were trained from 2000 to June 2002.<sup>25</sup> As a result, the number of Internet users increased from 3.1 million in 1998 to 24.38 million (around 56 percent of the total population) by the end of 2001, and the rate of female users increased from 7.7 percent in 1998 to 57.8 percent in 2001.<sup>26</sup> However, this initiative had a limitation in that most of the training programmes still remained at very basic levels and were not able to adequately promote professional ICT skills. Table 3 indicates the number of beneficiaries across different target groups, which the Informatization of Ten Million Citizens initiative reached out to.

Recognizing this challenge, the Second Step Training Plan on Informatization of Citizens was announced in 2003, which aimed at training 5 million citizens to become information producers as well as information consumers. It aimed at equipping 3.5 million 'e-Koreans' to freely utilize information technologies at work and in their everyday lives, and providing basic trainings for computer and Internet skills for 1.5 million people in vulnerable groups – such

<sup>20</sup> Lee, Soo-Yeon et al.(2013), Women's Use and Production of Information in the Age of Media Convergence. Korean Women's Development Institute.

<sup>21</sup> Jung, 2001 cited in Lee, Soo-Yeon et al.(2013), op.cit, pp 39-40.

<sup>22</sup> Jung, Sook-Kyung(2001), Current Projects on Women's Informatization and Their Problems. Informatization Policy 8(2): 54-72.

<sup>23</sup> Jung, Sook-Kyung(2001), op.cit.

<sup>24</sup> KADO(2003), 2003 Bridging Digital Divide White Paper. Korea Agency for Digital Opportunity and Promotion.

<sup>25</sup> Ibid.

<sup>26</sup> Ibid.

as the disabled and the aged. Under the plan, various e-literacy programmes were provided for marginalized groups by the Korea Agency for Digital Opportunity and Promotion. One of the programmes aimed to provide e-Biz trainings to housewives.<sup>27</sup>

**TABLE 3**  
**NUMBER OF BENEFICIARIES OF THE**  
**INFORMATIZATION OF TEN MILLION CITIZENS**  
**INITIATIVE BY TARGET GROUP (FROM 2000**  
**TO 2002)**

<b>Target Group</b>	<b>No. of beneficiaries</b>	<b>Target group</b>	<b>No. of beneficiaries</b>
The disabled	101 thousand	Employees in Private Sector	1,435 thousand
Farmers	129 thousand	Soldiers	623 thousand
Fishermen	16 thousand	Public servants	510 thousand
The aged	443 thousand	Teachers	1,109 thousand
Housewives	434 thousand	Students	3,373 thousand
Inmates of juvenile reformatory and prisons	120 thousand	State-owned enterprise Staffs	153 thousand
Local community members	5,359 thousand	Total	13,805 thousand

Source: MOIC internal data cited in KADO(2003), Bridging the Digital Divide White Paper. Korea Agency for Digital Opportunity and Promotion.

## 2.2 EFFORTS LED BY NATIONAL WOMEN’S MACHINERY

The establishment of the Ministry of Gender Equality (MOGE) in 2001 seems to be a turning point for addressing gender in relation to the informatization and e-government issue. The MOGE has since been renamed the Ministry of Gender Equality and Family (MOGEF). The e-literacy programmes initiated by MOGEF have focused on nurturing female IT professionals since 2002, and have attempted to develop women’s human resources as well as their IT capacities. The training programmes have ranged from basic IT skill courses to advanced IT skills courses including trainings, including on JAVA, web design, IT security, and mobile Java. In addition, there have been some IT training programmes that have aimed at developing specific IT skills tailored to so-called women-friendly jobs such as telemarketing, accounting, fashion-styling, 3D animation, shopping mall merchandising, avatar design, photo shop, etc.<sup>28</sup>

MOGEF’s IT trainings seem to have been effective in helping women enter into the job market. It has been reported that 52 percent of trained job seekers successfully entered the job market in 2003.<sup>29</sup>

The MOGEF also established the Basic Plan for Promoting Women’s Informatization (2002~2006) which set out a rather aggressive policy vision on realizing gender equality through women’s informatization, taking one step forward from previous approaches and efforts passively focusing on addressing the gender digital divide.<sup>30</sup> Its five focus areas ranged from enhancing women’s access to information and building infrastructure for it; improving women’s information literacy; invigorating informatization in

<sup>28</sup> KADO(2004). 2004 Bridging Digital Divide White Paper. Korea Agency for Digital Opportunity and Promotion.

<sup>29</sup> Ibid.

