Press Release
Waseda University International e-Government Ranking 2013
March, 25th 2013
I. International e-Government Ranking (Final scores)

The Waseda University Institute of e-Government is pleased to release the *2013 Waseda University International e-Government Ranking*. This is the ninth consecutive year of monitoring and surveying the development of e-Government worldwide (55 countries) by the research team of Prof. Dr. Toshio Obi, Director of Institute of e-Government, Waseda University. The Team has made the meetings with many international and national organizations including OECD, ITU, and UN. The research has been conducted by Waseda University in cooperation with International Academy of CIO with partner universities to organize the workshops and meetings.

II. Main Trends of e-Government by Indicators

The main indicators and their weights are still kept in order to maintain backward compatibility. The final score in Ranking 2013 is shown in the table 1: There are seven main indicators used to rank the e-Government development of countries in the world. These indicators are [*Network Preparedness], [Required Interface-functioning applications], [Management Optimization], [National portal], [CIO in Government], [e-Government Promotion], and [e-Participation (Digital Inclusion)].* These seven indicators are further broken down into 30 sub-indicators or dimensions as table 3

1. Network Preparedness/Infrastructure

Regarding e-Government development issues, Network preparedness is the basic infrastructural foundation for effective e-Government implementation. Infrastructure has long been available in many countries and become an important tool to connect the citizens and enterprises to government. In our survey, the "Network preparedness" indicator comprised 10% of the total score. The sub-indicators of this indicator section are "Internet Users, Broadband Subscribers, PC Users and Mobile Cellular Subscribers".

The Internet Users indicator shows that the availability of Internet access for citizens results in major opportunity to apply e-government services. Broadband penetration issue is one of the key market factors, which indicates the accessibility to the designated online services in high speeds. Broadband access will stimulate citizens to use such services and encourage the development of new services.

The PC is the major access platform for many e-Government services; therefore, the PC User is also the main sub-indicator to the successful development of e-Government.

Concerning the infrastructure of information technology, developed countries such as Singapore, Korea, USA, Finland, Japan, United Kingdom and some Nordic countries are in advanced level of their network infrastructure. The emerging technologies in terms of 5 preparedness are spread across the whole of each of the countries mentioned above with almost similar percentage in all items used in the evaluation.

2. Management Optimization

The "Management Optimization" indicator reflects the usage of ICT for improving internal processes and measuring the government‟s computerization and the level of ICT integrated utilization. To systematically and effectively implement the practical purposes of e-

government to the whole bureaucratic system, it is required for government services to be available for all stakeholders and to make immediate and continuous gains. Standardization of service procedures and information systems to achieve internal effectiveness and efficiency of governmental operations have been constrained by many reasons. On this regard, both PDCA cycle and EA are extremely significant for effective evaluation to resolve the problems. In our survey, because of its importance this indicator makes up 20% of the total score. This indicator refers to the e-Government strategies linkages at national and sub-national level (e-municipality), which encompasses the entire national government with well-defined targets.

In the top of this indicator, all countries have good e-Government strategies or clearly road map where targets have been achieved. In top 10, for the first time to mark the appearance of Germany, Netherlands, New Zealand and Estonia, these countries have completed e-Government target and timeline. They receive the excellent score. The "management optimization" along with "network preparedness" constitutes foundations for the effective implementation of e-Government;

3. Required Interface/Applications

This main indicator refers to the e-Transaction as well as e-Services that government provides to citizens and enterprises. E-Services such as e-Tender system, e-Tax systems, e-Voting, e-Payment system, Social Security services (including the payment of pensions, social benefits and insurance), Civil Registration services (such as issuing birth and marriage certificates) and e-Health systems are examined. According to our survey, the "required interface" indicator has an important role in implementing the online program; therefore it accounts for 20% of total score.

The most recent trends show that some of governments among developing countries shift to user-oriented strategies and develop one-

stop-service portals. They are also planning to gradually expand and enhance variety of service delivery.

In the area of e-government applications, e-Tax and e-Tender applications seem to be most widely implemented in almost top 10 countries. Compared with last year, Finland stands in the top with much information changed on e-services. European countries are no longer represented in the top 10 compared with last year, instead are Asian countries.

Most developed countries are in advanced level of e-health systems, while developing countries have not focused on these services due to low level on technical and infrastructure framework. Singapore, USA and Taiwan are equally No.2.

4. National Portal/Home Page

The national portal is the foundation of e-government and a basic interface for stakeholders to access government in an electronic way. In our survey, we select four factors affecting the portal significantly; they are "Navigation, Interactivity, Interface, and Technical". Eighteen parameters are adopted to evaluate the interface of a national portal. As for Navigation, fourteen parameters are employed to test the basic functions of a portal. Interactivity is measured with fifteen parameters. Twelve parameters are adopted for technical indicator to test the innovativeness of portals.

