DEPARTMENT OF SCIENCE & TECHNOLOGY (DST)

and

RESEARCH COUNCIL OF NORWAY (RCN)

CALL FOR PROPOSALS ICT (2017)

Last date for submission of proposals: 06 September 2017

Under the Agreement between the Government of India and the Government of Norway on Cooperation in the fields of science and technology, the Department of Science and Technology (DST) from Indian side and the Research Council of Norway (RCN) from Norwegian side coordinate the programme for joint funding of collaborative research projects in mutually agreed fields to achieve world-class scientific results.

Both sides now intend to support projects within the field of ICT research. Norwegian funding is part of the two Research Council of Norway (RCN) programmes INDNOR and IKTPluss.

Up to 40 million NOK / INR 30 crore in total is available from the Research Council of Norway (RCN) for allocation to Norwegian institutions, funding per project (Norwegian partners) stipulated to 4-10 mill. NOK/ INR 3-7.5 crore per project.

Activity matching funding is available from DST for allocation to Indian Project investigators.

Project duration: 3 years.

Scientific part

Objective of this call for proposals:

DST and RCN invite Indian and Norwegian researchers/ institutions to submit research proposals within the fields indicated below.

The objective of this call is to establish joint Indian – Norwegian researcher projects that strengthen already on-going research activities in each research group and contribute significant added value to these on-going activities within ICT and the thematic areas:

**Smart environments.** This area includes topics like environmental monitoring, smart neighborhoods, sensor networks/IoT, smart grid, monitoring for safe living, mobility and wireless infrastructure. Artificial intelligence, autonomous and cognitive systems.

**ICT for society.** This area includes topics like educational ICT, ICT for improved e-Governance, human-computer interfaces with particular emphasis on elderly, disabled and illiterate citizens, and cybersecurity, privacy and vulnerability for individual citizens and society at large. NB! ICT for health and medicine is not a priority in this call.

This research activity must intend to move the research front, promote essential competence-building and create new opportunities in the short and long term for the participants, potential industry and society at large.
The research projects should benefit long-term cooperation between the partners and the two countries. (One of the main objectives of the call is to promote collaboration and to build long-term partnerships between Indian and Norwegian scientists.)

The projects must adhere to principles of responsible research and innovation (RRI) and be based on ethical, cultural, health-oriented and environmental perspectives to the benefit of society and the individual.

**Administrative part**

**Who can apply**

Joint proposals must be developed in cooperation between Principal Investigators (PIs) representing a research institution in Norway (universities, university colleges and research institutes are eligible to apply) and a research institution in India. Each partner PI must submit separate research proposal from the research institution.

Additional collaborators from other countries may be included. DST and RCN will only fund their own partners.

Project cooperation should be well-rooted in research institutions in both countries and organised to ensure relevance and benefit to society and industry. To ensure adequate participation of all project partners and encourage long-term cooperation, the project description should clearly describe specific in-kind and financial contributions by each partner, as well as their role in the joint project.

**How can you find partners?**

If you and/or your research institution are involved in ongoing collaboration with Indian or Norwegian research institution within ICT, this call is an opportunity to strengthen this collaboration. If you are searching for new partners, a good starting point is to contact participants at the Indo-Norwegian ICT workshop held on June 21 – 22, 2016 at IIIT Hyderabad, India. See [Report and recommendations of Indo-Norwegian ICT workshop held on June 21-22, 2016 at IIIT Hyderabad, India](https://example.com).

**What types of activities are eligible for funding**

Funding may be sought for research projects. Joint research projects might have a duration of up to 3 years, including dissemination and network activities (workshops, conferences). Any grants to support recruitment of PhD students and post doctoral fellows should be integral components of the project proposal. Proposals for individual fellowships for their own research will not be given priority.

The scope of the project should be realistic within the timeframe and budget limitations of the project. Plans for publication in peer-review journals that are accessible in Norway and India are strongly encouraged.

**Available budget**

Up to 40 million NOK /INR 30 crore in total is available from the Research Council of Norway (RCN) for allocation to Norwegian institutions.

