# Minutes of the Seventh EU-Republic of Korea Joint S&T Cooperation Committee Meeting

#### 14 February 2022

The seventh meeting of the European Union (EU) - the Republic of Korea (Korea) Joint Committee on Scientific and Technological (S&T) Cooperation took place in Seoul on 14 February 2022 under the co-chairmanship of Director-General of the Directorate General for Research and Innovation of the European Commission (EC), Mr. Jean-Eric Paquet, and Vice Minister of Science and ICT (MSIT), Republic of Korea, Mr. Yong Hongtaek.

The Seventh Joint S&T Cooperation Committee Meeting was composed of two sessions. During Session 1, major STI policies and priority areas for cooperation were discussed, and during Session 2, potential future cooperation under the Horizon Europe Framework Program was discussed.

The following agenda items were discussed in Session 1:

- 1. STI Policy Updates
- 2. Fundamental R&I values and principles
- 3. Priority Areas for Cooperation

The following agenda items were discussed in Session 2:

- 4. Review of Cooperation under the Horizon 2020 Program and Suggestions for a Successful Cooperation with Korea as an Associated Country
- 5. Closing

# Agenda item 1. STI Policy Updates

The Korean side (MSIT) presented the overall science, technology and innovation context in Korea and policy priorities.

The EU side (DG-RTD) highlighted the importance of international cooperation in R&I, explained the EU's current political initiatives, and presented the EU's strategy on the Global approach to RI cooperation.

## Agenda item 2. Fundamental R&I values and principles

The EU side (DG-RTD) presented the fundamental values and principles, including research ethics, integrity, gender equality, and Open Science policy, underlying international cooperation in research and innovation that would be discussed with international partners. In particular, the overview on the Open Science policy focused on the European COVID-19 Data Platform that enabled sharing research outcomes during the COVID-19 crisis, Ethics and Research Integrity and fostering gender balance and equality in research and innovation at global level.

# Agenda item 3. Priority Areas for Cooperation

The five areas of ICT, Health/BIO, Climate Change and Emerging Future Technology, Research Hub, and Human capital development were addressed.

## <u>ICT</u>

The EU side (DG-CONNECT) provided an overview on a Digital Partnership with Korea, previously proposed by the EC Commissioner Thierry Breton in September 2021. The EU side shared what it envisions with the Digital Partnership with Korea, including the areas of cooperation and thereby provided a framework for both sides to move forward the discussion on Digital Partnership. The EU side emphasized that the Digital Partnership aims to creating a collaboration vehicle to deliver concreate and practical deliverables also in the field of R&D.

The Korean side (MSIT) presented the developments and achievements of the EU-Korea ICT Joint R&D programs, which began with the adoption of the Joint Declaration on strategic cooperation in ICT and 5G in 2014. The two Joint Call projects have been conducted in 2016 and 2018 respectively. Korea also introduced the Digital New Deal Initiative, upgraded to integrate Korea's ICT policy, proposed Beyond-5G/6G, Cloud-Edge/AI, Cyber Security, Quantum as potential fields of the third EU-Korea ICT Joint Calls in 2023. The EU side said that the EU-Korea consultation could take place under the Digital Partnership framework.

#### Actions to be taken

- The two sides intend to hold a workshop to discuss EU-Korea Digital Partnership

#### Health/BIO

The Korean side (MSIT) shared the backgrounds of the establishment of the National Infrastructure for Bioresources and its current work in Korea. Korea introduced the Korea Bio Data Station (K-BDS) and a best practice case during the COVID-19 pandemic. In future areas of cooperation with the EU, Korea proposed developing and sharing animal models for COVID-19 infection, and jointly analyzing and sharing preclinical data from COVID-19 infection.

The EU side emphasized the importance of international cooperation in antibiotic resistance research, briefed on the European One Health Antimicrobial (OH AMR) Partnership, and expressed hope for Korea to participate in the OH AMR as a partner country.

