

# South Korean Government's **Horizon Europe** Participation Supporting Programme



11 Jan 2023

Dr. CHO Woohyun  
Director General of Korea-EU Research Centre  
[www.k-erc.eu](http://www.k-erc.eu)





# Content

- **Korea-EU Research Centre(KERC)**
- **S. Korea's HE supporting programme**
- **Other International Cooperation Programmes**



# Brief introduction to KERC : Korea-EU Research Centre

# Korea-EU Research Centre

- Established in 2013 in Brussels
- Under the influence of **Ministry of Science and ICT (MSIT)** and **National Research Foundation of Korea (NRF)**
- **Promote and Support R&D and policy cooperation** between Korea and the EU (ex. Horizon Europe, Digital partnership etc.)
  - Networking hub, Information services(newsletters, in-depth analysis, report etc.), Policy support, NCP tasks, Event, Infrastructure for cooperation



# Korea-EU Research Centre

## “A bridgehead to enhance Korea-EU cooperation”

Our mission is to promote  
The R&I cooperation  
between Korea and EU

Information

Networking

Facilitation

Pathfinding

### Raise awareness on both sides

- Analyze and share relevant information & knowledge

### Provide sustainable infrastructure for cooperation

- Build network and support partnering & consortium

### Respond to mutual needs

- Communicate with Korea & European researchers and research institutes

### Enhance research career opportunities

- Support researchers from both sides to develop research careers in both countries

KERC's weekly newsletter “What's new in Korea?”

<https://k-erc.eu/newsletters/> -> subscribe!

# Korea-EU Research Centre

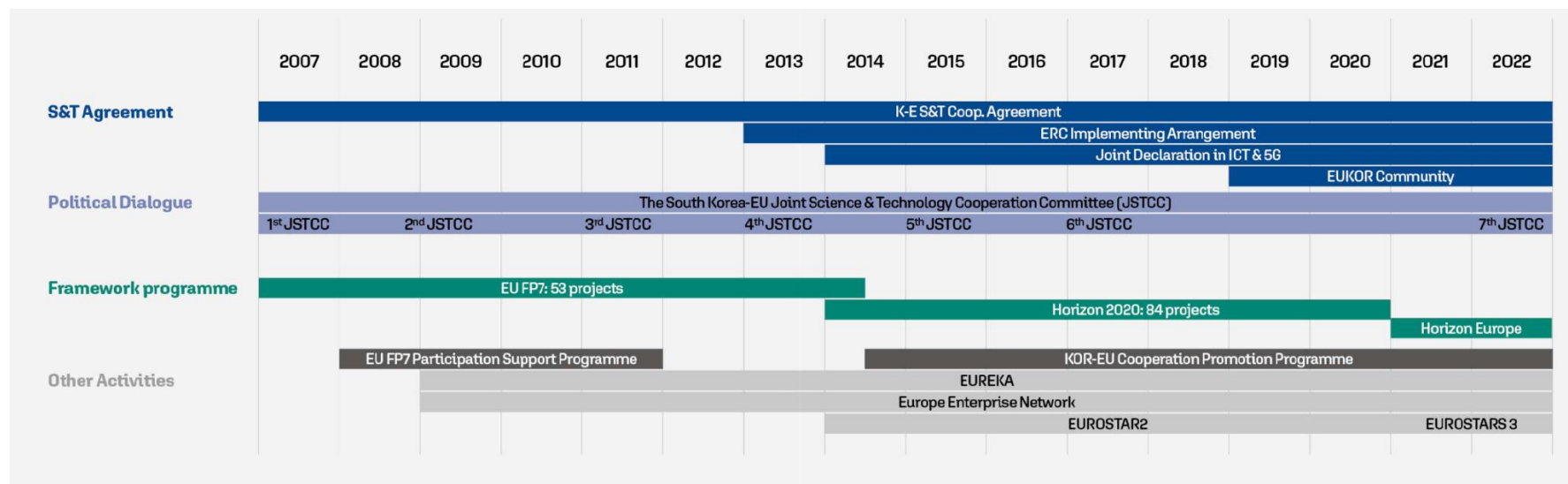
## ➤ Participants from Korean State`s Institutes

- **NRF** (National Research Foundation of Korea)
- **KISTEP** (Korea Institute of S&T Evaluation and Planning)
- **ETRI** (Electronics and Telecommunications Research Institute)
- **IITP** (Institute for Information and Communications Technology Planning & Evaluation)
- **KIOM** (Korea Institute of Oriental Medicine)
- **KIMM** (Korea Institute of Machinery and Materials)
- **KRICT** (Korea Research Institute of Chemical Technology)
- **IPET** (Korea Institute of Planning and Evaluation for Technology in Food, Agriculture, Forestry and Fisheries)
- **KICT** (Korea Institute of Civil Engineering and Building Technology)
- **KISA** (Korea Internet & Security Agency)

## ➤ Role of seconded staff from Korean institutes

- NCP
- Policy officer

# Korea-EU Research Cooperation



## ➤ Horizon Europe

- Exploratory Association Talk (~2023)
- Official Association Negotiations (~ 2024?)