<sup>30</sup> Lee, Soo-Yeon et al.(2013), op.cit.

private sector; evaluating and monitoring women’s informatization; and international cooperation.<sup>31</sup>

Every five years, the MOGEF establishes a Basic Plan on Women’s Policy where national policy directions for women’s empowerment and gender equality are broadly defined. MOGEF’s policy directions on women’s informatization are also in line with the Basic Plan on Women’s Policy. Table 4 below summarizes plans on women’s informatization included in the second, third and fourth Basic Plans on Women’s Policy. The second (2003~2007) and the fourth (2013~2017) Basic Plans on Women’s Policy developed by the MOGEF also included women’s informatization as one of the focus areas for women’s policy for five years.<sup>32</sup> The third Basic Plan on Women’s Policy (2008~2012) however did not explicitly set out women’s informatization as a focus area as the Ministry of Information and Communication that had led national informatization efforts was dissolved and jurisdiction on IT-related policies got diffused across various ministries.<sup>33</sup> As a result, IT literacy programmes for marginalized groups were greatly scaled down.<sup>34</sup> Also, as the Act on Eliminating Digital Divide was abolished in 2009, the informatization programmes for women tended to diminish, except for those targeted at minority women’s groups such as women farmers and international marriage migrant women.<sup>35</sup>

**TABLE 4**  
**INFORMATIZATION ISSUES IN SECOND TO**  
**FOURTH BASIC PLANS ON WOMEN’S POLICIES**

Plan	Strategic perspective on Women’s Informatization
The 2nd Basic Plan (2003~2007)	<ul style="list-style-type: none"> <li>- Promoting women’s informatization</li> <li>- Establishing Informatization Strategic Plan (ISP) (Ministry of Information &amp; Communication and Ministry of Gender Equality)</li> <li>- IT Trainings for women (Ministry of Information &amp; Communication and Ministry of Gender Equality)</li> <li>- Women-net website for women</li> </ul>
The 3rd Basic Plan (2007~2012)	No specific plan on women’s informatization
The 4th Basic Plan (2013~2017)	<ul style="list-style-type: none"> <li>Improving women’s IT capacity</li> <li>- Finding measures to bridge gender digital divide in, for example, Internet use, SNS use (Ministry of Gender Equality and Family)</li> <li>- ICT literacy trainings for vulnerable women groups</li> </ul>

Source: Korean Womenlink(2014), Women and Media, In Beijing +20 & Post-2015: Changes of Korean Society in Gender Perspectives (November 11. 2014), Korean Women’s Association United and Ministry of Gender Equality & Family, pp. 406-407

## 2.3 WOMEN-DIRECTED SERVICES

Along with efforts for women’s informatization, the MOGEF has tried to actively use ICTs to better deliver its services. According to a web measurement analysis on MOGEF’s website, it is well-

<sup>31</sup> Lee, Soo-Yeon et al.(2013), op.cit.

<sup>32</sup> Korean Womenlink (2014), Women and Media, In Beijing +20 & Post-2015: Changes of Korean Society in Gender Perspectives (November 11. 2014), Korean Women’s Association United and Ministry of Gender Equality & Family.

<sup>33</sup> Ibid.

<sup>34</sup> Ibid.

<sup>35</sup> Lee, Soo-Yeon et al.(2013), op.cit.

integrated into the national Government for Citizen (G4C) web portal with services and content provided via the website.<sup>36</sup>

Also, there is demonstrated evidence of the impact of online channels on improving the effectiveness of MOGEF's service delivery.<sup>37</sup> Women-net, a platform for online networking among women, is one of the significant e-government efforts of the MOGEF. Its membership amounts to around 5.6 million as of 2014<sup>38</sup>. It provides information on policies on women and family, and also directs users to cyber-mentoring and e-learning courses for women's career development. Through this portal, MOGEF as a women-focused agency of the government of the Republic of Korea, attempts to better communicate with its policy clients; effectively deliver information on its policies to them; and empower women through various online training programmes. Compared to the main webpage of the MOGEF, the Women-net web portal is designed in a more user-friendly way by displaying various menu bars categorized into needs for specific target groups (working women and mothers, women taking a break from their career, women immigrants who are part of multicultural families) and women situated at different stages of their life cycle, even though quantity and quality of the information on each topic vary.<sup>39</sup>

In line with the recent Government 3.0 initiative, the MOGEF has opened a section for public data release with a menu bar on its homepage (<http://www.mogef.go.kr>). The section provides a list of public information to be released without request, a platform for requesting information, information on related laws and regulations, budget, etc. The Ministry of Gender Equality and

Family has also interlocked its web portal Women-Net along with various SNS platforms. More recently it has attempted to actively utilize smart phone applications for service delivery.

Table 5 outlines the various ICT services that the MOGEF currently provides. The MOGEF has been operating a web portal named Women-net since 2002 (one year after its establishment). The portal was set up in order to effectively provide information and various services for women's empowerment. In addition to serving as a one-stop-shop portal about the Ministry's services for women, Women-net also has a cyber-mentoring service, which has contributed to women's empowerment in various ways. Recently, the MOGEF has also attempted to actively explore the mobile opportunity for reaching out to women. Sex Offender Alert Application is one such example. By providing information on sexual criminals, it attempts to protect vulnerable groups (such as women, children) from the threat of sexual crimes.

