# 3. ICT INDUSTRIES AND SMART CITIES: SOUTH KOREA AS TECHNOLOGICAL LINK WITH LATIN AMERICA

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## INTRODUCTION

In recent years, South Korea has become a world benchmark in e-Government, ICT policies and Smart Cities, and has pursued a strong policy of assistance and consultation aimed especially at developing countries. In 2010, 2012 and 2014, South Korea ranked first in the world ranking of e-government carried out by the United Nations Public Administration Network (UNPAN). The country has managed to maximize the use of information and communications technologies in public administration to such an extent that practically any procedure can be carried out online. Examples of this are: Korea On-Line E-Procurement System (KONEPS), a single portal to obtain information on contracts, tenders, acquisitions and payments of all administrative organizations) (see Image 1), Korea Immigration Smart Service (KISS), customs procedures (UNIPASS) and patents (KIPOnet), among others. The private sector played a critical role in developing innovative technologies and systems to meet the challenges of digitizing official documents and the state's interaction with citizens. Korean civil society is also very active on a virtual level when it comes to exchanging information, which is why it has, for example, the *E-people portal* to channel queries from those who do not know to

which government agency submit their complaints or want to participate in collective discussions / petitions on political issues.


***Image 1. Korea On-Line E-Procurement System***

E-Government and ICTs have a particular potential to promote the development and growth of economy, taking the form of investment and include the transfer of highly valuable high technology in less developed countries. South Korea has invested heavily in this technology sector, currently allocating more than 90 billion dollars to this sector. Historically, Korean economy was based on an export model, leading it to position itself in fifth place worldwide. In 2017, South Korea is the first provider of official assistance for the development of e-government to developing countries. The Cyber Korea 21 (1999) plan was the first to highlight among its objectives promoting the export of technological products.

South Korean telecommunications giants (SK Telecom, KT and LG Uplus) are entering the global market with fifth generation wireless network technology in an attempt to open new business opportunities beyond the domestic market. They are intensifying their efforts to enhance 5G partnerships with mobile device providers of all the world, for example by exporting network equipment and developing 5G-based content. Since the launch of 5G

services in April, achieving a world first, mobile operators are taking advantage of the high profile they gained on the global stage. (Yeo, 2019)

## THE ROLE OF THE STATE IN SOUTH KOREAN TECHNOLOGICAL DEVELOPMENT

In 1982 South Korea achieved the inaugural connection to the network: a prototype of the internet that connected computers from the main research centers (Oh and Larson, 2011, p. 76) in a joint effort of the Institute of Electronic Technology, the National University of Seoul and the Advanced Institute of Science and Technology (KAIST). In 1993, with the establishment of the World Wide Web, the first website (http://cair.kaist.ac.kr) operated by the KAIST Research Center for Artificial Intelligence arrived. A year later the first private internet service provider appeared, accompanied by the establishment of government websites and email services. At that time, residential internet users had a dial-up connection of only 64 Kbps, this was modified in 1998 when Thrunet offered the first broadband services that use cable television networks. For October 2001, there were seven companies offering ADSL service, so that 90% of households with fixed telephone lines could access the service, and other options were added, including cable modem, Local Area Network (LAN, which connects computers in a relatively small and predetermined space), Wireless Local Loop (WLL, which is based on the use of a wireless communication link as connection to offer broadband internet and telephone services to users. It mainly uses licensed frequencies that avoid the risks of network saturation associated with frequencies of shared use or free bands) or satellite connections. In 2004, the number of home users with broadband connection already exceeded eleven million, which represented 70% of Korean households. (Chon, Park, Kang and Lee, 2005, p. 7)

By the end of 2010, in rural areas 74.7% of internet users were connected through broadband services and the total number of subscribers to these services exceeded seventeen million, of which six million or more used LAN. (NCA, 2011, p. 34) The infrastructure necessary for this included national and international submarine fiber optic cables, and satellite ground stations that allow the entire territory to have network coverage. This distribution, diffusion and advance in the treatment of technology is largely owed

mostly to a conjunction of factors that include geography, competition, equipment, culture and, fundamentally, State support, which is manifested in sustained public policies for a continued technological development.

