



**Asia-Pacific
Economic Cooperation**

2020/DESG/011

Agenda Item: 4

COVID-19 and the Digital Economy

Purpose: Information
Submitted by: Korea



**Digital Economy Steering Group Special
Virtual Meeting on COVID-19
26 June 2020**

We invite member economies to share information on digital-economy related policy interventions, initiatives, lessons learned, and/or solutions in response to COVID-19 ahead of the 26 June 2020 APEC Digital Economy Steering Group Special Virtual Meeting using the template below. The descriptions of the issues below are **only suggested points** to help members with the exercise, and members need not regard them as mandatory points to follow in generating their information sharing in the template. Members are advised to submit the completed template below through the APEC Collaboration System (ACS) no later than 23 June. Members are able to view and download completed templates submitted by other members on ACS ahead of the Special Virtual Meeting, and this will help DESG optimize the limited meeting time on 26 June.

- a) **Business continuity and resilience** – As COVID-19 has caused significant disruptions to economic activities and business operations, members may wish to share how they support business continuity and resilience in terms of:
 - i. Ensure access to reliable connectivity and relevant digital technologies, in particular among MSMEs, women, and young entrepreneurs, to help overcome digital divides;
 - ii. Encourage businesses, including MSMEs, to leverage digital technologies and solutions in carrying out production, business activities, and international trade, so as to maintain the stability of global supply chains;
 - iii. Encourage the digital transformation, including through digitalized production systems, e-commerce, digital supply of services, e-invoicing, and e-payments, and other services, as well as smart working solutions, including remote working, and innovative new business models.
- b) **Exchange and use of data in a secure manner** – Members may wish to share how they:
 - i. Encourage collaboration to collect, pool, process, and share reliable and accurate non-personal information that can contribute to the monitoring, understanding, and prevention of the further spread of COVID-19 as well as other infectious diseases;
 - ii. Ensure the collection and processing of COVID-19-related data is being done in an ethical, transparent, safe, interoperable, and secure manner that protects the privacy and data security of individuals, in line with prevailing international measures and domestic laws and regulations.
- c) **Use of digital technologies and solutions including for tracing purpose** – Given the importance and urgency of slowing down the spread of COVID-19, members may wish to share how they:
 - i. Use digital technologies and solutions to enable individuals and firms to continue to participate in the economy;
 - ii. Use digital technologies to help contact tracing efforts;
 - iii. Promote digital work and the development of basic digital skills in companies, public institutions, schools, and universities;
 - iv. Encourage and collaborate with the research community, private sector, and business entities to promote the use of digital technologies and solutions for the development and manufacturing of critical medical equipment and supplies (including disinfectants, Personal Protective Equipment, and ventilators) to fight COVID-19 and other infectious diseases.
- d) **Secure and trusted online environment** – Given the increased digital vulnerability in the context of a pandemic, members may wish to share how they:

- i. Enable timely domestic and international responses to counteract malicious cyber activities that present risks to the security of the digital economy;
- ii. Work collaboratively with businesses and organizations to leverage online platforms to continue sharing trustworthy information and prevent disinformation, hoaxes, and online scams;
- iii. Ensure that reliable crisis communication over digital channels is available.

e) Preparations for economic recovery post-COVID – Members may wish to share other policy interventions and initiatives as part of the preparations for economic recovery, given the reinforced significance of the digital economy as a result of COVID-19.

[Korea]

[Yonggi KIM, yogkim18@mofa.go.kr]

ISSUE	POLICY INTERVENTIONS, INITIATIVES, LESSONS LEARNED, AND SOLUTIONS IN RELATION TO THE ISSUE	ACTUAL/EXPECTED OUTCOME
<p>Business continuity and resilience</p>	<p>Public Procurement Service (PPS), a central contacting agency in Korea, operates the Korean On-line E-procurement System (KONEPS) which offers end-to-end online procurement service and Online Shopping Mall.</p> <p>Amid a rapid increase in demand for goods for infection prevention, PPS prepared a prompt process for emergency procurement and stabilized the supply of essential goods for quarantine activities by using the Online Shopping Mall.</p> <p>To curb the spread of COVID-19 outbreak, PPS encouraged all government entities to use the e-evaluation platform (an online system for “contracting by negotiation”). These electronic procurement procedures were critical to avoid disruption in procurement administration during the pandemic.</p>	<p>The sales of infection prevention goods in the Online Shopping Mall increased comparing to the same period of last year (e.g. disinfectant increased by 4,292% and sterilizer by 336%)</p>