National portal is the face of the Government to communicate with citizens through the provision of e-services, guidance information as well as other utilities, therefore the weight of this indicator account 15% in total score.

Thought this survey, we found that the US national portal is the best portal with full technics and utilities provide to citizens, followed by Singapore and Finland. UAE gets excellent score and tied at 4th place for the first time. Compared with last year, some countries such as, Netherlands, Japan jumped to 4th place.

Most of National Portals in the top ten countries have been using Web 2.0 technology and combining SNS features as well as being user-

friendly. All the portals have easy-to-use electronic services for finding information.

5. Government Chief Information Officer (CIO)

The Government CIO is a very important indicator in Waseda e-Government ranking. The CIO is expected to align management strategy with ICT investment in order to achieve harmonization between business strategy, organizational reform, and management reform; hence, the Government CIO is considered by many governments to be one of the key factors in the success of e-Government implementation as ICT leaders.

In this ranking, we split this indicator into four elements: firstly the presence of CIOs in government; secondly, the extent of their mandate; thirdly, the existence of organizations which fosters CIO development, and finally, the special development courses and the degree/quality which teaches CIO related curricula.

Singapore, USA and Korea are sharing the first place; these countries also got full score in this indicator. This year, Thailand has made positive progress changed in policy making related to CIO, therefore, she is the first time in top 10.

Japan still holds the same position as the previous year and tied at 5th place, Most developing countries receive low score since there are no strong evidence on CIO mandate, CIO Presence as well as CIO development programs

6. E-Government Promotion

The "e-Government Promotion" indicator is evaluated by using a comprehensive list of parameters, which judges teach e-Government promotion development. In Waseda e-Government ranking, it includes activities involved in supporting the implementation of e-Government such as legal frameworks and mechanisms (law,

legislations, plans, policies and strategies). In other words, these activities are carried out by the government in order to support the development of e-Services as well aa In-house operations. This indicator accounts 10% in total score

Both Singapore and Korea are in first place for its e-Government Promotion Activities, followed by Finland and USA with 3rd place, Finland jumped five steps and tied at 3rd place with USA. This is the first time Finland in this position. Compared last year, Japan dropped down and placed at 5th, the same position with UK, while last year UK was not in the top ten.

Almost developing countries got low score due to lack of law or legislation and policies involved e-Government Promotion. Especially, there are activities such as training, conferences or advertisements and over-sight committee on e-Government.

7. E-Participation

E-Participation is a term referring to ICT-supported participation in government and he degree of development in each section and the current status of

governance processes. Processes may be concerned with administration, service delivery, decision making and policy making. This is the third year we introduced this indicator. The Waseda ranking adopts the UN definition and measures the presence of e-participation through three sub-indicators, i.e. e-Information, e-Consultation, and e-Decision making that are in turn divided to many parameters upon which e-Participation are measured.

This year, there are six countries sharing first place with full score. All countries in the top ten are developed countries which means that the application of ICT in the management and leadership of government have been implemented very effectively in developed countries.

In developing countries, almost countries have good situation with e-Information but regarding e-consultation or e-decision, there is no

evidence to show that the government takes the opinions of citizens in all processes. 6 countries are the top group

The main indicators and their weights are still kept in order to maintain backward compatibility. The final score in Ranking 2013 is shown in the table 1below:

III. Waseda e-Government ranking by groups

The latest edition of Waseda e-Government Ranking surveys e-Government development of 55 countries (Economies) altogether. Same the countries number last year. Our comparisons are categorized in three groups: the higher scoring group, the middle scoring group and the lower scoring group.

(1) The upper scoring group

A feature in this group, all countries are developed countries with very high total score, in top ten, 40% countries from Asia, 50% are European countries and only one country from America. Singapore still in the top in total ranking, same position compared last year. Thanks 8 to policies and they have been clearly roadmap to develop e-Government, Finland replaced USA in the final ranking and jumped to 2nd place.

In this group, there are many changes in policies and strategies for development of e-Government in all countries, they also receive more scores in some indicators than the previous years. Especially, Singapore, this year they have new changed on many sectors transformation such as education, healthcare, tourism and also social enablement. According to IDA of Singapore this year the Fiber-broadband coverage is more than 95% of household, they also have key programs focused citizens, businesses and Government with changing on improving service delivery to citizens by introducing new e-Citizen portal as well as upgrade mobile government and one inbox services.