## ➤ Digital Partnership between the ROK and the EU

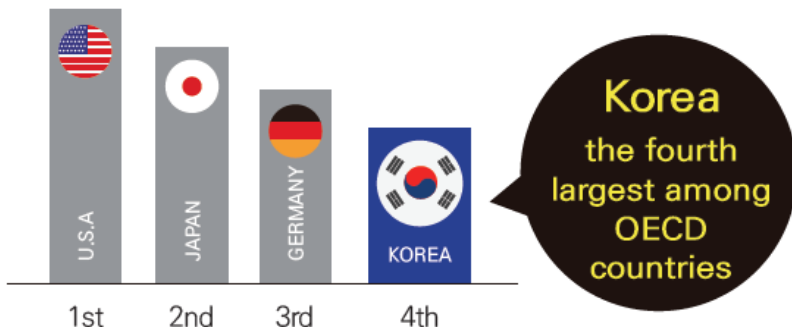
- Signed in 28 Nov 2022
- Fostering joint work on 11 areas (semiconductors, next generation mobile networks, quantum, HPC, cybersecurity, AI, platforms, data and skills)

# Why South Korea?

- Strong Innovator, Top Global Performance in European Innovation Scoreboard
- 586,666 Researchers (470,728 FTE) in 2021 (World's 4th)
- 4th biggest government investment in R&D among OECD : 22 bln EUR in 2023
- R&D expenditure 4.96% in 2022 (World's 2nd)

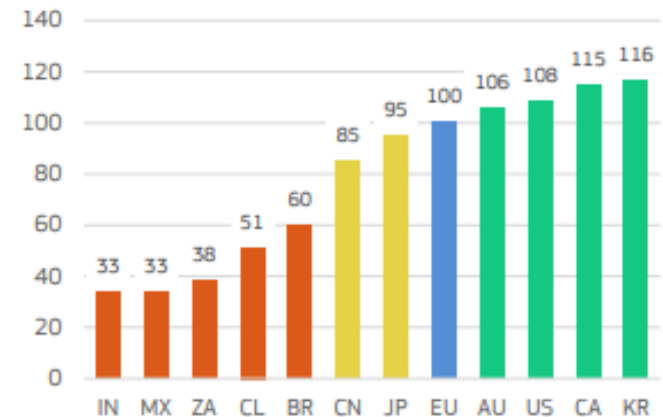
- The Korean government's R&D investment is the fourth largest among OECD countries as of 2020
- The government's R&D investment has been steadily increasing every year, reaching KRW 29.777 trillion in 2022

Ranking of Government Investment in R&D of OECD Countries in 2020



The performance of **South Korea** is well above that of the EU, and the country is a Strong Innovator. Performance has increased since 2015, in particular in 2021. South Korea's relative strengths are in Intellectual Property applications.

Figure 2: Global performance



Coloured columns show performance in 2022 relative to that of the EU in 2022. For all years, the same measurement methodology has been used.



# S. Korea in Horizon Europe

- Horizon 2020
- 84 Projects
- **Success Rate : 19.95%**
  
- Horizon Europe
- 15 Projects (14 GAs)
- **Success Rate : 27.32%**



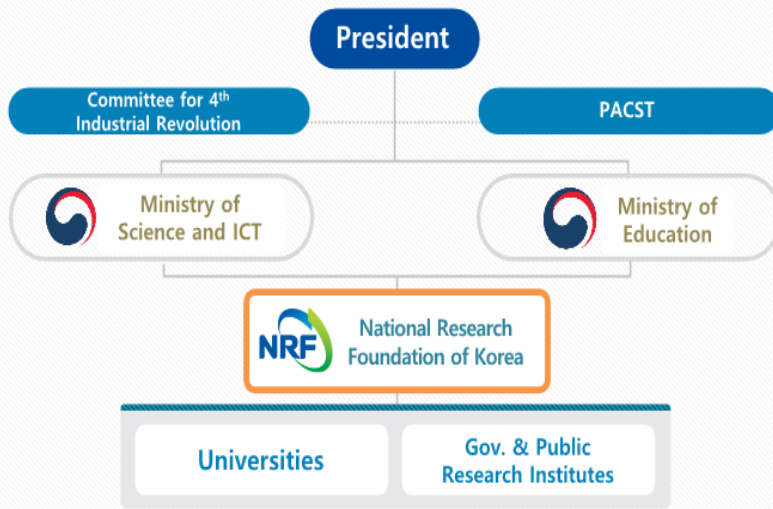
- Korea-EU Joint Research Comilation (2020)