The government of South Korea implemented programs in order to promote and strengthen the information society: one of the first and most important was the National Basic Information System of 1987, which had among its objectives the digitalization of government-run information (housing records, taxes, finances, etc.). The progress made in the framework of this program began the current system of e-government, allowing the digital connection to the different government offices, and increasing the provision of digital services for citizens. At the same time, efforts were carried out to increase the number of accesses to the network with several educational programs aimed at age groups less prone to technological change. Training was also carried out for vulnerable sectors, facilities were provided for the purchase of computers. (ITIF, 2008, p. 2)

## E-GOVERNMENT

E-Government is a form of government in the information age, in which ICT are widely used in public administration. The use of ICT related to e-government refers to its use in public services, mainly government support services and common technological services (KOICA, 2013p. 14), all with the aim of increasing efficiency, transparency and citizen participation. (OEA)

Efforts to build an information society began in South Korea in 1987 through the National Basic Information System (1987-1996): the first national project dedicated to mobilizing resources for the use and promotion of computer networks, as the South Korean Executive Branch decided to digitalize important information in areas such as residence registration, finance, public safety, education and research. In 1995, the Korean Information Infrastructure Plan (KII) was launched, with the purpose to build an information highway that would provide technological services to the public and that would promote the computerization of each sector of society. The KII was divided into the New Government Network (the governmental part) and the New Public Network (the public part). (Oh and Larson, 2001, p. 78) The first aimed to implement the network infrastructure throughout the country to

provide high-speed services mainly to government agencies to connect public offices, educational and research institutions, and to provide an adequate platform for the development of certain services e-government, data exchange and joint use of information. The second, the public network, focused on expanding the commercial network and promoting the use of high-speed services, being its main recipients companies and home users. (Hur, 2011, p. 7) The State, in turn, formulated the plan in stages: the first, from 1995 to 1997, aimed to build an infrastructure network for high-speed multimedia services. The second, from 1998 to 2002, aimed to increase the competitiveness of the information technology industry sectors in the global environment, to expand the infrastructure network and to develop services such as the Internet. In January 2001, the government created the Special Committee for E-Government made up of experts from the private and public sectors, designed to coordinate and improve the quality of services. (ITIF, 2008, pp. 3-4) In 2000, the Government for Citizens program (G4C) was implemented. It was an innovation system run by the Ministry of Administration and Interior that concentrated its efforts on the following key services: 1) Build a single website that would provide information from all public offices, electronically linked, to develop an integrated portal representing the entire government; 2) offer information on four thousand civil services and online processing possibilities, including personal data, documentation requirements, requests, fines, etc., through an unified e-government services portal; and 3) enable citizens to request more than four hundred and ten types of documentation from the central government on the portal and to receive their requests either by conventional mail, by email or at local offices designated for this purpose. (Suh, 2004, p. 1) At the same time, an integrated database was developed that covered the areas of taxes, automotive registration, personal registration, property registration and business information, which considerably reduced the number of physical documents and the number of visits to the public offices. The third stage, the stipulated period that ran from 2003 to 2010, ended five years ahead of schedule, aimed at strengthening companies and reforming the economy through the information industry.

In 2003, President Roh, continuing with the objective of the G4C, promoted measures and projects to further develop computerization and e-government. The so-called "e-government roadmap" established an ambitious agenda for improvements and deepening of the already existing services.

With this, the electronic systems for finance, auditing, public information, local governments, the diplomatic service, social services, employment, and improved online-integrated services for citizens, among others, were enhanced. (Chung, 2015, p. 21) The result, at the end of his administration, was the vertical and horizontal integration of the government systems between the ministries, and the improvement in the electronic participation of citizens and the exchange of information in all public offices. In 2004, the South Korean government launched the Broadband Network Convergence Plan (BcN) through a consortium that included the Ministry of Information and Communication, the private telecommunications sector and the cable TV provider companies sector. The BcN intended to provide efficient transmission of broadband multimedia services through the convergence of telecommunications, broadcasting and the internet. As a result, South Korea would achieve the world's highest level of information technology infrastructure, distributing high-speed internet services to more than thirteen million households and wireless services to nearly thirty million subscribers. (NIA, 2011, p. 7)