(2)   **The middle scoring group**

Almost countries in this group are developing countries, stand out in this group are Thailand, Malaysia and UAE. Some countries from Euro are Portugal, Turkey and Spain, for example, also have a good position. But compared last year, they did not much change on e-Government strategies and policies. Some countries from Southeast Asia also in this group, they are Brunei, Vietnam, Indonesia and Philippines. In these countries, Vietnam jumped one step and tied at 37th place, while other countries fell down to the bottom of this group

(3)   **The lower scoring group**

This group included countries with total score less than 50 pointswith 49.72 score and tied at 42 place to Uzbekistan with only 30.35 score and ranked at 55th place. In this group, we do not find any change information and no update from government as well as there aren`t evidence on e-Government development and activities. There are some reasons can explain this issue, such as some countries are in a period of political crisis (Egypt), other countries that government has not taken any specific action to promote e-Government. However, Iran is an exception, they have very good National portal, friendly with citizens but they did not focus on other indicators such as CIO, e-Participation or Management Optimization.

IV. Ranking by APEC, OECD and population size

1. Ranking for the Economies in APEC group

This year is the second time we have divided the countries based on the international organization group (APEC and OECD group). In APEC, there are twenty-one economies members. In the Waseda e-

Government ranking it covered twenty economies, except Papua New Guinea is not in the list.

Top three countries in this group is also top ten countries in total ranking, they also are developed countries. Compared with last year, top three was the same position, they only changed in the total score that received. This time, Japan replaced Australia and jumped to 4th place. Chinese Taipei and Canada are also inverted for each other. In this list, only Peru is named in lower scoring group. Some countries in Southeast Asia such as Indonesia and Philippines were losing the position and tied near the bottom of the list.

2. Ranking for OECD countries

For the OECD countries group, the Waseda University e-Government ranking has covered 25 over 34 country members. Almost OECD members are high-income countries with a "very high" Human Development Index (HDI) and are regarded as developed countries. This year, Nordic countries dominate in the top ten in this group and also in total ranking. These countries have the advantage of Network Preparedness and broadband access. In e-Government development, these countries have long term strategy to develop. Finland replaced USA and jumped into the first place, they had a strategy proposal for the use of ICT in the Public Administration 2012-2020, they also has succeeded in provision of proactive public e-services and information and continues its efforts in e-government implementation demonstrating constant work on improvement of interoperability, development of coherent enterprise architecture and increased cooperation between state and local authorities in relation to Information Society issues.

3. Ranking for "over 50 million population" countries

The biggest population countries over 50 million people are twenty-one countries, but in the list, we pick up only 10 countries. The countries with large populations have difficulties in implementing e-Government and distributing e-Services to nation-wide all citizens. This is true in the case of China and Mexico. Almost countries in this list are developed countries, all countries in the bottom are developing countries, same as last year, the gap between developed countries and developing countries is very high

4. Ranking for "less than 10 million population" countries

In Waseda ranking, there are 14 countries which have population less than ten million people, in top ten countries (table 7), they are developed countries. They have a high score in terms of e-Government in the ranking. Therefore, it can be said that in the countries having the small population the deployment of e-Government implementation and development could be easier and more effective.

Singapore has implemented e-Government very successful and effectively. This is a special case and the best practice for other countries to learn and apply. Singapore, a city-state, has no local government divisions. In order to monitor and manage its e-government development better, the Singapore government chose the centralized approach. The government also owns all the central ICT infrastructure, services, and policies in the public service. Thanks to the centralized infrastructure, all e-Services provided by the government 11 can utilize the same security, electronic payment, and data exchange mechanisms. Therefore many countries with small populations can apply this model to implement e-Government rapidly.

V. New Trends of e-Government development found from the Survey

1. Cloud Computing

Cloud computing is the delivery of computing as a service rather than a product, whereby shared resources, software, and information are provided to computers and other devices as a metered service over a network. Related to e-government, public sector should take advantage of those improved conditions for development and deployment of e-government solutions. This can be achieved through the adoption of new architectures such as cloud computing and service-oriented architecture, in the public sector. Cloud computing permits to uniformly cover the whole country with e-government solutions, independently of divergence of local administrative units that may be better or worse prepared to provide e-services. Service-oriented architecture facilitates provision of compound services covering whole customer processes,

E-Governance with cloud computing offers integration management with automated problem resolution, manages security end to end, and helps budgeting based on actual usage of data. At the global level, cloud architectures can help government reduce duplicate effort and increase effective utilization of resources. This in turn helps the government to reduce pollution and manage waste effectively. Through cloud computing, e-Government can rapidly deploy applications where the underlying technology components can expand and contract with the natural ebb and flow of the business life cycle**.**

2. Mobile government and Social Media

Mobile government, sometimes referred to as m-Government, is the extension of e-Government to mobile platforms, as well as the strategic use of government services and applications which are only possible using cellular/mobile telephones, laptop computers, personal digital assistants (PDAs) and wireless internet infrastructure.

Mobility is no longer a technological revolution. It is more about how businesses and governments can provide a better social infrastructure through mobile applications and services. Adoption of mobility, therefore, is an indispensable asset for the public sector in meeting the demands of citizens. While e-Government is an important step taken by many governments, the provisions of services through mobile technologies is now becoming compulsory. M-Government emerges as the next big wave in the process of ICT use in the public sector even if supplemented activities to e-Government. Mobile Government is primarily concerned with the study of these major social and technological changes in the public sector.