<sup>36</sup> Choi, Dong-Ju & Hanah Zoo (2011), E-government for Women in Korea: Implications to Developing Countries in Asia Pacific, APWIN 12: 78-111.

<sup>37</sup> Ibid.

<sup>38</sup> MOGEF (2014), Internal data source.

<sup>39</sup> Park, Sung-Jung, Seon-Mee Shin, Mi-Hye Chang, Seung-Ah Hong, Dongsik Kim & Soyoun Kwon (2014), op.cit., pp 16-23.

**TABLE 5**  
**MOGEF'S SERVICES VIA ICTS (INTERNET AND MOBILE)**

<b>Webpages</b>	<b>Description</b>
MOGEF Homepage www.mogef.go.kr	main homepage of the MOGEF
Women-net portal www.women.go.kr	provides one-stop information on women's policies to support various issues according to one's life-cycle and specific needs provides e-learning courses, career coaching, cyber-mentoring for women's empowerment provides government services to find locations of nearby facilities for women such as women's development centres, women's crisis centres, etc. Facebook: <a href="https://www.facebook.com/women.go.kr">https://www.facebook.com/women.go.kr</a>
Child-care webpage idolbom.mogef.go.kr	provides information on child-care support provided by MOGEF
E-museum for the Victims of Japanese Military Sexual Slavery www.hermuseum.go.kr	aims to facilitate accurate history education about the comfort women victims violated by the Imperial Japanese Army delivers historical facts, records and data, victim's oral testimonies, photos, artworks and animation film Facebook: <a href="https://www.facebook.com/hermuseum">https://www.facebook.com/hermuseum</a>
Webpage on the academy for women in managerial level kwla.kigepe.or.kr/front/main.do	provides information on various trainings and leadership programmes for female managers offers online trainings

Webpage on certification of family friendly enterprises ffm.mogef.go.kr	introduces various supporting programmes for family friendly enterprises provides information on policies and support programmes for work and family balance
Webpage on support for international marriage immigrants and multicultural family www.liveinkorea.kr/intro.asp	provides useful information in various languages for married immigrants and multicultural families
Sex Offender Alert Webpage www.sexoffender.go.kr/index.nsc	discloses information on sexual criminals
<b>Mobile Applications</b>	
Sex Offender Alert Application	discloses information on sexual criminals
Work & Family Tap Tap	provides information on policy supports for women's work and family balance
Danuri	provides useful information in various languages for married immigrants and multicultural families

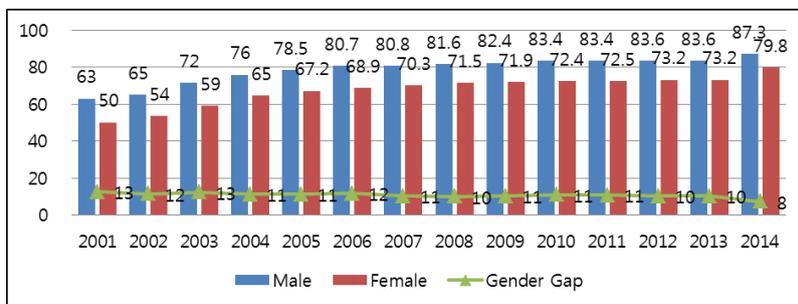
Another good example of women-directed services enabled by ICTs is Safe Return Home Application, led by the Ministry of Security and Public Administration. Utilizing digitalized administrative geographical information, the application helps individuals share details of their geographical location in real time, via texts and SNS services, with family and friend networks. The idea is that such a service can be used as a personal safety measure by individuals, when passing through areas that they consider unsafe.

## 2.4 WOMEN'S UPTAKE OF E-GOVERNMENT SERVICES

### Women's Internet access and use

Internet use by both men and women has been increasing for the past years, in Republic of Korea. The gender gap has decreased over the years, and stands at 8%, as of 2014.<sup>40</sup> See Figure 1 for details.

