

EU-Korea Research & Innovation Cooperation

4 October, 2016



Ju Young KIM

Policy Officer in Science, Technology and Innovation

Delegation of the EU to the RoK



Outline

- 1. Political Context
- 2. Framework Conditions
- 3. Korea-EU Targeted Cooperation
- 4. Vehicles for Cooperation



1. Political Context









"South Korea – A Strategic Partner of the EU"

- Framework Agreement (2010)
- Free Trade Agreement (2011)
- Crisis Management Agreement (2014)
- Agreement for Scientific and Technological Cooperation (2007)
- ITER Int'l Agreement + fusion energy + fission research (2006)
- ERC Implementing Arrangement (2013)
- Joint Declaration in ICT and 5G (2014)
- Agreement on a Civil Global Navigation Satellite System (2016)
- EU-Korea Joint S&T Cooperation Committee : meeting every two years (2007, 2009, 2011, 2013, 2015, 2017...)







EU - Republic of Korea Summit Seoul, 15 September, 2015



8. The Leaders welcomed the substantial progress made in the ROK-EU cooperation on research and innovation and the creative economy, including the outcome of the 5th Joint Science & Technology Cooperation Committee in June 2015 where it was agreed to continue improving the framework conditions and to deepen and scale-up the ongoing cooperation in the selected thematic areas of nanotechnology, nanoelectronics, information communication technology (ICT), health and biomedical challenges, energy, and satellite navigation and to promote researcher's mobility. They looked forward to the upcoming launch of joint research and innovation projects in the area of next generation mobile telecommunications networks (5G) and Internet of Things and Cloud Computing under the 2016-2017 Horizon 2020 Work Programme and the prospects for related cooperation on 5G standards and spectrum allocation. They welcomed the agreement to engage in a twinning collaboration on carbon capture technologies and processes. The Leaders also recognised that since the ROK became a member of the Eurostars-2 Program in 2014, cooperation between SMEs of both sides has contributed to further joint research and technological development. They further shared the view that this cooperation should be continued to promote SMEs' technological competitiveness and encourage entry into third markets.





2. Framework Conditions



EU-Korea Joint Science and Technology Cooperation (JSTCC)

Framework Condition

- Exchange of the maximum possible level of programme information
- Supporting instruments and channels (policy project KONNECT, NCT, focal points, events, etc.)

Deepening, scaling up and opening cooperation in selected thematic areas

- ICT, Nanotechnology, Health/Bio, Energy, Satellite Navigation

Promoting researchers' mobility

- Korea-ERC Implementing Arrangement
- Marie Skłodowska-Curie Research Fellowship Programme

Emphasising bottom-up type cooperation

- Expanding support for bottom-up type cooperative activities





2016 Major Activities in Korea Supporting EU-KR R&I Cooperation

29-30 March Korea-EU R&D Fair by KONNECT project (Seoul & Daejeon)

28 June EU Networking & Information Day (Hamilton Hotel, Seoul)

4 October
 EU Research & Innovation Day (Grand Hyatt Hotel, Seoul)

■ 6 October The 5th EU-KR Nano Workshop (Westin Chosun Hotel, Seoul)

■ 10-11 October **The 1**st **EU-KR ICT Conference** (Koreana Hotel, Seoul)





EU-Korea Policy Support Project : KONNECT

Objectives

- Infrastructure building for the stimulation of Korea-EU STI cooperation
- Communication and networking for improving mutual understanding
- Project Duration: 42 Month (1October, 2013-31 March, 2017)
- **Budget** : 1.75 million euros
- Project Coordinator: National Research Foundation of Korea
- **Project Partners:** 8 organisations from 5 countries (Korea, Germany, Netherland, Spain, and Turkey)
- Major Activities
 - Developing recommendations for EU-KR STI cooperation
 - Conducting feasibility studies and analyses
 - Producing, gathering, and disseminating information and knowledge
 - Organising networking & brokerage events, implementing joint funding programmes, etc.