ISSUE	POLICY INTERVENTIONS, INITIATIVES, LESSONS LEARNED, AND SOLUTIONS IN RELATION TO THE ISSUE	ACTUAL/EXPECTED OUTCOME
	<p>To support 'untact' export, the Korean government is conducting Global E-business matching program, including consultations, contracts, customs clearance, and logistics procedures. In addition, 'Online IRs' and 'Online Korea Exhibition' will also be held on the support of the government. The program will start from April until the end of July 10 times.</p>	<p>Promoting trade, in particular SMEs and Startups.</p>
	<p>Korea government supported the sales of products of MSMEs via home shopping networks and online shopping malls, in particular for those experienced economic losses due to the COVID-19.</p>	<p>Providing practical support for MSMEs by expanding sales channels.</p>
<p>Exchange and use of data in a secure manner</p>	<p>Korea has introduced the Epidemiological Survey Support System (EISS) for COVID-19, an online system that can rapidly collect and analyze data from related agencies to quickly identify the movements of paths of confirmed COVID-19 cases. Simultaneously, to protect the privacy, the collected data has been accessible only to key staff such as the government epidemiological investigators by law. Also, only minimum information about the movement paths is temporarily disclosed to the public to prevent the spread of the infectious disease.</p>	<p>Due to faster tracing, Korea has been able to avoid the lockdown and protect its people more systematically from the virus.</p>

ISSUE	POLICY INTERVENTIONS, INITIATIVES, LESSONS LEARNED, AND SOLUTIONS IN RELATION TO THE ISSUE	ACTUAL/EXPECTED OUTCOME
<p>Use of digital technologies and solutions including for tracing purpose</p>	<p>By leveraging artificial intelligence (AI) technology, a specialized company in Korea developed the diagnostic reagent for COVID-19 in two weeks. And thanks to the government’s emergency use authorization process, it only took one week to receive approval for use.</p>	<p>Only after three weeks, the test kits started to be widely accepted.</p>
	<p>Korea has developed applications for Self-diagnosis and Self-quarantine to monitor the possible suspicious symptoms of inbound travelers more efficiently and effectively. Since 1 April, all travelers entering Korea are required to install the Self-diagnosis Application and are subject to quarantine for 14 days. People in self-isolation should enter the address of their quarantine location into the Self-quarantine Application. If they leave the location, an automatic notification is sent to relevant authorities.</p>	<p>Thanks to the applications, the Korean government has improved the management of inbound travelers and people in self-isolation and reducing the burden of monitoring them.</p>
	<p>Seoul Metropolitan government has been operating the AI call center to conduct daily monitoring and provide daily self-diagnosis results of key subjects such as people in Self-quarantine and incoming travelers.</p>	<p>By reducing the burden on staff and improving work efficiency, the AI call center system has contributed to the rapid monitoring of many people.</p>