**FIGURE 1**  
**PERCENTAGE OF MALE AND FEMALE INTERNET USERS**



Source: KISA Internet Infrastructure statistics, <http://isis.kisa.or.kr>

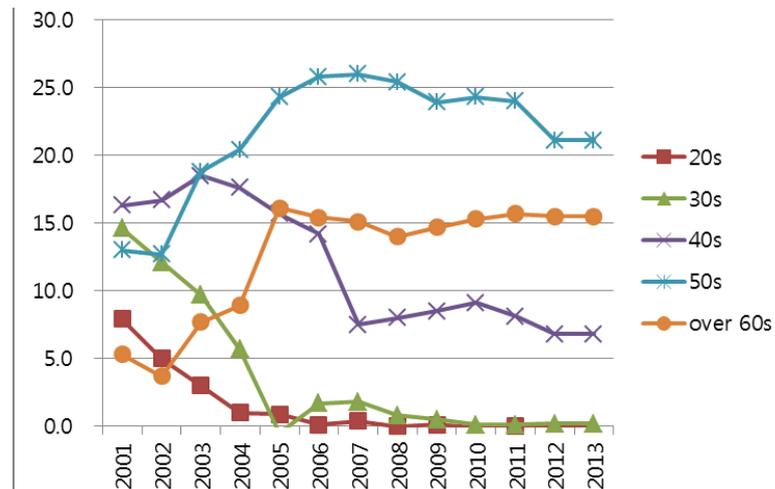
A more detailed examination of the gender gap data for different age groups reveals some differences. As Table 6 and Figure 2 indicates, the gender gap between women and men in their 20's has reversed now, with women Internet users outnumbering men. For users in their 30's, the gender gap has systematically reduced over the years and has now evened out. However, among women and men in their 50's and 60's, the gender gap continues to persist.

**TABLE 6**  
**PERCENTAGE OF MALE AND FEMALE INTERNET USERS BY AGE GROUP**

Men	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
20s	89	92.3	96	95.8	98.3	98.9	99.5	99.7	99.7	99.8	99.9	99.9	99.9	99.8
30s	68.7	75.3	85.4	90.9	90.7	95.4	97.4	99	99	99.3	99.5	99.6	99.6	99.8
40s	43.6	47.5	60.7	71.1	76.4	81.8	82.8	85.9	88.5	91.8	92.4	92.9	92.9	97.8
50s	21.5	24.3	32.2	41.3	47.9	55.8	59.5	61.6	64.2	67.3	69.4	70.6	70.6	89.2
over 60s	6.5	4.5	9.7	15.3	21.3	25.3	26.3	27	28.4	30.5	31.8	33.2	33.2	43.5
Women	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
20s	80.6	87.3	93	94.8	97.4	98.8	99.1	99.7	99.6	99.9	99.9	100	100	100
30s	54.1	63.2	75.7	85.2	91.2	93.7	95.6	98.2	98.5	99.2	99.4	99.4	99.4	99.8
40s	27.3	30.8	42.2	53.5	60.7	67.6	75.3	77.9	80	82.7	84.3	86.1	86.1	97.2
50s	8.5	11.6	13.4	20.9	23.6	30	33.5	36.2	40.3	43	45.4	49.5	49.5	89
over 60s	1.2	0.8	2	6.4	5.2	9.9	11.2	13	13.7	15.2	16.1	17.7	17.7	24.5
Gender Gap	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
20s	7.9	5.0	3.0	1.0	0.9	0.1	0.4	0.0	0.1	-0.1	0.0	-0.1	-0.1	-0.2
30s	14.6	12.1	9.7	5.7	-0.5	1.7	1.8	0.8	0.5	0.1	0.1	0.2	0.2	0.0
40s	16.3	16.7	18.5	17.6	15.7	14.2	7.5	8.0	8.5	9.1	8.1	6.8	6.8	0.6
50s	13.0	12.7	18.8	20.4	24.3	25.8	26.0	25.4	23.9	24.3	24.0	21.1	21.1	6.2
over 60s	5.3	3.7	7.7	8.9	16.1	15.4	15.1	14.0	14.7	15.3	15.7	15.5	15.5	19.0

Source: KISA Internet Infrastructure statistics, <http://isis.kisa.or.kr>

**FIGURE 2**  
**GENDER GAP IN INTERNET USE BY AGE GROUP: PERCENTAGE OF MALE USERS MINUS PERCENTAGE OF FEMALE USERS**

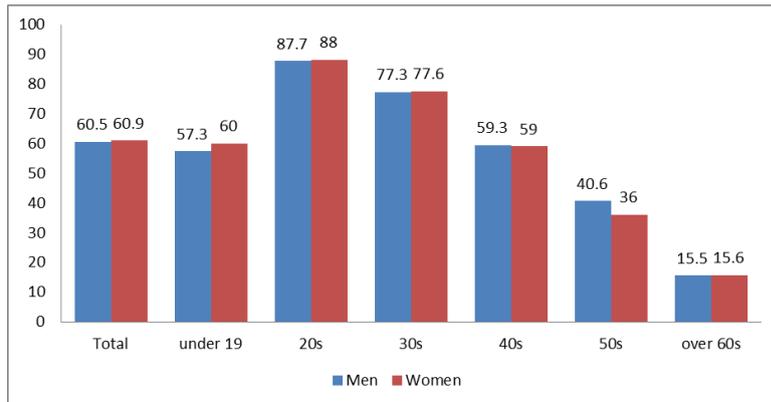


40 KISA Internet Infrastructure statistics, <http://isis.kisa.or.kr>, and Lee, Soo-Yeon et al.(2013), op.cit.

Source: KISA Internet Infrastructure statistics

As for SNS (Social Network Services) Use, 60.5 percent of men and 60.9 percent of women are using SNS, and there is little gender gap in SNS use. See Figure 3 below.