The main trends on e-Government in all developed government are integrated social media with privacy protection issues. Government can use social media to connect with citizens or businesses to exchange information interactively. Social media has substantially changed the way that organizations, communities, and individuals communicate. Social media 12 provides a powerful platform to help government communicate directly with citizens and be more visible on the Web

3. Open Government/Big Data

The OECD defines [open government] as „the transparency of government actions, the accessibility of government services and information and the responsiveness of government to new ideas, demands and needs". Together, these three building blocks are seen to support a number of benefits for government and societies: improving the evidence base for policy making, strengthening integrity, discouraging corruption and building public trust in government. The open government agenda is transforming how governments around the world conduct their business. Characteristics: are as follows: 1.Agile and friendly access of public service. 2. Real-time government information /services 3.Applications of Social Networking to enhance interactions of both government and the public. 4. Utilization of Open data.5.Transparency of e-Government.6 Need of Global standard

The term big data has come to refer to these very large datasets, and big data analytics to refer to the process of seeking insights by combining and examining them. The concept of open data is not new; but a formalized definition is relatively new. Big data sizes are a currently ranging from a few dozen terabytes to many petabytes of data in a single dataset. There are some trends related to this growth in big data –not only contributing to the growth but also providing part of the solution to managing such large datasets. Samples of Usage will be e-Health, Space, Disaster as well as e-Government,

4. BCP for disaster management

A Business Continuity Plan (BCP) / Disaster Recovery Plan aim to ensure that an organization‟s critical business functions can continue to be executed in the event of a major disruption or disaster. The organization is more resilient, survives the event and is able to minimize the impacts/damages on its business operations.
In the aftermath of terrorism and recent natural disasters such as the earthquake in Japan on 11th March, 2011 and flooding in Bangkok in October, 2011, the government and businesses have recognized more than ever the need of preparedness for disasters. Companies are striving to meet the demand for continuous services. With the growth of e-Commerce, e-Government and other factors, system availability expectations are driven toward 24Hx365D. To recover all the activities and databases, it is necessary for e-Government to prepare BCP for disaster management.
Strengthening BCP and Supply chain as disaster management is the key for solution. A Business Continuity Plan / Disaster Recovery Plan aim to ensure that an organization‟s critical business functions can continue to be executed in the event of a major disruption or disaster. The organization is more resilient, survives the event and is able to minimize the impacts/damages on its business operations. In the aftermath of terrorism and recent natural disasters such as the earthquake in Japan on 11th March, 2011 and flooding in Bangkok in October, 2011, both government and businesses have recognized

more than ever the need of preparedness for natural disasters and cyber terrorism.

5. Digital Inclusion in Ageing Society

Digital inclusion, like accessibility, is a term that is rarely explicitly defined. Digital Inclusion is concerned with addressing inequalities, where those unable to access technologies are disadvantaged and marginalized in society and therefore digitally excluded. The term is related to activities such as Access and Digital Inclusion, Use and Digital Inclusion, Participation and Digital Inclusion, and Empowerment and Digital Inclusion.

Regarding the e-Government concept, Digital Inclusion means both inclusive ICT and the use of ICT to achieve wider inclusion objectives. It focuses on the participation of all individuals and communities in all aspects of the information society. One of the problems that many countries are facing today is the ageing population i.e. increase in the proportion of older people (Japan is a typical example) which requires bigger funds for social welfare and the support of government. In this regard, ICT can be applied to solve the issues caused by a rapidly ageing population even in the global context. For instance, ICT can help in providing new and flexible tele-conference and e-learning opportunities, which connect senior people to each other and to younger generations.

Through our past 9-year research, we found that the ICT application for Ageing Society is becoming extremely important. Furthermore, it is an opportunity which must be taken by government in order to have comprehensive and speedy solution to fully apply ICT on this issue.

6. Cyber Security and National ID card

Cyber-attacks are seriously concerned with e-Government security in any countries. Cyber security can simply be defined as security measures being applied to computers to provide a desired level of protection. E-Government operations are increasing with citizen demand for timely and cost effective services. Security associated with individual systems is similar to many e-Commerce solutions. The span of control of e-Government and its impact across a community defines a system that is more than a sum of individual systems. E-Government faces the same challenges that faced e-Business in private sector.

In fact, in almost countries, each citizen has a number of different types of identification issued by different authorities. It is difficult for other agencies to retrieve information from one another when they need it, therefore the new trends here is integrated all personal information into a centralized database -one ID card for one stop service

http://www.e-gov.waseda.ac.jp/pdf/Press_Released_on_e-Gov_ranking_2013.pdf