## DEPARTMENT OF SCIENCE AND TECHNOLOGY, GOVERNMENT OF INDIA & MINISTRY OF SCIENCE ANDICT, REPUBLIC OF KOREA

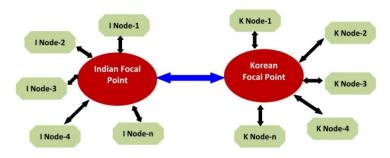
## INDIA-KOREAJOINT PROGRAMME OF COOPERATION IN SCIENCE & TECHNOLOGY

## India-Korea Joint Network Centre Call for proposals

#### Proposals to be submitted by 6:00 pm (local time) on May 29, 2020

#### 1. Objectives

This Call for Proposals is to enable Indian and Korean scientists from academia and laboratories to carry out joint research activity by leveraging already existing infrastructure and funding available with the partners at both sides through a linkage established by a **Joint Network Centre (JNC)**. Joint Network Centre aims to encourage joint project implementation on focal areas of thematic and knowledge research through networking thus, paving way to sustainable interactions by promoting excellence and developing long term relationship based on synergy of activities. Network Centre may also provide opportunities for integrating research with education.



Structure of the JNC

## 2. Potential Area of Cooperation

Department of Science & Technology (DST),Government of India,Ministry of Science and ICT (MSIT) of theRepublic of Korea invite Indian and Korean research groups to submit proposals for **Joint Network Centre** in the following area:

#### • Cyber Physical System

(Artificial Intelligence, Internet of Things focused on agriculture, energy, water and transportation)

## **3. Activities of the JNC**

When the focal coordinator draws up the proposal of JNC, the below details may be included.

- Exchange of Researchers, Research students and Post-Doctoral scholars
- Joint Seminar/Workshop/ Hands on training School (one in each country per year) - Joint Research

When the focal coordinator draws up the proposal of JNC, the below details may be targeted to be delivered as outcomes.

- Publish joint papers
- Develop Prototype / Processes
- Promoting pre-commercial R & D activities

## 3. Eligibility Requirements

- (i) One focal lead coordinator each from India and Korea.
- (ii) Minimum of two Indian and two Korean separate institutional node partners, except the focal point institute (3+3 partnership mode). However, there can be more than two node partners on each side as well.
- (iii) The Focal Coordinator and node partners should either be scientists, researchers, or faculty members employed by government-recognized universities, academic institutes, or national research and development laboratories orinstitutes.
- (iv) If interested, Industries can also participate with their own funding, but they will not be counted as neither the focal coordinators nor node partners.
- (v) All partners to have intellectual and financial stake in the Joint Centre activities.
- (vi) Proof of existing funding support available towards infrastructure and equipments has to be provided with the proposal.

On the Korean side, intellectual property and financial issues shouldcomply withdomestic regulations.

## 4. Programme Requirements

- The Focal Coordinators are responsible for submitting annual scientific and financial reports in order to ensure continued funding.
- Focal Coordinators are also responsible for the technical and administrative coordination of Network Centre.
- Neither Focal Coordinator / Node Partner should be retired or planning to retire during the proposed period of the Proposal.
- In the case of Korea, the project should be carried out in accordance with Korean regulations.

## 5. Kind of support available for Joint Project:

Only one Network Centrewill be selected for funding. The selected Joint Network Centre will be funded for a period of up to three years. However, both sides must pass the annual evaluation in each country for continuation of funding. Expenditure by JNC in their country would be borne by the respective country, i.e., DSTwould support expenditure on Indian side of the JNC whereas MSIT would meet the expenditure of Korean side.

On the Korean side, MSIT's tentative funding amount for the Network Centre would be approximately 60,000,000 won per year.

On the Indian side, DSTwill provide funding support to Focal Coordinating Indian Institute. Funds to other Indian nodes of the JNC would be provided through the Focal Indian Institute of the JNC. From DSTfollowing financial support can be provided for the JNC:

- **Research Manpower:** Maximum One JRF / SRF/ Research Associate for each node. In additional one suitable manpowercan be provided to the Focal coordinator for coordination of the activities.
- **Research Expenses:** UptoRs. 5 lakh to each Indian node towards consumables.
- Joint Workshop& Training School: Financial support for organizing one join workshop cum hands on training school each in India and Korea with participation of 15 -20 students of host country every year may be provided to the Focal coordinator of the JNC

- **Support for Exchange visit component:** Two visits from each side each year for each node of the JNC can be funded. The sending side will provide round-trip economy-class airfare to the relevant entry city of the host country as well as medical insurance. The receiving side will provide accommodation and living expenses, i.e., transportation including pick-up service to and from the airport, food, etc.
- **Institutional Overhead:** Institutional Overhead and contingency support will be determined in accordance with specific norms of DST.
- Participating Indian institutions are responsible for expenses regarding equipment.
- All expenditures must be agreed upon by both parties in the available budget. And since the budget regulations of the two sides are different, consultations must be made within their respective rules.