3. EU-Korea Targeted Cooperation



Five Research Areas for Deepening and Scaling-up Cooperation

ICT

5G communication networks
Internet of Things
Brokerage of mobile cloud services

1. ICT Coordinated Call targeting Korea / 2016

2. € 12 million for 2 years

3. 3 Project launched in mid-2016

Ongoing discussions towards a **2nd ICT Coordinated Call** (WP 2018-2020)

Energy

Technologies and processes for Carbon Capture

1. Twinning Call targeting Korea / 2016

2. €17million from the EU

+ Budget for Korea Budget for 3 years

3. 3 Projects launched in mid-2016

Health/Bio

Global Cooperation in Infectious Disease Glopid-R / Global Initiative led by the EC

New cooperative areas Medical device, Innovative medicine

(eg) Anti-Microbial Resistance, Traumatic Brain Injury, etc.





Five Research Areas for Deepening and Scaling-up Cooperation

Nanotechnology

NanoSafety Multilateral Initiative NanoReg / EU-KR bridging project

Nanoelectronics



- 1. Twinning Call targeting Korea / 2017
- 2. Nano-roadmap exchange
- 3. Further twinning/joint activities / 2018-2020

New cooperative areas



Materials Modelling

Satellite Navigation Promoting joint research activities and partnering

Other possible cooperation areas

- Possible future cooperation on clean energy in the context of 'Mission Innovation' Initiative
- Climate Change & Environmental research
- Arctic research
- etc.





Exchange of Researchers & staffs

Korea-European Research Council (ERC) Researcher Exchange Programme

- To enable Korean researchers to undertake research visits to the ERC-supported Principle Investigators in Europe
- Short-medium term visit to the ERC team for extending network and conducting joint research
- As of today, more than 80 Korean researchers/professors selected and granted
- Opening a call for proposal every year since 2014

Marie Skłodowska-Curie Programme

Horizon2020 Programme for mobility, training, and career development of the human resources

ITN	Innovative Training Networks	
RISE	Research and Innovation Staff Exchange	
COFUND	Co-funding of Regional, National and International Programme	
IF	Individual Fellowships	







Commission

4. Vehicles for Cooperation

Main Features of Horizon2020

- The biggest Research- and Innovation-funding programme ever: nearly € 77 billion / 7 years (2014-20)
 - The only part of the EU budget to increase (30% more than 2007-13)
- The most open programme in the World!
 - International cooperation at its core
- 'From lab to market'
 - Basic and applied research, technology development and integration, testing and validation, demonstration and piloting
 - Innovation-driven Public-Private Partnerships
 - SME measures: collaborative projects, new SME instrument, Eurostars etc.
 - Access to finance: debt and equity instruments
- 'Challenge-based' ≠ 'discipline-based'
- **Simple**: faster, less red tape





Three Main Priorities

€24 billion

- European Research Council (€13,095mil)
- Future and Emerging Technologies (€2,696mil)
- Marie Skłodowska-Curie actions (€6,162mil)
- Research infrastructures (€2,488mil)
- Leadership in enabling and industrial technologies (€13,577mil)
- Access to risk finance (€2.842mil)
- Innovation in SMEs
 (€616mil + complemented
 by 20% of budget of
 'Societal challenges' and
 'Access to risk finance'
 with strong SME focus
- European Institute of Innovation and Technology (EIT)
- Joint Research Centre (JRC)

Excellent Science

Industrial Leadership

Societal Challenges

€29 billior

- Health, demographic change and wellbeing (€7,472mil)
- Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the Bioeconomy (€3,851mil)
- Secure, clean and efficient energy (€5,931mil)
- Smart, green and integrated transport (€6,339mil)
- Climate action, environment, resource efficiency and raw material (€3,081mil)
- Inclusive, innovative and reflective societies (€1,310mil)
- Secure societies (€1,695mil)
- Science with and for society (€462mil)
- Spreading excellence and widening participation (€816mil)