Activity matching funding is available from DST for allocation to Indian Project investigators.
The financial support from DST shall be available for mobility (up to 2 visits per year from each side with sending side provides international travel-related expenses while the receiving side provides the local hospitality as per their national norms) of project participants; one manpower ie JRF/SRF, RA etc; minor equipment (accessories) for up to Rs. 5.0 Lac; and chemicals / consumables/ contingency up to Rs. 5.0 Lac per year.

The funding from Indian side shall be released through a sanction order issued by DST indicating all terms and conditions of the grant. Any formal clearance/ approval pertaining to any kind of regulation by nodal departments/organizations concerning foreign collaboration must be completed before sanction of the project by DST.

The provisions for local hospitality, as mentioned above are as follows:

- Norwegian scientists visiting India shall be paid and amount of INR 2500/-,- per day towards food and out of pocket allowances, or as agreed in contract negotiations for each project plus fully furnished guest house accommodation on actual cost at the host Institute. In case a suitable guest house accommodation is not available at host institute, accommodation would be arranged by the host institute in a suitable hotel/guest house subject to max charges of Rs. 4000/- per day.
- Indian scientists visiting Norway on short term basis shall be provided an amount of NOK 460,- per day and 13 800,- per month on a long term visit towards food and out of pocket allowances, or as agreed in contract negotiations for each project
- For short term visits the maximum payment shall not exceed the total per diem for 20 days
- Free furnished accommodation in a guest house or a hotel with reasonable amenities and facilities shall be provided
- Transport to and from the airport for visiting scientists shall be arranged. In case of senior scientists (in the rank of director or above), transport shall be provided for all official engagements.

How to submit a joint proposal
Each proposal shall have one Norwegian and one Indian Principal Investigator (PI). Norwegian PIs must submit the proposal to the RCN. Indian PIs must submit the proposal to the DST (Department of Science and Technology, India). The proposals should be identified with a common short name/acronym, and a joint (common) project description should be enclosed. The proposals submitted to the respective funding agencies must be identical.

Joint application requirements for the Indo-Norwegian call that shall be described in the application:

- Relevance for the India-Norway Collaborative Research Program and the research areas shall be stipulated
- Planned activities according to a timeline, and organised into well-defined work packages with corresponding responsibility
- Milestones that can be used to easily follow the progress of the project
- Budget with detailed and clearly represented information per partner, including in-kind and financial contributions by each partner.
- Management structure and partner roles/responsibilities.
- Research methodology as well as technology transfer, if appropriate.
- Impact the results of the project will have for the users, the research field and society at large.
- Capacities for implementing research findings in practice.
• Communication plan that describes concrete measures and activities targeted towards various user groups.
• Activities for dissemination and communication of research results to key decision-makers, the public administration and the public at large.

Requirements and criteria:

This call is based on the standard application type Researcher project.

A general description of what activities are qualified for funding, what kind of information the grant application should provide and what the assessment process will comprise is given from the Research Council of Norway here; General requirements for Researcher project.

As listed in the general requirements, the application assessment criteria for Researcher projects are:
• Scientific merit
• Project management and the Project group
• Implementation plan and resource parameters
• National cooperation
• International cooperation
• Dissemination and communication of results
• Relevance relative to the call for proposals
• Overall mark of the referee/panel

Additional assessment criteria for this call

• Indo-Norwegian cooperation: This criteria will evaluate the extent and quality of the Indo-Norwegian cooperation. Points to consider:
  o Balanced and strong consortia, level of integration of partners and distribution of resources (financial and in-kind) as well as project organisation
• Impact: the results of the project will have for the users, the research field and society at large.
• Consideration to whether applications that are relevant for funding take adequate account of ethical perspectives, environmental impact and gender perspectives in the research.

Application requirements in addition to the application requirements for Researcher projects:

• Grant applications, including all attachments, are to be submitted in English.
• The joint application requirements given in this call shall be included in the project description and/or the application form, following the template for the project description.
• The proposals submitted to the respective funding agencies must be identical, with an identical short name/acronym for the project title.
• Don’t include other attachments than the mandatory attachments for Researcher projects; CV’s and Project description.
• The commitment from the partners shall be clear in the joint application. Therefore letters of confirmation from partners are not asked for.