## 6. Proposal Submission

Korean and Indian Focal Coordinator shall write a common application to be submitted to both DSTand NRF. The common application must be written in English. It will be responsibility of the Focal coordinator to collect technical and financial details from each associated nodes while writing the proposal.

The Indian applicants for funding can download the proposal formats from websites <u>www.dst.gov.in</u> / <u>www.onlinedst.gov.in</u> and should submit completed application form and all relevant information through e-PMS portal of the DST. Proposals must be submitted to DST through the e-application system provided at <u>www.onlinedst.gov.in</u>. Indian Applicants also requested to send <u>three hard copies</u> to DST (Dr. Rajiv Kumar, Scientist É'), DST)by May 29, 202018:00through proper channel. Proposal not submitted through either ePMS portal or hard copy by due date will not be considered. DST will not be liable for any postal delay.

All proposals must be submitted by the deadline, taking into account the time difference between the two countries.

It should be ensured that application with identical title has been submitted by the Korean Focal Coordinator to NRF by due date/time.

For Korean applicants, a separate application form written in Korean is also required. Please refer to 'call for proposals' for instructions on completing the Korean-language proposal. **(Korean side only).** 

## 7. Assessment of applications

All applications received by the notified deadline will undergo a peer review process and then be referred to an independent advisory panel for consideration and ranking. Applications must attain a positive rating to be considered eligible for funding. Joint selection of successful application by DST and NRF will be discussed by the respective nodal agencies. Decisions made by the India-ROK Joint S&T Committee will be final. The following criteria will be taken into consideration for selection of proposals:

- Scientific merit / Scientific excellence of the proposal
- Synergy / Complementarity aspects between the collaborating nodes
- Mutual advancement of research through the transfer of knowledge and expertise
- Ability of the teams to successfully complete the project
- Expected research outputs
- Perceived advantage(s) for both Indian and Korean sides
- Participation of Industry and potential towards applied research and product development.

## 8. Contact Information

DST(INDIA)	MSIT- NRF(KOREA)
Rajiv Kumar	<u>Ms.Jihye Shin</u>
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ANNEXURE - I

# APPLICATION FORM FOR JOINT PROGRAMME OF COOPERATION IN SCIENCE AND TECHNOLOGY

#### 1.Name of Joint Network Centre

#### 2. Duration

/ / ~ / / (dd/mm/yyyy)(Years & Months)

**※**Duration should be 3 years (i.e., 36 months) all together.

3. Contact Information of Lead Focal Coordinator

	INDIA	KOREA
Name of Focal Coordinator		
Organization		
Department		
Title		
Address of Institution		
Office phone #		
Cell phone #		
Fax #		
e-mail		
Date of Birth		

# 4. Contact Informal with Affiliation of all participating Nodes (Minimum 2 nodes from each side)

	INDIA	KOREA
Name of Node Partner		
Organization		
Department		
Title		
Address of Institution		
Office phone #		
Cell phone #		
Fax #		
e-mail		

Name of Node Partner	
Organization	
Department	
Title	
Address of Institution	
Office phone #	
Cell phone #	
Fax #	
e-mail	

## 5. Executive Summary of the Proposal

	o carrinary of ano r rope	
Keywords		
Objectives		
Approach		
Expected Outcome		

X Attention - font: Times New Roman, size: 11 points / Do not exceed space provided.

6.Background and introduction of the subject area including state of the art in India and South Korea (upto200 words)

7. Aims and Objectives of the Joint Network Centre

8. Details about the partnering Nodes in the JNC (Please specify role and responsibility of each Indian and Korean Nodes alongwith synergy / complementarity)

## 9.Plan of work(*per annum*)

Timeline	Responsibilities of Indiannode	Responsibilities of Korean node
1 <sup>st</sup> Year (уууу)		
2 <sup>nd</sup> Year (уууу)		
З <sup>rd</sup> Year (уууу)		

At the Collaborating Indian Institutions	At the Collaborating Korean Institutions

10. Details about sharing of facilities / manpower and other stakes by the partners:

## 11. Justification for collaboration

12. Proposed mechanism for IPR sharing

13. Expected outcome specifically in terms of furthering bilateral cooperation / interactions and other substantive follow-ups. Expected results likely to have commercial value.