# South Korea's Horizon Europe Supporting Programme

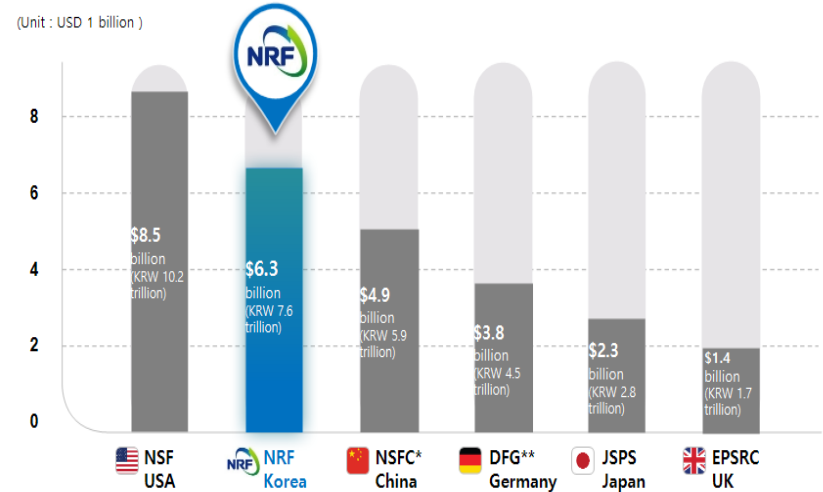
# National Research Foundation of Korea

## NRF Position in the Government



PACST: Presidential Advisory Council on Science & Technology  
ICT: Information & Communication Technology

## Budget Comparison with Global Partner Research Funding Agencies (2021)



※ Exchange rate: USD 1 = KRW 1,200 \* Budget for 2019 \*\* Budget for 2020  
 ※ NIH: 5 times of NSF, Defense: 2 times of NIH (53% of the total)  
 ※ NRF functions as NSF + parts of NIH + parts of DARPA

# National Research Foundation of Korea

2022 NRF Budget : **KRW 8.4 trillion**

(unit : KRW/USD)