Through different plans, South Korea not only invested a considerable amount of resources from the state budget, approved regulations and norms, provided incentives to private firms, but also carried out a series of fundamental efforts for digital literacy. Among these programs, PC for all, an educational plan aimed to increase digital literacy, stands out, and Cyber Korea 21, which also includes, in the PC distribution, the promotion of electronic commerce. (ITIF, 2008, p. 91) Since 1999, this state project incorporated the e-government as a mechanism to promote job creation in the area of the ICT industries; this meant improving the provision of online services to increase productivity, advancing the construction of ICT infrastructure, and perfecting the legal and regulatory environment. (Im and Sea, 2005, p. 195) The latter was one of the objectives for the export of governmental on-line service systems on the government. In 2011, Lee Myung-bak's administration set up the "Smart Electronic Government Plan" to promote the services of the government using technologies developed for mobile devices. (NIA, 2014, pp. 17-18) This aimed to address the e-government in real time for citizens, using mobile devices (online citizens' petitions, fostering communication with residents by widening the participatory channel, increasing communication with global society and international digital cooperation, and connecting, integrating and managing all government information resources efficiently. (MOPAS, 2011) UNPAN valued the performance of South Korea, placing it in

the first place of its E-Government Ranking for three consecutive periods (2010, 2012 and 2014), passing to the third place in the last measurement that dates from 2016. (United Nations E-Government Knowledgebase, 2016) This index is a combined measure of provision of online services, telecommunications connectivity and human capacity that reflects how a country uses information technology to promote access and the inclusion of its people. (United Nations E-Government Knowledgebase, 2018) As of 2013, a new paradigm of e-government was established in South Korea under the denomination of Government 3.0. (Chung, 2015, p. 26) According to Nam (2013), Korea's National Information Society Agency (NIA) argued that the 3.0 paradigm should move towards a personalized and intelligent government that fosters the use of artificial intelligence. This gave way to a new generation of e-government where computers defined, understood, and deduced the meaning of information. (p. 4)

In the website of the Ministry of Interior and Security of the current administration of President Moon Jae-in (Ministry of Interior and Security), it is noteworthy that South Korea occupies the first place in both the Electronic Participation Index (EPI) and the Electronic Development Index (EGDI) of the UN´s Electronic Government Survey in 2010. Since then, South Korea has been identified as a world leader in e-government, raking first in EPI and third in EGDI in the the UN's Electronic Government Survey in 2018. The key public participation policies of the Moon Jae-in administration, "Gwanghwamoon 1st Street" and "Blue House Online Petition System", allow citizens to make policy proposals online and the "Government 24" portal offers public services to citizens 24 hours a day. Finally, the South Korean government would like to share experiences and knowledge on e-government with the international community and carry out digital innovation through the incorporation of new technologies in digital government to help promote constant innovation in the government and the society. It also notes that, while international cooperation with advanced countries is promoted, it also support developing countries through knowledge sharing and technical support.

# TECHNOLOGICAL COOPERATION AND EXPORTATION POLICIES

E-Government and ICTs have a particular potential to promote the economy and development: ICTs take the form of investment, rather than consumption, and include the transfer of valuable high technology, scarce in less developed countries. (Schopf, 2017, p. 38) South Korea has invested heavily in the sector; to which currently allocates more than 90 billion dollars. Since its economy has developed based historically on an export model (Chiang, 2017), it is pertinent to observe the advance of ICT in South Korea and analyze the intergovernmental cooperation with Latin America, in order to understand that it has the objective of opening the market.

In 1996, the Republic of Korea joined the Organization for Cooperation and Economic Development (OECD) and began to donate Official Assistance to Development (AOD) in 2010. For 2017, it was listed already as first supplier of AOD for e-government to countries in development, representing approximately 40% of AOD of the OECD in the field of ITC. (Schopf, 2017, p. 33), incorporating this modality to its export / cooperation strategy. This is also observed in the sending abroad of teams of specialized professionals and experts in ICT and with the invitation to foreigners to take courses taught in South Korea by Korean specialists. According to data from 2010, ICT experts and teams from the Ministry of Technology and the International Cooperation Agency of Korea (KOICA) provided on-site computer education to more than 100,000 employees, professors, teachers and students in more than 67 developing countries. The infrastructure established for assistance included communication networks, consolidated government computer centers and access centers with training facilities, software and more than twenty thousand used computers. (Schopf, 2017, p. 39) The *Cyber Korea 21* plan was the first that stipulated among its objectives to promote the export of technological products. In its section on supporting ICT companies, it mentions: *"The government will strengthen export bases by providing information and developing basic technology. It will endeavor to transform ICT into one of the main export industries by means of the support of high potential products. It will also develop plans to increase the competitiveness of these articles"*. (MIC, 1999, p. 60)