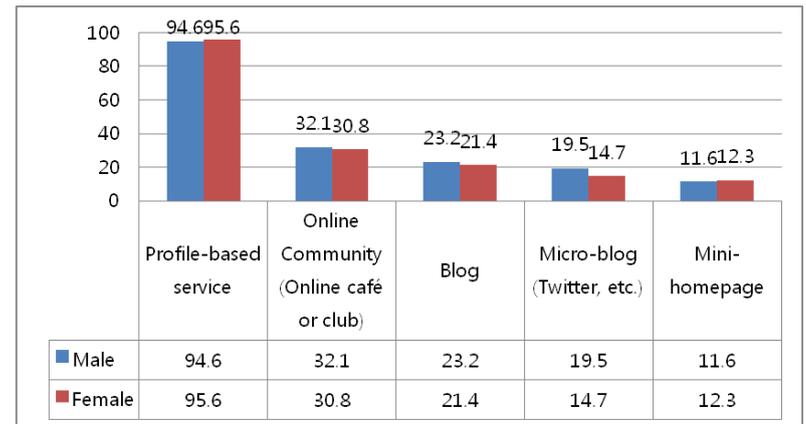
**FIGURE 3**  
**PERCENTAGE OF WOMEN AND MEN INTERNET USERS**



Source: KISA&MOSIP(2014). 2014 Internet Use Survey. Korea Internet & Security Agency.

As Figure 4 and Table 7 reveal, the most used SNS are profile-based services for both men and women. There is little gap between men and women’s SNS type-preferences, but across all age groups, men are more likely to use micro-blogs than women. Women tend to utilize SNS for various purposes for multiple purposes, when compared to men.<sup>41</sup>

**FIGURE 4**  
**SNS PREFERENCES OF WOMEN AND MEN USERS (%)**



Source: KISA&MOSIP(2014). 2014 Internet Use Survey. Korea Internet & Security Agency.

41 Lee, Soo-Yeon et al.(2013), op.cit., pp 249-251.

**TABLE 7**  
**SNS PREFERENCES OF WOMEN AND MEN BY AGE**  
**(%)**

<b>Male</b>	<b>Profile-based service<sup>42</sup></b>	<b>Online Community (Online café or club)</b>	<b>Blog<sup>43</sup></b>	<b>Micro-blog (Twitter, etc.)<sup>44</sup></b>	<b>Mini-homepage<sup>45</sup></b>
under 19	93.3	24.6	20.3	16	13.8
20s	96.8	36.5	29.9	26.2	15.6
30s	96.7	33.8	24.3	21	12.8
40s	93.1	31.9	21.8	17.5	7.8
50s	91.7	31.1	15.2	12.1	4.7
over 60s	82.9	30.1	11.2	9.9	3.7
<b>Female</b>	<b>Profile-based service</b>	<b>Online Community (Online café or club)</b>	<b>Blog</b>	<b>Micro-blog (Twitter, etc.)</b>	<b>Mini-homepage</b>
under 19	95.1	25.5	19.3	14.9	15.3
20s	96.3	36.8	29	22.9	17.7
30s	95.6	33.7	23.3	15.9	12.8
40s	96.2	28.8	18.4	9.9	7.7
50s	93.6	26.1	10.7	3.2	4.1
over 60s	94.2	12.5	10.4	4.7	2.1

Source: KISA&MOSIP(2014). 2014 Internet Use Survey. Korea Internet & Security Agency.

However, it is pointed out that women's active use of SNS does not necessarily lead to active participation of women in information production or shaping public opinion. The patterns of SNS use among women and men reflect some key differences: while men

are more likely to actively make use of SNS to share opinions, women are more likely to use them as platforms for promoting friendships and familial relationships.<sup>46</sup> According to a 2013 survey on the use of, and participation in, social media among women and men, women are less active than men in these spaces. The survey revealed that women's topics of interest focused on child-care and children's education. Also, women participated less than men in online discussions commenting on political issues.<sup>47</sup>

As for mobile phone use, 96.1 percent of men and 94.5 percent of women use mobile phones as indicated in Figure 5. Also, mobile phone access is higher than Internet access and SNS use, among both men and women. Also, across age groups, the gender gap in mobile access is negligible.