# Climate Change and Emerging Future Technology

The EU side presented an overview of its active participation in Mission Innovation, an international initiative to expand the public sector's R&D investments in clean energy technology and stressed the initiative's significance.

The EU undersigned the synergies between Korea' Carbon Neutrality and Green Growth Act for the Climate Change and EU initiatives on driving decarbonisation of cities: Horizon Europe Climate Neutral and Smart Cities Mission and Urban Transitions Mission developed with Mission Innovation.

The EU also pointed out the possible synergies between Korea's CNGGA and two missions of Mission Innovation: Net-zero industries and Integrated Biorefineries using the recent announcements like the "Carbon Neutrality Vision and Strategy for Industry and Energy": achieve carbon neutrality in the industry and energy sectors.

The Korean side introduced ongoing R&D efforts for carbon neutrality and quantum technology. The Korean side invited EC officials and European

researchers to join the Hydrogen Technology Forum scheduled for the third quarter of 2022 to take place either in Korea or via online, whose participation will help intensify R&D cooperation in hydrogen technology.

The Korean government is focusing its policy capacities on quantum technology and is seeking international cooperation, as it is expected to be a game changer for securing future competitiveness, with the announcement of its medium to long-term vision and strategy and Investment Strategy for Quantum Technology R&D in April 2021. The Korean side proposed further build up on the EU-Korea cooperation of quantum technology that is currently centered on developing postgraduate and doctoral talent, and expand the scope of cooperation to sign cooperation MoUs between governments, support joint research, establish EU-Korea cooperation centers in EU, and develop and operate joint education and training programs.

#### Actions to be taken

- The Korean side intends to invite EC officials and European researchers to the Hydrogen Technology Forum scheduled for the third quarter of 2022 in Korea

## Research Hub

The Korean side (KIST-Europe) introduced the KIST-Europe, founded in 1996 to conduct environmental research in Saarbrücken, Germany and to serve as a hub of research cooperation between Europe and Korea. The KIST-Europe introduced its works of collaboration with various research institutes in Europe and Europe, including an integrated toxicology platform based on Adverse Output Pathway (AOP), alternatives to animal testing, and real-time monitoring and risk assessment of particulate matter.

The EU side introduced the research cooperation between the (JRC)-ISPRA, located in Italy and Korea Construction Engineering Development Collaboratory Management Institute (KOCED), and research cooperation between the JRC-SEVILLA, located in Spain, and Korea Advanced Institute of Science and Technology (KAIST). The EU side expressed intention to

cooperate with Korean research institutes in relevant areas in the future.

# Human capital development

The EU side recalled that it offers numerous opportunities for cooperation with Korea on human capital development, in particular through the Marie Skłodowska-Curie Actions (MSCA) for the training, mobility and career development of researchers, and the setting up of excellent doctoral programmes. The EU sees a lot of room for improvement in cooperation, with positive benefits on both European and Korean organizations and The EU willingness hold expressed to videoconference meetings to follow up after the Joint S&T Cooperation Committee Meeting to exchange information and strengthen cooperation, a suggestion which was welcomed by the Korean side (MSIT). The two sides intend to coordinate the details such as schedules and agenda items at a later date.

The Korean side (KERC) introduced researcher exchange support through the Korea-EU Research Center established in Brussels in 2013. The KERC regularly publishes news-letters and issue reports relevant to cooperation with the EU (e.g. Horizon Europe), and formed a consultative body to promote cooperation by agreeing to launch the "EUrope-KOrea R&I Community (EUKOR Community)" in September 2020 with 12 members (from Europe and Korea) and the EU DG R&I participating as an observer. Korea informed that the KERC will hold an annual meeting from 2022 which will facilitate in forming consortium and offering researcher effective cooperation match-making services. The KERC requested active participation from the EU and member states in the EUKOR Community, and proposed that the DG R&I continue its involvement in the EUKOR Community as an observer.