Since 2002, South Korea began to export e-government systems and within ten years achieved an export volume of more than US$ 230 million directed to more than 30 countries of Asia, Africa, Latin America and Eastern Europe. The export strategy was perfected from 2016 with the launch of the *Korea e-Government 2020 Master Plan*. (NIA, 2015) In mid-2019, the South Korean Ministry of Transport assured that South Korea will invest 500 billion won (US$ 425 million) in Smart Cities projects abroad that will be built by local companies. In association with private investor funds, the ministry aims to establish a Global Plant, Infrastructure and Smart City (PIS) fund worth 1.5 trillion won by December, according to the Ministry of Lands, Infrastructure and Transportation. (Korea Bizwire, 2019)

In the South Korean Ministry of Interior and Security, it was established that the basis for spreading the good government of South Korea was through an extended cooperation in the public administration. Sending South Korean delegations to countries, requesting cooperation in public administration, in Europe, Middle East-North Africa, Central and South America, and Asia, and expanding the scope of cooperation in the field of public administration. Prepare follow-up to the activities of the South Korean delegations on cooperation in public administration, and provide full support to requests for follow-up cooperation carried out by the partner countries. (MOIS)

In November 2019, during the inauguration of the Busan Eco Delta Smart City project, President Moon argued that the Republic of Korea together with the Association of Southeast Asian Nations (ASEAN) can be pioneers in the Smart Cities industry. (ARIRANG News, 2019) The president assured that South Korea will share with its Asian neighbors its knowledge and experiences on these issues to establish a cooperation network in the region. This reinforces the idea that the Republic of Korea seeks to position itself strategically as a regional and world leader in issues related to Smart Cities.

It should be noted that the private sector played a key role in the absorption of technologies and the development of innovative systems to address the challenges of digitalizing government records and citizen-government interactions. (Young and Kailash Joshi, 2016, pp. 1-5) Currently the telecommunications giants in South Korea SK Telecom, KT and LG Uplus are entering the global market with wireless technology 5G in an effort to discover business opportunities beyond the domestic market. (Yeo, 2019)

## RELATED COMPANIES AND CONSULTANTS

Projects related to the training and promotion of e-Government / Smart Cities are accompanied by the presence of private companies. The items cover the full spectrum of services that could be needed in the implementation of what was suggested in training: from data storage and wireless technologies to intelligent parking. A clear example is the World Organization of Sustainable Smart Cities (WeGo) established in 2010 (see Images 2 and 3), which, with its training programs, promotes the use of ICT in public administration and fosters collaboration between cities. (World Smart Sustainable Cities Organization) Its objective is to form an international association of local cities and governments, providers of smart technology solutions, and national and regional institutions. Its president is the Mayor of Seoul, Won-Soon Park, city where it has its headquarters, and has regional offices in Chengdu (China), Ulianovsk (Rusia), Beyoğlu (Turkey) and Mexico City (Mexico). Among its associates, it works with companies, in addition to Koreans, from countries like China, France, United Kingdom, United States, etc. In July 2019, Park visited Colombia, Costa Rica, Venezuela, Guatemala and Mexico to promote WeGO in Latin America. That same year the Municipality of San Antonio de Areco (Buenos Aires, Argentina) became a member of the network and participated in the training program. (Municipalidad de San Antonio de Areco)