International Cooperation

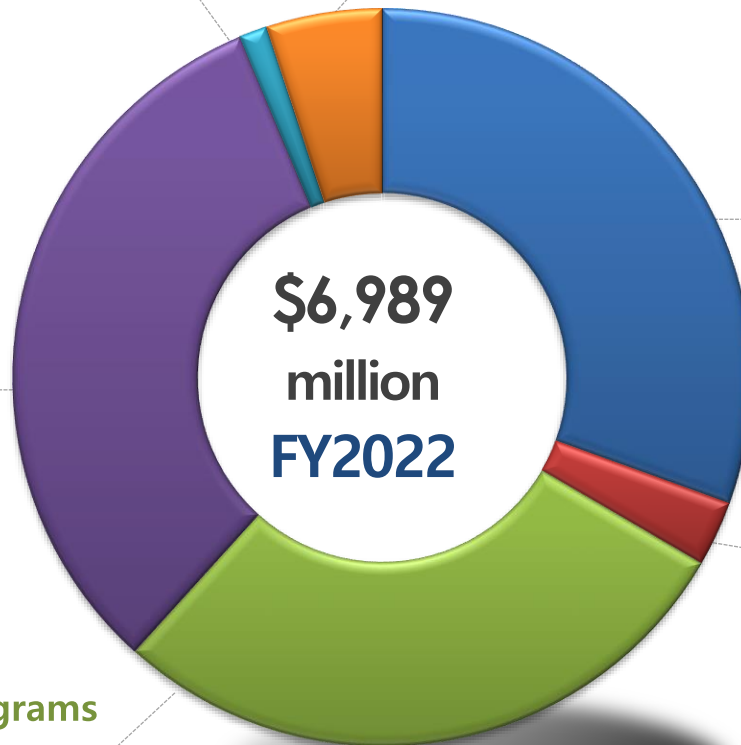
1,027million(1%)  
\$ 86million

Academic Research &  
University Funding

26,845million (32%)  
\$ 2,237million

National Strategic R&D Programs

23,731million (28%)  
\$ 1,978million



\$6,989  
million  
FY2022

Others

4,249million (5%)  
\$ 354million

Basic Research In Science and  
Engineering

25,602million (31%)  
\$ 2,134million

Humanities & Social Science

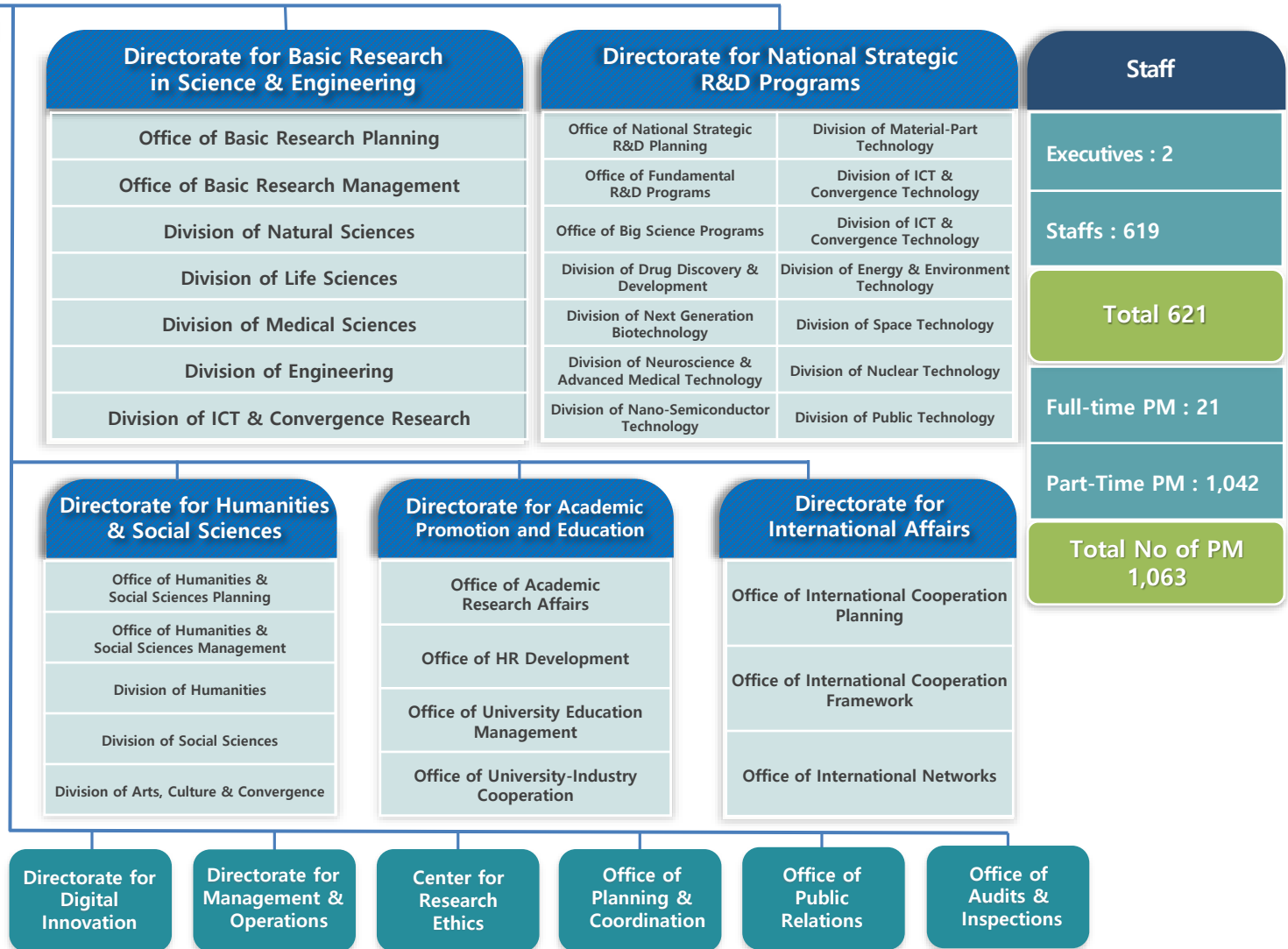
2,416million (3%)  
\$ 201million

※ 1USD = 1,200 KRW

# National Research Foundation of Korea



**Institute of Information & Communications Technology Planning & Evaluation**



# NRF's International relationship

- The NRF has exchanged MOU with 80 agencies in 51 countries.

## Europe

(42 agencies in 24 countries)

RFBR, RAS, SKOLKOVO,  
RA, BRFFR, SAS, SSF, NASU,  
GACR, CAS, TUBITAK,  
PAN, OTKA, HAS, HAE,  
FORTH, NWO, SINTEF, IFD,  
DFG, AvH, DAAD, MPG,  
FNRS, FWO-Vlaanderen,  
IVA, SSF, STINT, VR, SNSF,  
CSIC, AHRC, ESRC, RS, BC,  
BBSRC, FWF, CNR, CNRS,  
ANR, AF, RCN

## Asia

(19 agencies in 12 countries)

MOST, MAS, NCSH, VAST, BRC,  
SCST, ICSSR, INSA, LIPI, JSPS, JST,  
CAS, NSFC, CASS, CSTEC, NRCT,  
NAST, NRCP, A\*STAR

## America

(7 agencies in 6 countries)