ISSUE	POLICY INTERVENTIONS, INITIATIVES, LESSONS LEARNED, AND SOLUTIONS IN RELATION TO THE ISSUE	ACTUAL/EXPECTED OUTCOME
	<p>Korea was able to make accurate and detailed predictions on the spread of COVID-19 and make policy decisions based on scientific data analysis by deploying machine learning techniques and big data, such as population density by region, traffic database, and telecommunications data.</p>	<p>The results showed that the efforts to contain the coronavirus in Korea have been successful and highlighted the importance of social distancing practices to the general public.</p>
	<p>Korea is providing information on sales of face mask in real time via mobile applications or relevant web sites.</p>	<p>Against the limited supply of face masks, Korea has maintained and improved the effectiveness of the mask supply system.</p>
	<p>The Korean government has adopted various measures to support remote learning.</p> <p>First, the Korean Ministry of Education phased in online education in primary and secondary schools to ensure learning for all students while prioritizing students' safety by introducing preemptive measures to prevent COVID-19. The Ministry also recommended higher education institutions to offer no-contact lectures.</p> <p>Second, by tapping into and further expanding the outstanding IT infrastructure in Korea, the Ministry of Education prepared for a full-scale introduction of online education. Teachers were trained to improve their capacity, while pilot schools were operated to develop and distribute a generalized model of online classes. Also, schools were informed of</p>	<p>Although there were problems at the beginning, such as delays on the educational websites, the system has become stabilized and received positive feedback from users. On April 20, 98.9% of the 5.34 million students of elementary, middle, and high schools participated in the full scale online classes.</p>

ISSUE	POLICY INTERVENTIONS, INITIATIVES, LESSONS LEARNED, AND SOLUTIONS IN RELATION TO THE ISSUE	ACTUAL/EXPECTED OUTCOME
	<p>guidelines on student attendance tracking and the management of students' academic records, including grading policies in online class settings.</p> <p>Third, the Ministry of Education provided smart digital devices and Internet subscription fees to students in need to ensure the participation of all students in online classes by working closely with relevant ministries, local governments, 17 provincial offices of education, and private companies. In addition, in order to bridge the information knowledge and learning gaps in students with disabilities, students from multicultural families and low-income households, customized policies were implemented to assist them. Also, in a bid to prioritize students' safety based on the advice of health experts, school reopening was phased in from May 20, starting with the third year high school students (K12).</p> <p>Fourth, to reduce the burden of childcare on parents caused by school closures, at-school childcare services are offered, and with the cooperation of relevant ministries, local community centers are used to provide emergency childcare services in combination of at-home childcare services.</p>	
	<p>The Korean government provides support for online religious activities using real-time video platforms such as Kakao TV and Naver Band in order to prevent COVID-19 cluster cases occurring from on-site religious gatherings.</p>	<p>The religious groups in Korea can continue religious activities online while refraining from having on-site gatherings.</p>

ISSUE	POLICY INTERVENTIONS, INITIATIVES, LESSONS LEARNED, AND SOLUTIONS IN RELATION TO THE ISSUE	ACTUAL/EXPECTED OUTCOME
Secure and trusted online environment	Korea has developed a cybersecurity guideline for teleworkers and data security managers to prevent damages from hacking and being infected with ransomware during teleworking. Some of the information security guidelines are as follows; i) ensure your computer is up to date, ii) update your antivirus software and check your computer's security, iii) set a password for your home router and update its software, iv) use work e-mail accounts rather than personal ones, v) refrain from visiting websites unnecessary for your work, vi) be careful when downloading, etc.	Raising awareness and preventing damages from hacking and being infected with ransomware.
	In response to the raise of COVID-19 related telecom scams such as smishing and voice phishing, Korea established a 24-hour monitoring system and strengthened the early warning and response system.	Preventing social and economic damage and easing public anxiety.
Preparations for economic recovery post-COVID	<p>The Korean Ministry of SMEs and Startups (MSS) pursues smart innovation across the whole value chains from manufacturing process to logistics to distribution and to sales by deploying smart IT technologies for SMEs, startups, and micro-enterprises to secure Korea's competitive edge in the 4th Industrial Revolution era.</p> <p>It aims to i) expand the base of smart factories up to 30,000 by 2020 from 12,660 in 2010 and build 1,000 5G-based smart factories in 2020 ii) lead Industrial 4.0 era by realizing customers-oriented smart services based on DNA (Data, Network, AI) iii) set up two MSMEs exclusive data centers and one data platform by 2020 to improve process & quality, and support</p>	

ISSUE	POLICY INTERVENTIONS, INITIATIVES, LESSONS LEARNED, AND SOLUTIONS IN RELATION TO THE ISSUE	ACTUAL/EXPECTED OUTCOME
	product development through manufacturing data analysis	