€17 billior





The Process: from Call to Grant Agreement

Publication of the calls (Participants Portal)

Proposal Preparation

- Consortium Organisation
- Request for ID on Participant Portal
- Issue PIC code

Submission of the proposal

Evaluation

- Excellence
- Impact
- Quality & Efficiency of the actions

Signing Grant Agreement & Project launching

GA Preparation

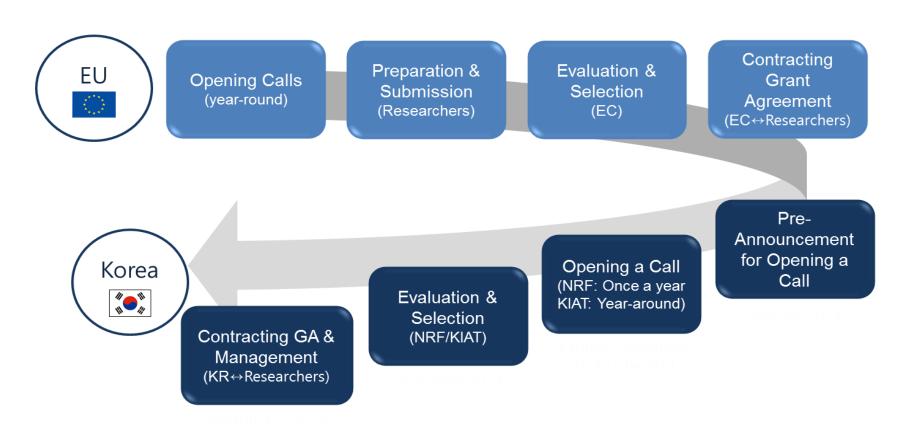
Evaluation Summary Report

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/index.html



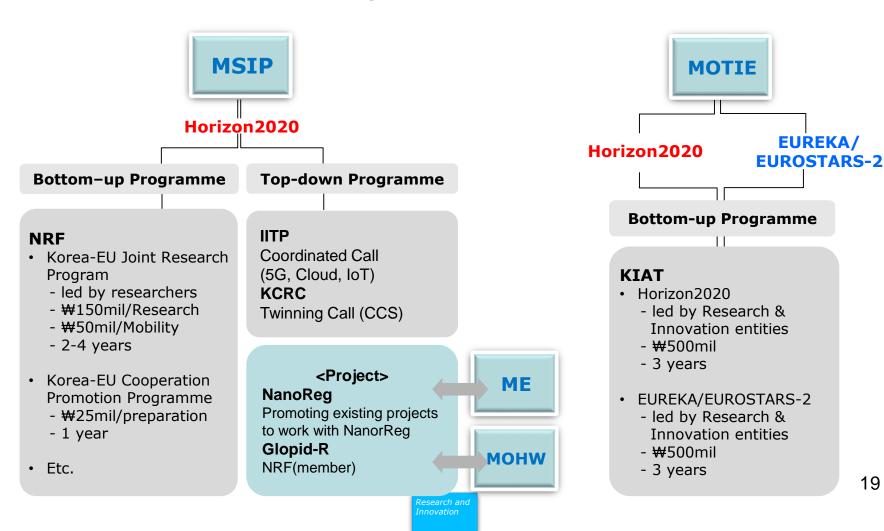


Matching Funds by Korea : Process



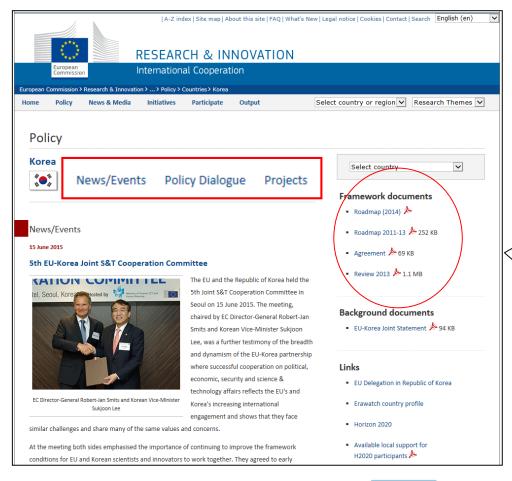


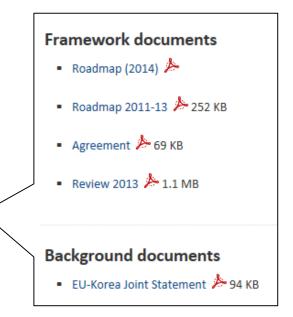
Korea Funding for Cooperation with Europe





Websites: EU International R&I Cooperation

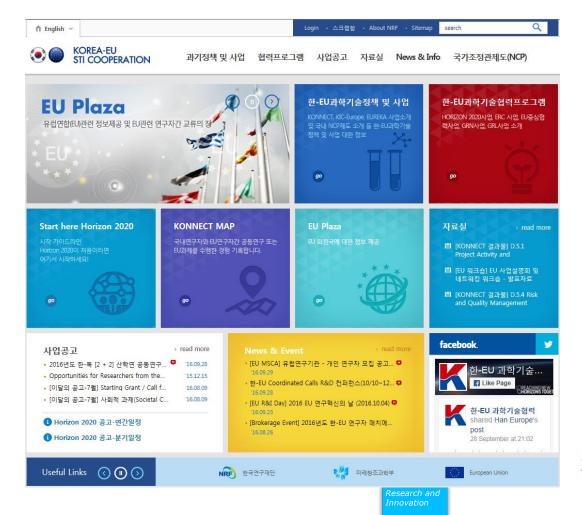


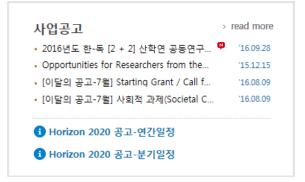


http://ec.europa.eu/research/iscp/index.c
fm?pg=korea



Websites: Korea-EU STI Cooperation by KONNECT







www.haneurope.com

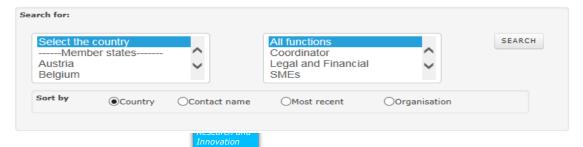


National Contact Points

Korean National Contact Points

Avec	NCP		
Area	EU Office	Korea	