NSF, NSERC, Mitacs, CONACYT,  
CONICYT, CONICET, CNPq

## Middle East and Africa

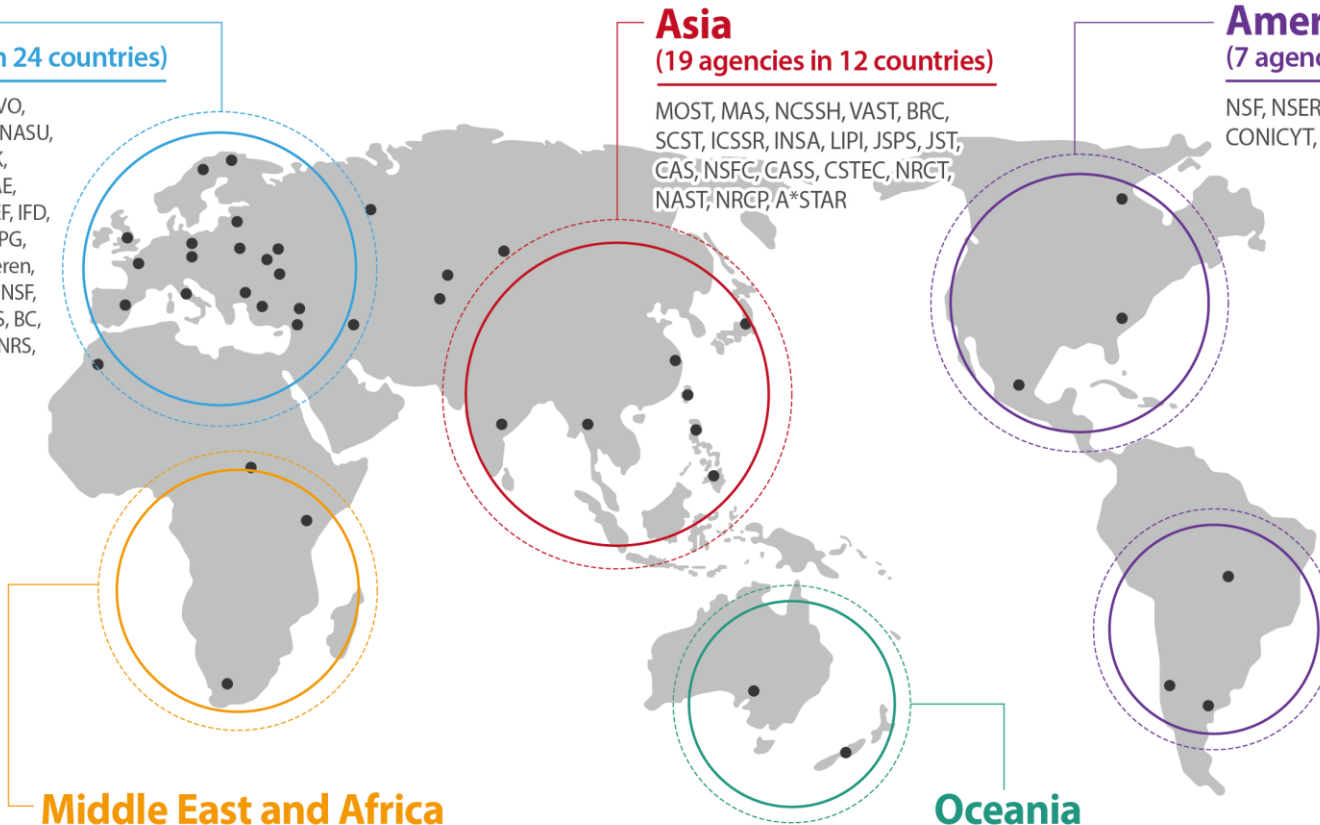
(8 agencies in 7 countries)

ASRT, STDF, UNCST, ScienceFund,  
COSTECH, CNRST, NRF, QNRF

## Oceania

(4 agencies in 2 countries)

AAS, ARC, ATSE, RSNZ



# NRF's International Cooperation Programs

Category	Programs
<b>Joint Research &amp; Mobility Programs</b>	<ul style="list-style-type: none"><li>• Global Research Development Center</li><li>• Strategic Joint Research Program</li><li>• Institut Pasteur-Korea Program</li><li>• Brain Pool</li><li>• Korea Research Fellowship</li><li>• Cooperation with International Organizations, etc</li></ul>
<b>Bi/multi-lateral Cooperation Programs</b>	<ul style="list-style-type: none"><li>• Joint Research Projects</li><li>• Conference/forum</li><li>• Exchange of researchers</li><li>• Oversea S&amp;T Cooperation Centers, etc</li></ul>
<b>ODA Programs</b>	<ul style="list-style-type: none"><li>• Appropriate S&amp;T Centers</li><li>• Techno Peace Corps Program</li><li>• Global Education Support Program, etc</li></ul>
<b>Support SMEs &amp; Start-ups</b>	<ul style="list-style-type: none"><li>• Korea Innovation Centers, etc</li></ul>

# Korea-EU Joint Research Program

## Objective

- Encourage participation of Korean researchers in the EU program by supporting the researchers who are confirmed of their participation in a Horizon Europe consortium