Agenda item 4. Review of Cooperation under the Horizon 2020 Program and Suggestions for a Successful Cooperation with Korea as an Associated Country

The EU side provided an evaluation of the EU-Korea cooperation under the

Horizon 2020 program, characterized by a growth in the Korean participation in comparison with the previous Framework Programme (FP7), and a high success rate of the Korean applicants. Korean participations were most notable in the areas of information and communication technologies, advanced materials, secure, clean and efficient energy. These areas match the global challenges at the core of Pillar II of Horizon Europe.

The EU side also provided information on the expected deepening of EU-Korea cooperation if Korea joins Horizon Europe as an associated country. Association of third countries with a strong capacity in science, technology and innovation, with which the EU share common values, is a novelty offered by Horizon Europe, which will allow building a global critical mass to address shared challenges through Research and Innovation. The Republic of Korea matches the criteria to be eligible to apply for association, and the EU side explained what the concrete benefits would be: access to the largest civil R&I funding programme worldwide, participation the same conditions as entities from EU Member States, and participation in the Programme's governance structure (Programme Committee). The EU side also highlighted that this offer of association was focused on Horizon Europe's Pillar II, which is central in building high scale collaborative actions to address global challenges. Pillar II already represented the vast majority of previous Korean participations in the programme as a third country.

Following the delivery of the Letter of Intent by the Korean side, the EU side explained that exploratory talks, a phase that prepares formal association negotiations, could now be planned.

The Korean side (MSIT) presented Korea's expectations and concerns on joining the Horizon Europe program. With the associated country status, Korea expressed much hope to provide Korean researchers with a global R&D environment and further strengthen the cooperative ties with the EU, and said that it also has huge expectations for the ERC. Korea also shared its concerns over Korean researchers being unfamiliar with the Horizon Europe system, Korea having limited information on the Horizon Europe

decision-making process (e.g. program committees, project selecting process), and the past cooperation rather being concentrated only in the field of ICT. To this end, Korean side requested much assistance from the EU side in establishing a mechanism to support Korean researchers, and requested that Korea attend as an observer to the Horizon Europe program committee. Korea also proposed to launch Joint Calls in technological fields other than ICT, to build up a network of cooperation between the EU and Korea. The EU side expressed their willingness to provide support to Korean side in establishing Horizon Europe supporting mechanisms, confirmed that, as a result of association, the Korean side would be invited to attend as an observer to the Horizon Europe program committee.

## Agenda item 5. Closing

Vice Minister Yong announced that Korea will begin official talks with the EU on Korea joining the Horizon Europe program as an associated country, as he delivered to Director-General Paquet the Letter of Intent signed by the Minister Lim Hye-sook of Science and ICT addressed to Mariya Gabriel, Commissioner for Innovation, Research, Culture, Education and Youth, expressing Korea's intention to start discussing Korea's membership in the Horizon Europe program as an associated country.

In the Joint S&T Cooperation Committee Meeting, the EU side informed about the Digital Partnership. The EU and Korea officially agreed on starting pre-negotiation exploratory talks on Korea joining the Horizon Europe program as an associated country.

Both sides expressed interest to cooperate with each other in developing green technologies (e.g. hydrogen energy) through a variety of activities, including activate exchanges between researchers and other stakeholders. The two sides expressed the intention to work together to further explore the Korean proposal for developing a cooperative system for research cooperation hubs and researcher networking programs that will underpin these cooperative activities.

The chairs noted that this Joint S&T Cooperation Committee Meeting served as an opportunity to further advance science, technology and ICT cooperation between the EU and Korea amid the climate crisis and digital transformation, and agreed to hold the next EU-Korea Joint S&T Cooperation Committee Meeting in Brussels, Belgium in 2024.

The minutes were drawn up in English and were signed and exchanged by the co-chairs after the Seventh Republic of EU-Korea Joint Science & Technology Cooperation Committee Meeting in Seoul on February 14, 2022.

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