<sup>42</sup> Social Network Services based on user profile such as Facebook

<sup>43</sup> Personal journal for an individual that is publicly accessible via web

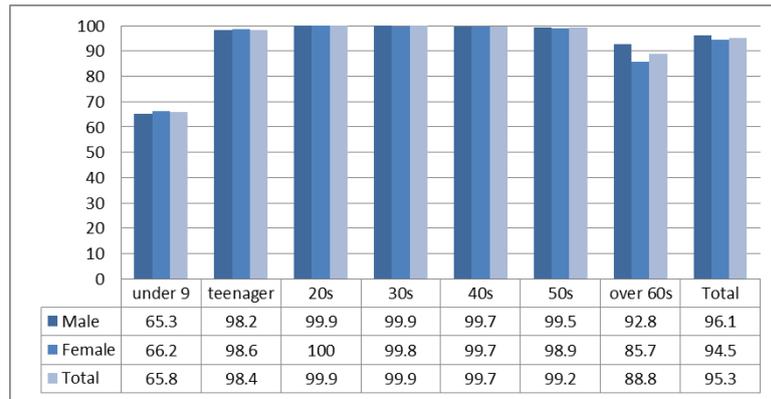
<sup>44</sup> A type of blog with comparatively short texts enabling constant comment exchange and updates

<sup>45</sup> A scaled-down personal webpage for individuals

<sup>46</sup> Lee, Soo-Yeon et al.(2013), op.cit., pp 31.

<sup>47</sup> Lee, Soo-Yeon et al.(2013), op.cit., pp 251-254.

**FIGURE 5**  
**RATE OF MOBILE PHONE USE AMONG WOMEN AND MEN, DISAGGREGATED BY AGE (%)**



Source: KISA&MOSIP(2014). 2014 Internet Use Survey. Korea Internet & Security Agency.

A survey on 4,000 smart phone users also reveals that there is no major gender gap in smart phone use.<sup>48</sup> Smart phone access is high among both men (95.4%) and women (94.7%).

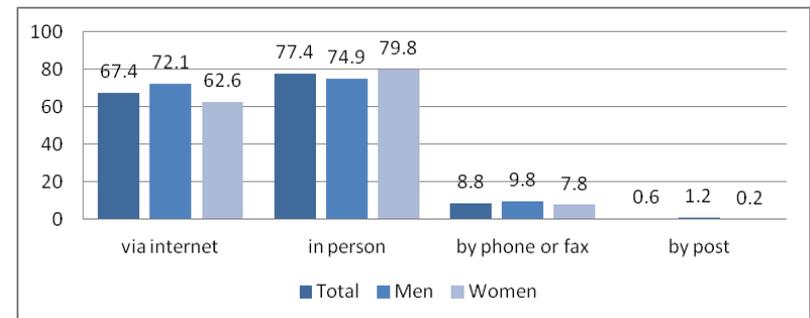
To summarize, the RoK government's programmes for women's informatization, since the 1990's, have certainly had a positive impact on women's access to and use of the Internet. However, improvement in Internet access varies by age. There is little or no gender gap in Internet use among the younger generation. The gender gap persists among the aged whose ICT accessibility is comparatively low. On the other hand, the recent advent of mobile phones opens up new prospects with respect to providing gender-equal and generation-equal access.

48 NIA(2011). Government 3.0. National Information Society Agency, pp 21.

## Women's uptake of online government services

According to the 2013 'User Take-up Survey of E-government Service',<sup>49</sup> 67.4 per cent of respondents use public services via the Internet, making it the second most common method for accessing public services surpassed only by face to face interactions (77.4%). See Figure 6 for details.

**FIGURE 6**  
**MAIN METHODS USED TO ACCESS PUBLIC SERVICES (%)**

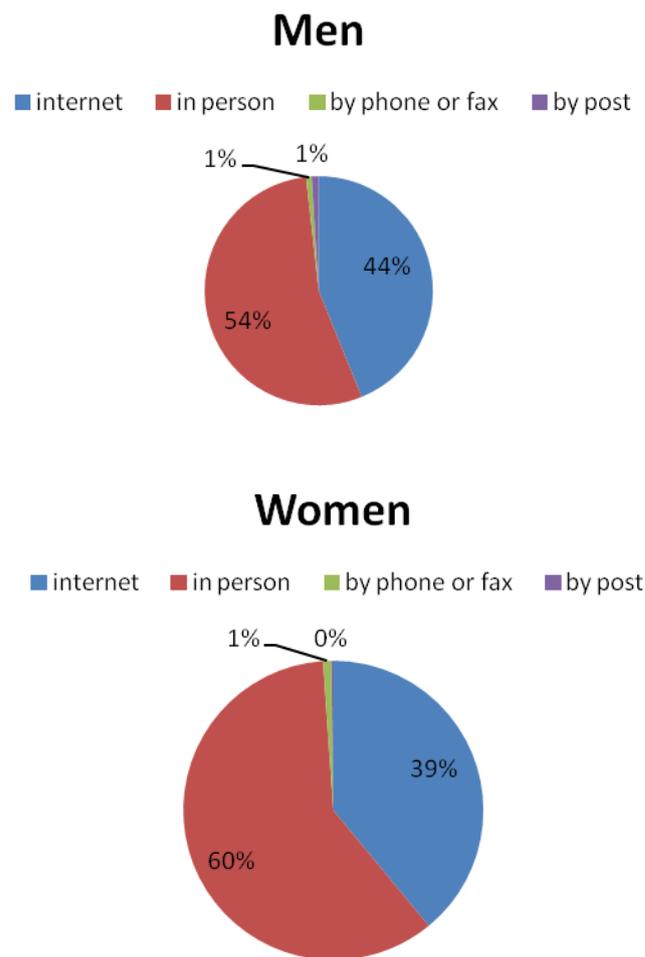


Source: MOSPA&NIA (2013). 2013 User Take-up Survey of E-government Service.