The Research Council of Norway and Department of Science and Technology (GoI) will contribute up to 100 per cent of the project funding. The amount of funding and size of the project will be determined on the basis of the research questions set out in the project proposal and the project partners included.
Assessment and joint decision-making procedure
The project proposals will be assessed separately according to the rules of procedure in each country.

The RCN will use international referee panels in its assessment procedure, followed by the ranking of recommendations by the decision board for IKTPLUSS.

The DST and the RCN will implement a joint decision-making procedure to determine the outcome of the call. Projects must receive a high assessment score in both countries to be funded. Importance will be attached to achieving a balanced project portfolio that reflects the full spectrum of the stipulated research challenges. The selected projects will receive funding from the DST and the RCN.

Anticipated date for notification of results of application process: December 2017.

Additional information
The projects must start before June 1st 2018.

Contracts
The RCN will enter into a contract with the Norwegian applicant for the Norwegian portion of the project.

Agreement on rights to and use of findings and partner obligations (collaboration agreement)
A consortium agreement detailing the obligations of each partner must be drawn up before the contract with the RCN is signed. The collaboration agreement should include specification of the rights to and use of findings (IPR).

Language
The call for proposal is in English language only which also is legally binding.

Proposal Submission
Indian and Norwegian applicants shall submit applications in English to DST and RCN.

For Indian applicants may use the Application given at Annexure. The application should include a jointly formulated and identical copy of the project description, including acronym, submitted to the RCN by the Norwegian partner. Only one original hard copy of the completed application (by post through proper channels) at the following address. Soft copy in a single soft file (do not include any scan page in the soft copy as signatures are not required in soft copy of the proposal) in ms-word or pdfformat as email attachment are required to be submitted. However, only the hard copy of the applications received before the due date will be accepted. DST does not hold any responsibility of not receiving the proposal due to postal delays etc. Incomplete applications will be rejected. Proposals by hand at DST are also not accepted.

Dr. Chadaram Sivaji, Scientist-F
International Bilateral Cooperation Division
Department of Science and Technology, Ministry of Science and Technology, Government of India
Technology Bhawan, New Mehrauli Road
New Delhi 110 016 India
Telefax: +91-11-26520714; Phone: +91-11-26590457; Email: sivaji@nic.in

For Norwegian applicants, application as per the procedure indicated above be submitted to RCN via the RCN electronic application system (www.rcn.no for guidelines).
Last date for submission of the proposals in India and Norway: 6 September 2017
**APPLICATION FORM**

**PART 1: General information**

1. Title of the project:

2. (Subject Area, as specified in the announcement)

3. Contact details / Address of the project leaders:

<table>
<thead>
<tr>
<th>Name &amp; Designation</th>
<th>Indian project leader</th>
<th>Norwegian Project leader</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department &amp; Institute/University (address)</td>
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<td>Telephone (Work)</td>
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<td>Telephone (Residence)</td>
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<td>Email ID</td>
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4. Other participants in the project:

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<tr>
<th>Indian side</th>
<th>Norwegianside</th>
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**INSTITUTIONS ENDORSEMENT**

Certified that –

i) The project participants involved in the project as mentioned above are affiliated to the Institute/University.

ii) All information provided in the project proposal is correct; and

iii) the necessary facilities including scientific equipment etc for implementation of the project are available in the Institution and all necessary administrative support will be extended to the project

<table>
<thead>
<tr>
<th>Signatures of the Indian PI</th>
<th>Signatures of the Norwegian PI</th>
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<tr>
<th>Signatures of the Head of Indian Institution with seal</th>
<th>Signatures of the Head of Norwegian Institution with seal</th>
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PART-II