## Details

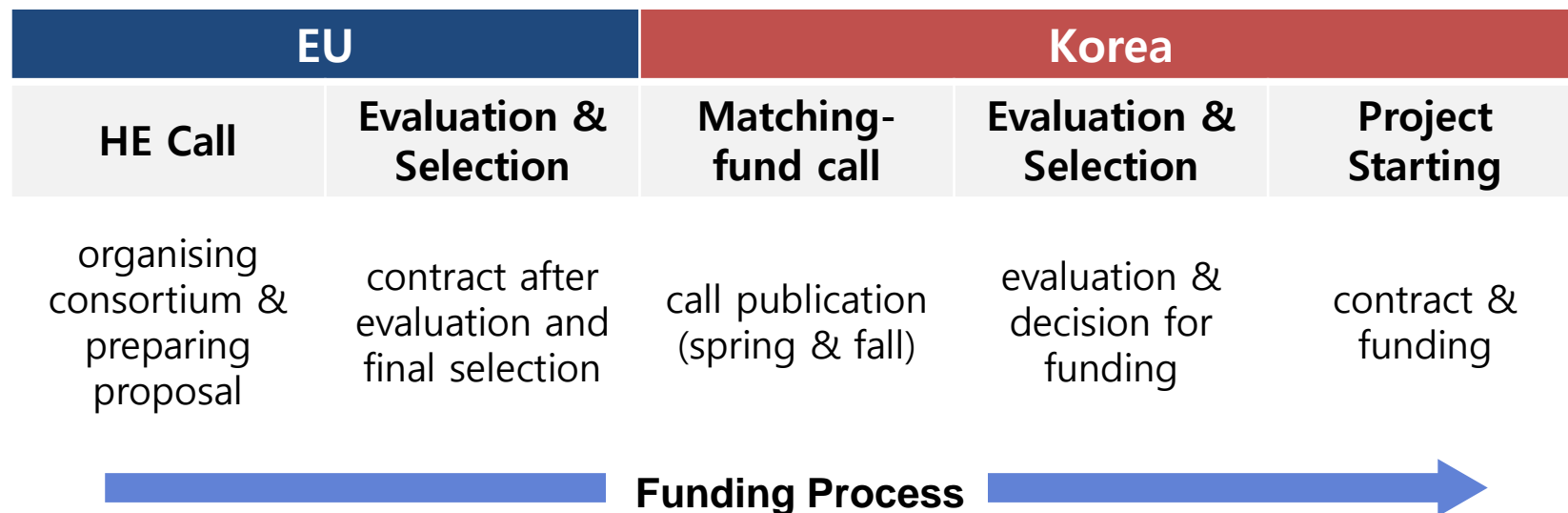
- **Eligibility:** Korean researchers affiliated with official partners of HE
- **Research themes:** All the research fields of Horizon Europe
- **Grant per project:** (Joint Research) 150M KRW, (Mobility) 50M KRW
- **Project duration:** 2~4 years
- **Counterpart:** European Commission
- **Total Budget 2022:** 2,300M KRW(1.73M EUR) / 4 new projects

## Schedule

- **2022.07** : Opening a new call
- **2022.08** : Final evaluation for new projects
- **2022.10** : Launching new projects
- **Next Call** : Spring/Fall, 2023