Women's preference for using online services tends to be lower than men, and also more women prefer going in person when compared to men. However, the difference is marginal. See Figure 7 for details.

49 MOSPA&NIA (2013). 2013 User Take-up Survey of E-government Service.

**FIGURE 7**  
**PREFERRED METHODS TO ACCESS PUBLIC SERVICES**



Source: MOSPA&NIA (2013). 2013 User Take-up Survey of E-government Service.

Looking at the rates of public service use via Internet among men and women across age groups, it is clear that the gender gap among younger generations, that is, under 30s, is relatively low. Especially for those in their 20’s, there is little gap between men and women’s uses of public services via the Internet. However, as age increases, the gender gap also goes up, as indicated in Table 8.

**TABLE 8**  
**RATES OF PUBLIC SERVICE USE BY MEN AND WOMEN VIA INTERNET BY AGE**

Age	Total	Men (A)	Women (B)	Gender Gap (A-B)
16~19	75.5	78	73	5
20s	86.3	86.2	86.4	-0.2
30s	85.7	88.3	83.1	5.2
40s	74.1	81.7	66.9	14.8
50s	44.7	55.3	33.7	21.6
60~74	14.9	23.9	4.3	19.6

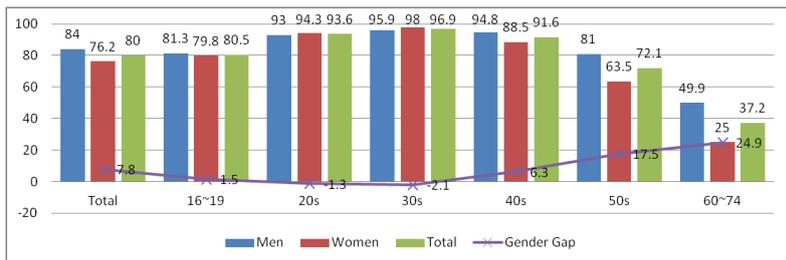
Source: MOSPA&NIA (2013). 2013 User Take-up Survey of E-government Service.

The survey also revealed that the extent of awareness and patterns of use of e-government services differ among women and men.<sup>50</sup> 76.2 percent of female respondents are aware of e-government services while 84 percent of male respondents are aware of e-government services Figure 8. Similarly, 62.6 percent of female respondents compared to 72.1 percent of male respondents have used e-government services at least once Figure 9. While examining the data for different age groups, we find that there is

<sup>50</sup> MOSPA&NIA (2013). 2013 User Take-up Survey of E-government Service.

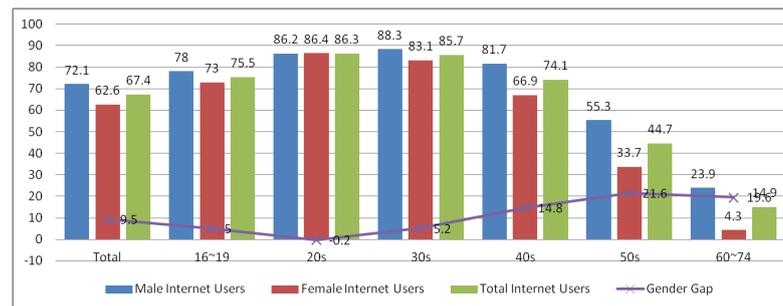
hardly any gender gap in access to e-government services among those in their 20s and 30s. But as age increases, the gender gap in awareness and use of e-government services also goes up.

**FIGURE 8**  
**AWARENESS OF E-GOVERNMENT SERVICES AMONG WOMEN AND MEN SURVEY RESPONDENTS**



Source: MOSPA&NIA (2013), 2013 User Take-up Survey of E-government Service.

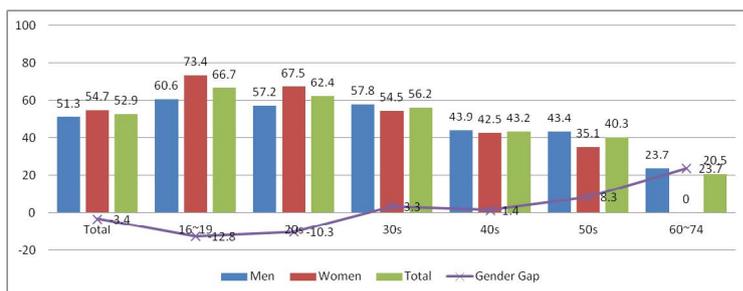
**FIGURE 9**  
**UPTAKE OF E-GOVERNMENT SERVICES AMONG WOMEN AND MEN SURVEY RESPONDENTS**



Source: MOSPA&NIA (2013), 2013 User Take-up Survey of E-government Service.