1. Project title
2. Scientific objectives
3. Current state of the research/technology of the topic
4. Proposed activities including methodology of the proposed research work
5. Preliminary activities by the Indian side
6. Preliminary activities by the Norwegian side
7. Detailed description of the Indo-Norwegian co-operation (Justification/Rationale for collaboration)
8. Compatibility of intentions of both sides with regard to individual components of the project, working method etc
9. Expected results and dissemination plan (Describe in detail the expected outcomes of the proposed activities and outline potential follow-on interactions between the involved institutes/institutions. If applicable, explain how you will disseminate your findings to key stakeholders and community and address potential for knowledge transfer to industry)
10. List of milestones (Outline major milestones of your project on a time-scale of months and list the activities that will be required in order to achieve the milestone)
11. Ethical, safety and regulatory issues (Does your proposed work raise ethical, safety or regulatory issues? If yes, how will you deal with it? Clearly indicate)

PART-III Budget requirement:

A. Indian side (In Rupee only)

i. Visit of Indian scientists to Germany

<table>
<thead>
<tr>
<th>Name of Scientists visiting Norway</th>
<th>Tentative dates of proposed visit and duration of stay in Norway</th>
<th>Anticipated budget estimates for international travel (including domestic travel in connection with the international travel, visa fees, medical insurance, etc) Please indicate break-up for each head</th>
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### ii. Visit of Norwegian scientists to India

<table>
<thead>
<tr>
<th>Name of German Scientists visiting India</th>
<th>Tentative dates of proposed visit and duration of stay in India</th>
<th>Per-diem charges @ Rs. 1000/- per day</th>
<th>Accommodation charges @ Rs. _____ per day</th>
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### iii. Other project costs:

<table>
<thead>
<tr>
<th>Item</th>
<th>Details ie name, number, quantity etc</th>
<th>Budget requirement (1st year)</th>
<th>Budget requirement (2nd year)</th>
<th>Budget requirement (3rd year)</th>
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<tr>
<td>Scientific manpower</td>
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<td>Spare parts / Consumables</td>
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<td>Workshop</td>
<td>Only one joint workshop during the currency of the project shall be supported</td>
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<td>Contingency etc</td>
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**NOTE:** The total project cost (ie A(i), A(ii) and A(iii) must not exceed Rs. 40 Lac)

### B. Norwegian side (In Norwegian currency only)

#### i. Visit of German scientists to India

<table>
<thead>
<tr>
<th>Name of Indian Scientists visiting Norway</th>
<th>Tentative dates of proposed visit and duration of stay in Norway</th>
<th>Anticipated budget estimates for international travel (including domestic travel in connection with the international travel, visa fees, medical insurance, etc) Please indicate break-up for each head</th>
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</table>

#### i. Visit of Indian scientists to Norway

<table>
<thead>
<tr>
<th>Name of Norwegian Scientists visiting India</th>
<th>Tentative dates of proposed visit and duration of stay in India</th>
<th>Per-diem charges as per the norms indicated above</th>
<th>Remarks</th>
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### PART-IV (For Indian partners only)

1. List of on-going/completed research projects with the Indian project participant(s):

<table>
<thead>
<tr>
<th>Title of the project</th>
<th>Brief description</th>
<th>Duration with dates of commencement and completion of the project</th>
<th>Funding available and source of funds</th>
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</table>

2. Infrastructure available/required to implement the project:

<table>
<thead>
<tr>
<th>Facilities</th>
<th>List of items required for the project</th>
<th>If not available presently, how it is proposed to be procured/recruited. Please indicate the source of funding</th>
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<tbody>
<tr>
<td>Equipment</td>
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<td>Manpower</td>
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<td>Consumables and Contingencies</td>
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3. Does the project involve (i) Biological Material Transfer / Use of GMOs / Radioactive materials; (ii) Human / animal trials? (If yes, submit necessary clearance of nodal agency / department of GoI in this regard)

4. Is the collaborative proposal involves IPR related issues? (If yes, the partners need to submit the IPR sharing agreement by the collaborating institutes before sanction of the project by DST and DFG)

5. Please mention Name/Address/Contact details including email address/area of specialization of 3 possible peer-rev