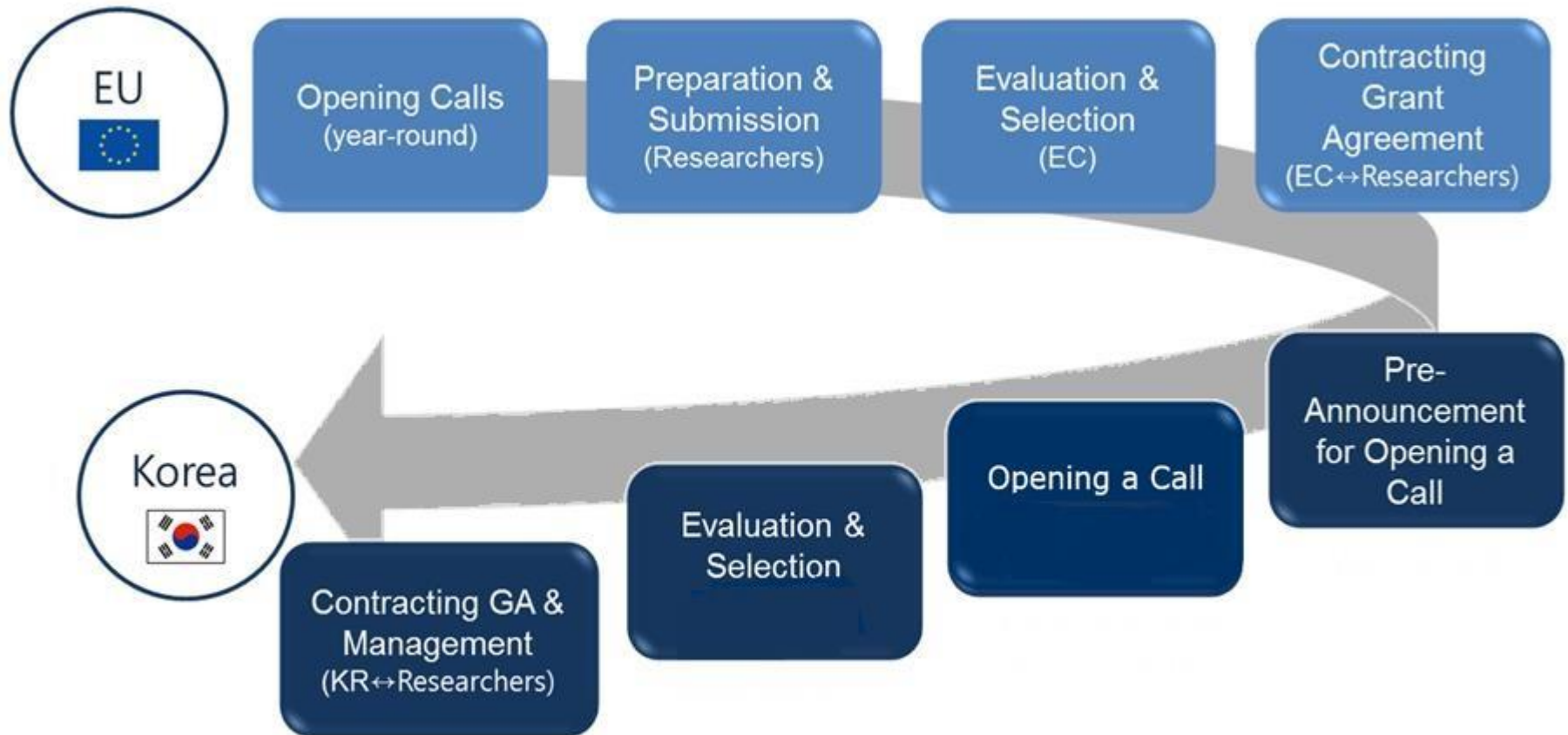


# Korea-EU Joint Research Program



- ❖ Korea as a third country, can't be a coordinator country of the project and Korean participants in the project can't receive EU funding
- ❖ Therefore, Korean participants need to secure their own funding by themselves or apply for matching fund provided by Korean government
- ❖ To be eligible applicants of the Korea-EU Joint Research Program, researchers should submit a copy of following documents to prove their participation status in EU project: Grant Agreement(GA), Consortium Agreement(CA), Description of the Action(DoA), etc.

# Korea-EU Joint Research Program



# Korea-EU Joint Research Program

## Funding History(2007-2013, FP7)

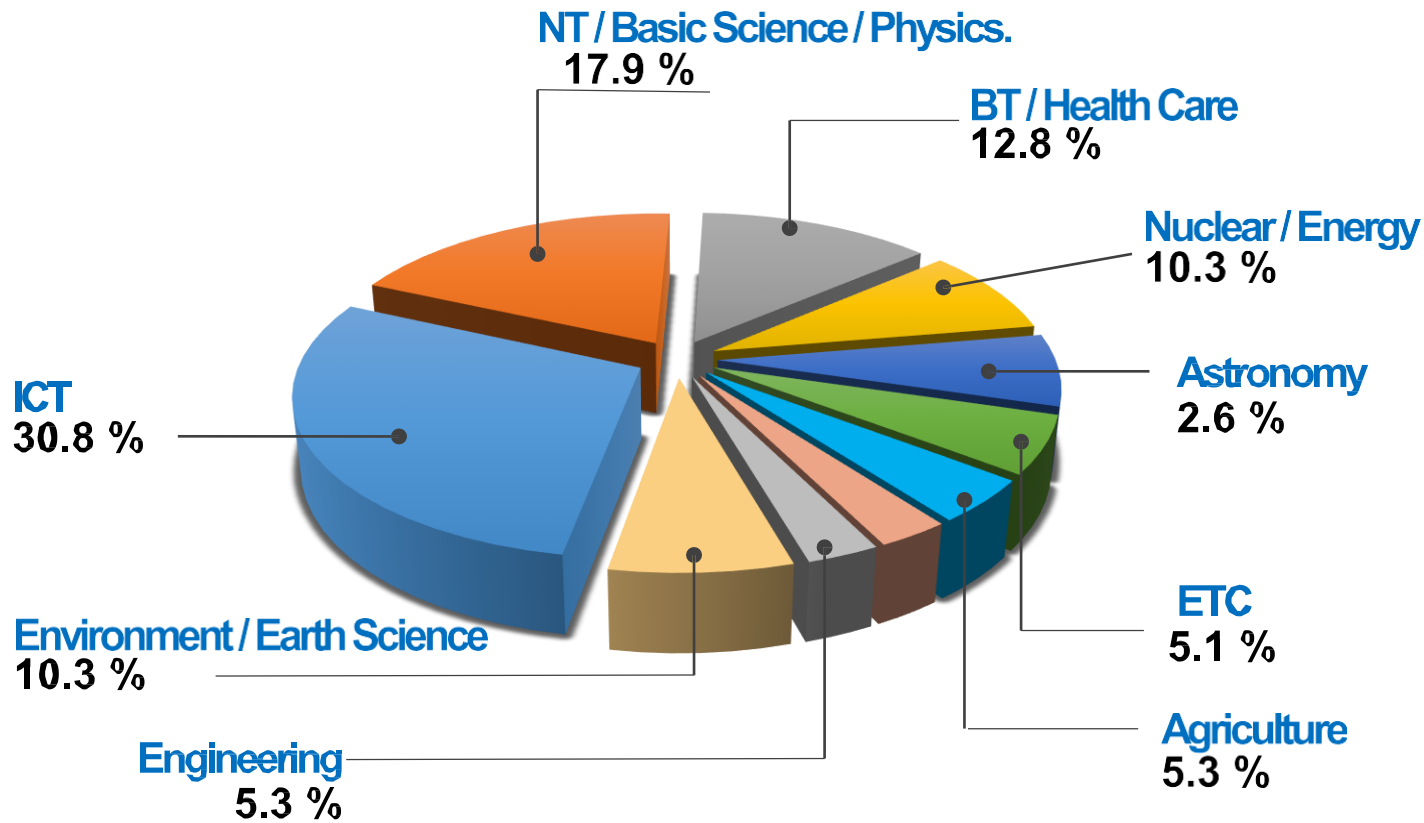
		2007	2008	2009	2010	2011	2012	2013	Total
# of new projects	J.R.	5	5	5	10	3	5	3	36
	Mobility	-	-	2	1	1	4	2	10
<b>Budget (Unit: m. KRW)</b>		449	550	2,600	2,600	2,600	2,600	2,300	13,699