On the other hand, use of mobile e-government services among women and men tells a different story. The rate of women using mobile e-government services (54.7%) is higher than that of men (51.3%). This tendency is pronounced in people in their 20’s. As age increases, the tendency reverses, but the gender gap is not as much as for non-mobile access to e-government, except in the oldest age group (60 to 74 years). See Figure 10 below for details. There is no in-depth research that can provide a clear explanation on why women tend to prefer mobile e-government services, but it can be inferred to be related to connectivity: women tend to have more connectivity via mobile phones than via the fixed broadband, as shown in the previous section on connectivity.

**FIGURE 10**  
**UPTAKE RATES OF MOBILE E-GOVERNMENT SERVICES AMONG WOMEN AND MEN**



Source: MOSPA&NIA (2013), 2013 User Take-up Survey of E-government Service.

### 3 Conclusions

The discussion thus far has revealed a number of insights about gender-responsive e-government design.

Firstly, it is important to establish basic ICT infrastructure at the initial stage, but it is also important to make targeted efforts to address the digital divide faced by vulnerable and disadvantaged groups such as women, disabled and older persons. The RoK government undertook a lot of efforts to improve the national IT literacy levels, also targeting women in the early 2000s.

Secondly, women's machinery can play a key role in leading efforts to provide women-directed e-government services and ICT trainings. While national infrastructure has been in place in RoK thanks to national informatization and e-government efforts made by the government, the impetus to use the infrastructure for women's empowerment undoubtedly comes from a dedicated agency that leads such efforts. Conversely, a well-established ICT infrastructure provides a breakthrough for the women's machinery to overcome limitations in their budget and human resources. The RoK's MOGE (currently MOGEF) initially started with limited budget and human resources, but was able to overcome these limitations by actively using ICTs from the early days and opening its portal website.

Thirdly, smart phones and innovative web platforms and SNS can be harnessed effectively to provide a new momentum for e-government. In RoK, Government 3.0 uses these latest ICT developments, for citizen participation in service delivery, openness of public information, and greater personalization of interactions between citizens and the state. Since women tend to use mobile-based e-government services more, the use of mobile phone applications for services becomes an important strategy to reach out to women.

## ANNEX I SUMMARY OF THE EVOLUTION OF E-GOVERNMENT IN THE REPUBLIC OF KOREA

Stages	Background and Trend	Institution/Laws/Policies	Focus
Preparation Stage (1987-1995)	- Pursuing small government and enhanced efficiency of public administration	- Building national basic information system (1st phase: 1987-1991; 2nd phase: 1992-1996) - Establishment of the Ministry of Information and Communication (1994) - Building the foundations for a super-high-speed information communications architecture (1995-1998)	Back office management - Building DB on National Core Information (1987-1991) (Public administration, finance, education and research, defense and security, welfare, postal service, weather , marine freight transportation and copyright)
Diffusion Stage (1996-2002)	- Responding to globalization and opening of the market - Pursuing transparency in public administration and prevention of corruption	- Basic Plan for Promoting Informatization (1996) - 11 priority areas for E-government (2001) - Presidential Special Committee on E-government for effective implementation of projects in 11 priority areas (2001) - Electronic Government Act (2001)	Front office management E-government Projects in the first phase (2001-2003) - Front office: G4C, national tax, E14 alignment of social insurances, procurement - Back office: national finance, HR, educational administration, provincial administration - Infrastructure: electronic distribution of documents, electronic signature, integrated pan- government information centre.
Maturation Stage (2003-now)	- Regarding e-government as an independent policy area - Pursuing smart and mobile government - Pursuing openness, sharing information, communication and collaboration	- Road-map for e-government - 31 priority areas for e-government - Dissolution of the Ministry of Information and Communication; handing over its functions to the Ministry of Public Administration and Security - Merging related laws - Government 3.0 Initiative	E-government projects in the second phase (2003-2007)  - 9 front office projects - 13 back office projects - 9 infrastructure projects

Sources: Song, Hui Jun(2008). Historical Review of Korea's Informatization Policies and Future Tasks and MOSPA & NIA, 2014, Electronic Government White Paper: 2008-2012, National Informatization Society Agency, pp 13-14.

## ANNEX 2 LIST OF INTERVIEWS

Interviewees	Date	Location
Two officials in National Information Society Agency (NIA)	March 6, 2015	The interviewee's office at NI