National Coordinator	Joon Hwan CHOI (MSIP)	Myon Jung KIM (NRF)	
MSCA (Mobility)	Ho Seok Jeon (NRF)	Seung Mi HAN (NRF)	
ICT	Oh Cheon Kwon (ETRI)	-	
Energy	Chong Hak CHAE (KRICT)	-	
Bio, Food Security	Chong Hak CHAE (KRICT)	-	
Nanotechnology	Jeong Dai JO (KIMM)	-	
Small and Medium Enterprises	Gi Tae SHIM (KIAT)	-	
European Research Council	-	Jin-Hyeon KIM (MSIP) / Hyong Ha KIM (KRISS)	
Future Emerging Technology	-	Jung Wook KIM (KIAT)	

European NCPs: http://ec.europa.eu/research/participants/portal/desktop/en/support/national_contact_points.html







Other Sources of Guidance and Information

In Belgium



Korea Research & Innovation Centre in Europe http://kiceurope.eu/



KIAT Europe Office http://kiat.or.kr

In Korea



Delegation of the European Union to the Republic of Korea

https://eeas.europa.eu/delegations/south-korea_en

✓ Horizon 2020 Participant Portal

http://ec.europa.eu/research/participants/portal/desktop/en/home.html http://ec.europa.eu/research/participants/portal/desktop/en/funding/index.html

✓ Partner Search

https://cordis.europa.eu/partners/web/guest/home





Thank you for your attention!

Find out more:

www.ec.europa.eu/horizon2020