## Funding History(2014-2021, H2020)

		2014	2015	2016	2017	2018	2019	2020	2021	Total
# of new projects	J.R.	3	4	2	2	4	7	4	3	29
	Mobility	2	-	3	2	1	0	0	1	9
<b>Budget (Unit: m. KRW)</b>		2,080	1,600	1,850	1,675	1,625	1,675	1,992	2,138	10,455

# Korea-EU Joint Research Program

## Fields of funded projects (2007~2021)



# Korea-EU Cooperation Preparation Program

## Objective

- Encourage participation of Korean researchers in Horizon Europe by supporting Korean researchers preparing participation to Horizon Europe consortium

## Details

- **Eligibility:** Korean researchers affiliated with official partners of HE
- **Research themes:** All the research fields of Horizon Europe
- **Grant per project:** 25M KRW
- **Project duration:** 1 years
- **Funding details:** Overseas travel expenses, consulting fee, etc.

- ❖ Korean Researchers should be currently preparing for applying to Horizon Europe projects and prove their application with relevant materials before the end of project's period

# Korea-ERC Research Visits Program

## Objective

- Encourage Korean researchers to collaborate with European researchers in ERC centers and increase Korean researchers' participation to Horizon Europe programs (Based on agreement between Korea and EU ERC in Nov. 2013)

## Details

- **Eligibility:** PIs, Joint researchers, Ph.D researchers in First Ever Research, Young Researchers and Mid-Career Scientists Programs
- **Host Institutes:** 352 Research centers/teams under ERC
- **Grant per project:** 30M KRW per year
- **Project duration:** 1~12 months
- **Number of projects:** about 35 projects



Other  
International Cooperation  
Programmes of NRF

# Brain Pool/Brain Pool Plus Program

Promoting the globalization of domestic R&D sites by inviting outstanding overseas researchers to Korean research institutions

## Host Institution

- Government-funded research institutions, national/public research institutions, universities, research institutions affiliated with universities, nonprofit research institutions and corporations, corporations and corporate research institutions

## Research fields

- All fields in Science and Technology

## Application method

- Research institutions/Host researchers in Korea find outstanding overseas researchers
- Overseas researchers can freely look for Korean institution where they are willing to conduct their research



# Brain Pool (BP)

## Eligibility

- Overseas residing researchers who hold a Ph.D or who have more than 5 years of onsite R&D experience in the industry regardless of a Ph.D

## Duration

- Type 1 : Short-term Support (6~12 month)
- Type 2 : Long-term Support (Max. 3 years)

## Funding

- **Personnel Costs** : Based on the BP fellow's annual salary level at original affiliation (5M~25M KRW per month)
- **Invitation Expenses** : Housing Allowances, insurance premiums, moving expenses, child education subsidies, airfare and etc.
- **Material Costs** : 1M KRW per year
- **Indirect Cost** : Upto 8M KRW per year

## Application Period

- 3 calls in 2023 : ① Jan 16th~31th, ② Feb~Apr, ③ Apr~Jun
- for Approx. 122 projects

# Brain Pool (BP)

➤ The number of BP fellows by countries for 3 years

	India	USA	China	France	Japan	Russia	Canada	Germany	UK	Others	Total
<b>2019</b>	91	21	35	7	3	5	2	5	3	...	339
<b>2020</b>	89	24	28	5	2	5	5	1	3	...	359
<b>2021</b>	88	35	28	7	3	6	2	3	2	...	393

❖ Accumulated newly selected/continued projects for 3 years

# Brain Pool Plus (BP+)

Korean R&D institutions employ talented overseas researchers as full-time researchers in all science and technology fields

## Eligibility

- Overseas residing researchers who hold a Ph.D or who have more than 5 years of onsite R&D experience in the industry regardless of a Ph.D

## Duration

- Max. 10 years (4+6)

## Funding

- Up to 600M KRW in total per year (Personnel Costs, Invitation Expenses, Student personnel costs, Facility equipment costs, indirect cost(5%) and Others)

## Application Period

- 3 calls in 2023 : ①Jan 16th~31th, ②Feb~Apr, ③Apr~Jun
- for Approx. 5 projects



Thank you!