14. Proposed monitoring / reporting mechanism for the Joint Network Centre

- 15. Personal Data of Indian and Korean Focal Coordinator to be attached.
- **\***Describe the expertise in the proposed field of workby citing relevant publications. Do not exceed <u>one pages A4 size</u> for each Coordinator(Font: Times New Roman, size: 11 points).

- 16. Research History of both Focal Coordinator.
- Methods in the second se

17. Personal Data and Research Historyof Indian and Korean Node Partner to be attached.

※Describe the expertise in the proposed field of workby citing relevant publications / patents, and ongoing / completed national / international projects during<u>the last 5 years</u>. Do not exceed <u>one pages A4 size</u> for each Node Partner(Font: Times New Roman, size: 11 points). 18. Number of exchange visits required to achieve the objectives by all Partners (Year wise)

	INDIA TO S. KOREA		S. KORE	A TO INDIA
	Number of persons x visits	Duration for each person's visit	Number of persons x visits	Duration for each person's visit
1 <sup>st</sup> Year				
2 <sup>nd</sup> Year				
3 <sup>rd</sup> Year				

18. Joint Workshops cum hands on trainingschoolproposed to achieve the objectives by all Partners (Year wise)

	In India		In South Korea		ea	
	Number of Korean Speakers	Number of Indian Speakers	Number of Indian Students	Number of Indian Speakers	Number of Korean Speakers	Number of Korean Students
1 <sup>st</sup> Year						
2 <sup>nd</sup> Year						
3 <sup>rd</sup> Year						

#### FINANCIAL INFORMATION

## Consolidated Budget Plan–Total proposed Budget on Indian side

(All costs should be in Indian Rs. for proposal submitted by Focal Coordinator. Budget of all Indian nodes must be included while seeking the financial support)
(Rs)

			(Rs.)
	1 <sup>st</sup> Financial	2 <sup>nd</sup> Financial	3 <sup>rd</sup> Financial
	Year	year	Year
Consumables		<b>, , , , , , , , , ,</b>	
Manpower			
Contingency			
Exchange Visits			
Indian Scientists to Korea			
Korean Scientists to India			
Workshop in Korea			
Workshop in India			
Training School			
Total			

#### Budget plan of Individual Indian Focal Coordinator and Nodes

(All costs should be in Indian Rs.. Budget of each Indian Nodes and Focal Coordinators should be prepared separately under this head.

			( <b>Rs.</b> )
	1 <sup>st</sup> Financial	2 <sup>nd</sup> Financial	3 <sup>rd</sup> Financial
	Year	year	Year
Consumables			
Manpower			
Contingency			
Exchange Visits			
Indian Scientists to Korea			
Korean Scientists to India			
Workshop in Korea			
Workshop in India			
Training School			
Total			

- Please quantified list out consumable items
- ✤ Full justification should be given for each budget head
- Please note that failing to provide quantified list of consumables and full justification, the support for consumables would not be considered by the evaluation Committee.

# A. Signatures of the Nodal Partners

► Indian		
Name	Signature	Date
► Indian		
Name	Signature	Date
► Korean PI		
Name	Signature	Date
► Korean Pl		
Name	Signature	Date

## B. Signatures of the Focal Coordinators&Institutions

Indian		
Name	Signature	Date
►Korean		
Name	Signatura	Date
Name	Signature	Dale

- C. Declaration from the Heads of the Focal Collaborating Institutions It is certified that
  - i) the Institutions agree to participate in this Joint Research Project;
  - ii) the Institutions shall provide necessary facilities for implementing the Joint Research Project;
  - iii) the Institutions assume financial & other management responsibilities for the duration of the project to be carried out at their institution; and
  - iv) the back-up funding for manpower, consumable etc. is available for this Joint Research Project.

Signature of the <u>Heads of the Institutions</u>

►	Head	of the	Indian	Institution
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Name Signature Date \_\_\_\_\_

#### ► Head of the Korean Institution

Name Signature Date