***Image 2. World Organization of Sustainable Smart Cities***

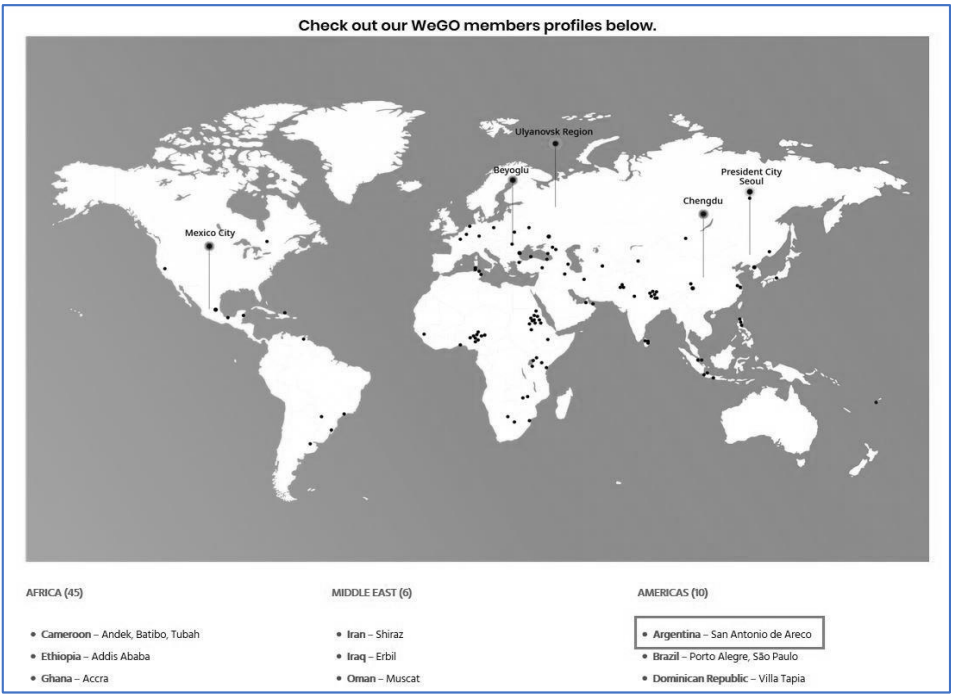


***Image 3. Cities members of the World Organization of Sustainable Smart Cities***

For its part, Alliance Smart Latam is the permanent Latin American collaboration platform that links and articulates efforts aimed at pushing the development of cities and territories towards the Smart City model. (see image 4) It originated as an initiative of the Smart City World Expo Congress, driven by UN Habitat, totally linked to the implementation of the New Urban Agenda and the Sustainable Development Goals of the UN. (UN Habitat) The Smart City World Expo Congress promotes social innovation, the establishment of associations and the identification of business opportunities in cities all over the world. (Smart City Expo World Congress) Microsoft is one of the associated companies and sponsor of this event, together with the World Bank and WeGo, among others. In July 2019, Germany mandated that using Microsoft's standard Office 365 configuration in the cloud exposes personal information of students and teachers to possible access by US authorities. This European country ruled that Windows 10 and Office 365 do not comply

with the General Data Protection Regulation of the European Union (GDPR) for use in schools. (George, 2019)


***Image 4. Alliance Smart Latam***

## THE LATIN AMERICAN CASE

The advancement of South Korean ICTs in South America has the objective to open the markets. In 2016, with the launch of the *Korea e-Government 2020* plan (Kim, 2020), the government, together with private companies specialized in the development of new technologies (such as LG, Samsung, etc.), exported to more than thirty countries advisory services in relation to e-Government. It should be noted that private companies could only sell their products through government intervention. This country also provides funding (through a program of OAD) for the implementation of e-government systems complemented by assistance from the World Bank and the Inter-American Development Bank (IADB). Similarly, the Korea IT Learning program was created to invite foreign officials and international organizations to share their experiences on the e-Government development and thus be able to design their own IT policies. (NIA)

In 2016 South Korea, through its Ministry of Interior, signed a memorandum of understanding with the Argentine Ministry of Modernization in electronic voting surveys (export of machinery, software and advice), which

finally broke through Argentine legislative opposition. A year later, the Municipality of the city of La Plata (later Berisso and Ensenada joined) came into contact with South Korea, through the Smart Cities Plan, through the IADB. According to informants contacted of the Secretariat of Modernization of the Municipality of La Plata, in this type of programs, South Korea provides the knowledge (know how) and survey of the situation of the requesting country. It is IADB the organization that facilitates financing for implementation, for which it needs an external entity to assess it. This is why a delegation from the city of La Plata traveled to South Korea to "defend the project" (words of the informant), explain the needs and present an action plan to obtain the funds. Afterwards, a diagnostic stage followed (mobility, risk, security and communication) by Korean consultants. It was during the stage of funds assignment that the IADB decided that there were "other priorities" in the country where to allocate the funds: "You already have the guide, you can continue on your own".

With the training and recommendations of Korea, the Municipality of La Plata managed to do the following:

1. Mobility plan - Signs on the avenues were improved and speed control sensors were installed, as well as anti-panic buttons in some places (the informant points out that it cannot be installed everywhere like in South Korea since "We we have vandalism").
2. Program "When does the bus arrive?" - The municipal transport companies (July 9, line 307, etc.) sent their representatives to the training that was held in South Korea. Then they implemented these ideas independently because in the previous administration they asked them for "gifts" and they did not want to take that risk again.
3. Civil Defense - A Risk Control Plan was formulated: radars (18) and sensors were installed in the rivers to anticipate rainwater growth due to the rains, etc. Action protocols for emergencies were also planned and distributed. What has not yet been implemented is a communication system between municipalities.
4. Monitoring Center - Security cameras (1,000) were installed and public lights were replaced with LED lamps to improve vision / recording. (see image 5)


***Image 5. Monitoring Center of the Municipality of the city of La Plata***

From the Modernization Secretariat it was assured that, to approve the financing of these projects, the IADB and South Korea give priority to the cities that appear together. When asked about the inclusion of South Korean technology companies in the project, the informant assured that, during the training, the South Korean government "recommended" that certain technology be used ("they give you everything together") but it is not exclusive and remains at the discretion of each country.

Attempts were made to contact members of the Korea Research Institute for Human Settlements (KRIHS) that were involved in the approaches with the Municipality of La Plata, but several of the emails sent returned in error in the email boxes provided or have promised to send information, but have not responded yet. Neither have the approaches with the Planning Secretariat of the Municipality of Ensenada, nor the Municipality of Berisso, nor the IADB, reported success.

In April 2019, the *Expo Smart Cities-Buenos Aires* was held in Argentina (see image 6), with the support of institutions like the World Bank, and the city government of Buenos Aires. (Expo Smart Cities Buenos Aires) One of the "allied" institutions of the congress was the Modernization Secretariat of the Presidency of the Argentine Government. The Modernization Secretariat of the National Government and the Digital Government sector were contacted,

without success. Finally, an email was also sent to the *Atlas Smart Cities* consulting in Argentina, with no response so far.


***Image 6. Expo Smart Cities Buenos Aires***

We propose to investigate also the situation in Chile and Mexico, two member countries of Asia-Pacific Economic Cooperation (APEC). In the case of Chile, in 2015 the heads of both countries, Michelle Bachelet and Park Geun-hye, signed a memorandum to expand the exchange in the areas of ICTs, health and cyber security. These negotiations were extended in 2017 through the Cooperation Forum on Public Administration, aimed at the bilateral exchange of experiences. About this, Bachelet said: "Chile has set out to share Korea's experience with ICT". (Limb, 2015)

In relation with our intention to expand the information, the Technical Secretariat of the Permanent Advisory Council for the Modernization of the Chilean State has responded that they do not deal with these projects. The Chilean Digital Government section (of the Executive Council for Modernization of the State, dependent on the Presidency) sent us the contact information of a member of the Policies and International Relations of the Digital Government Division, with no results so far.

We tried to contact, without success so far, with the Production Promotion Corporation that is the agency of the Government of Chile in charge of promoting national production and regional economic growth. (Corporación de Fomento de la Producción) Among its goals is the promotion of innovation and technology, through its Government Laboratory or Committee on Innovation in the Public Sector (CIP), which has the mission of developing, coordinating, facilitating and promoting innovation processes centered on

people within public sector institutions, and in the articulation between citizens, the State, its officials and the private sector.

The Municipality of Santiago has been contacted with the same query and we have not received any response. (Municipalidad de Santiago) The Chilean Pacific Foundation has been contacted and they have provided contact with the Asia Department of the Chilean Ministry of Foreign Affairs's Secretariat for Economic Relations, but they have not sent a response yet. Also the contact with the Executive Council for Modernization of the Chilean State that has under its wing the Modernization Secretariat, as well as the Government and Digital Government Laboratory was unsuccessful. (Gobierno Digital)

Through the documents of the South Korean Foreign Ministry (Embassy of the Republic of Korea in Chile), we know that in 2017 the *Chile-South Korea Public Administration Cooperation Forum* was held. This event was organized by the Embassy of the Republic of Korea in Chile, together with the Ministry of the Interior of the Republic of Korea, the Ministry of the General Secretariat of the Presidency and the Ministry of Foreign Affairs. As reported by the Yonhap News Agency, *"the Chilean government asked its South Korean counterpart to present signatures related to big data, the communication security network in crisis and the intelligent transport system, among others".* (Yonhap, 2017)

In the case of Mexico, in 2015 an exchange of technical assistance was agreed with the South Korean government. In the period 2012-2018 the training of the Municipality of Mexico City was carried out by WeGo. (World Smart Sustainable Cities Organization) In 2018, the establishment of the WeGO Mexico headquarters was formalized, with the presence of the WeGO General Directorate of South Korea and members of Computing Committee of the State and Municipal Public Administration (CIAPEM) (see image 7). (CIAPEM) It is a civil association that seeks to promote the development and use of projects related to ICT in state and municipal governments. Its objective is to optimize as many procedures as possible to transform society, helping administrations to reduce the delivery time of services, saving resources and increasing the concentration of information; thus deriving agility in the internal functioning of the Government. One of CIAPEM's allies is Alliance Smart Latam. The renewal of interest in these issues was reflected also in the organization in July 2019 of the Expo Smart Cities Puebla (Mexico). Due to

the scarce information available on the Internet in this regard, an attempt was made to expand the data with the possible inputs from the University of Nuevo León, Monterrey. However, no data was obtained either.


***Image 7. Computing Committee of the State and Municipal Public Administration***

## CONCLUSIONS AND RECOMMENDATIONS

South Korea's cooperation in the region, based on the selected countries, highlights ICT and e-Government as a priority area, currently focused in Smart Cities, which is reflected in the orientation of ODA and the participation of KOICA, as well as in the efforts to achieve signing of bilateral agreements. There is no doubt the economic importance that this type of cooperation can achieve when it is argued that e-government exports will reach one billion dollars through the creation of E-Government Cooperation Centers in five strategic regions around the world. All of this will take advantage of an enhanced framework for public-private collaboration (NIA, 2017, p. 14), so it is admissible to argue that the final purpose is not only to contribute to development, but also to expand markets for South Korean firms.

In this sense, Lee (et al.) argues, "South Korean companies are hired to build telecentres and e-government systems. Companies from the host country are excluded from participation". (Lee et al., 2008, pp. 9-10) In this scenario, South Korean government plays a fundamental role: it identifies the opportunities, generates the spaces, promotes and facilitates their sale to the target countries. Furthermore, as South Korean e-Government systems may

need to adapt Latin American regulations and procedures; advisory services and intergovernmental cooperation reinforce their central role. As Kim and Yoshi point out, South Korean private companies sell their e-government systems to several government agents or private entities in importing countries, most of which sales depend on concessional financing arranged by the South Korean government through ODA, from financing from the Asian Development Bank, the World Bank, or the Economic Development Cooperation Fund (EDCF). (Young and Kailash Joshi, 2016) Taken in general, all this accounts for a consumption-based approach, where recipient countries have a passive role, far from seeking participation in the production of information and communication services.

Based on what we found in the research, the subject of e-government and smart cities is an area with little promotion at a general level, especially in Argentina. Perhaps due to mismanagement in relation to electronic voting (Molina, 2017), mistrust was generated regarding the modernization of the management of certain aspects of State. Nor is it explicit that the training and technology are provided by other countries.

For its part, the South Korean government carries out little promotion of its activity as a promoter, at a regional level, of activities related to e-Government and Smart Cities. Trying to obtain information was one of the main obstacles that we faced due to the poor disclosure of the memoranda, agreements and results of the bilateral agreements. There are no clear local and foreign references when it comes to obtaining information.

Another of the difficulties, according to what the informants have stated, is that due to the experience and history in our country, there is a tendency to distrust intermediaries when carrying out projects with foreign subsidies.

An important point to take into account to generate trust and transparency, when seeking to implement a Smart City policy, is to provide details on the destination of the information of the citizens and its relationship with the law 25.326 of Protection of Personal Data (Agencia de Acceso a la Información Pública) that rules in our country for the management of information (health, political affiliation, sexual orientation, etc.). This is relevant in relation to the installation of surveillance and monitoring cameras: what information is collected and what is done with that data. For example, if they are stored in the Microsoft cloud, it must be taken into account that their servers

are located in the United States, where laws such as the Patriotic Act apply, which enables the government of that country to access information for national security.

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