



VINNOVA
Sweden's Innovation Agency

Artificial intelligence for advancing healthcare across India and Sweden

A call for proposals under the Innovations partnership between India and Sweden



DEPARTMENT OF BIOTECHNOLOGY, GOVERNMENT OF INDIA
www.dbtindia.nic.in

VERKET FÖR INNOVATIONSSYSTEM · SWEDISH GOVERNMENTAL AGENCY FOR INNOVATION SYSTEMS
www.vinnova.se



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1 The Call in Brief

Department of Biotechnology (DBT), Government of India, and Vinnova (The Agency for Innovation Systems), Government of Sweden, is announcing grant funding to implement projects aimed at producing new solutions which, aided by artificial intelligence (AI), have significant potential to improve public health, nursing or care in Sweden and India. Projects may focus on such things as disease prevention, diagnosis, treatment, improved medicines and vaccines, nursing or processes. Projects should be able to add economic value either by:

- bringing about new products and services, which can be commercialised, or
- by other means such as improved healthcare or streamlining of nursing or care.

For this reason, the solution should be scalable and implementable during the lifetime of the project. The project duration may be up to three years and should start no later than 26st of February 2021.

This call addresses groupings of at least two project partners of differing expertise; AI plus healthcare, nursing or care. The grants must be jointly applied for by Indian and Swedish partners. Applicants are welcome from all sectors. This might include companies, universities, county councils and municipalities. At least one requirement owner should be included as a project partner in the group. In this call, a requirement owner means someone who needs the solution which the project intends to develop. The requirement owner is responsible for the solution corresponding to a genuine need and that the solution can be implemented within the allotted duration of the project. Users, customers, patients and the public sector are examples of possible requirement owners.

Swedish applicants send their application to Vinnova and Indian applicants to DBT. Relevant information on this offer and a link to Vinnova's application service (eServices Portal) can be found on the Vinnova website¹ and on DBT's website². Swedish applicants should submit their applications to Vinnova no later than 2 p.m. Swedish time on 28th of August 2020. Indian applicants should submit their applications to DBT no later than 8 p.m. Indian time on 28th of August 2020. Vinnova and DBT's joint decision to award or decline an application will be made by e-mail no later than 15th of December 2020.

2 Background

Department of Biotechnology (DBT), Government of India and Vinnova (Agency for Innovation Systems), Government of Sweden, have been jointly working on advancing biotechnology R&D in both the countries for over a decade.

A Joint declaration was signed by the Governments of Sweden and India on an innovation partnership for a sustainable future during the visit of Hon'ble Prime

¹ <https://www.vinnova.se/en/calls-for-proposals/swedish-indian-cooperation/bilateral-cooperation-with-india-within-2020-00331/>

² <https://dbtpromis.nic.in/pi/frmOpenCallList.aspx>

Minister of India to Sweden on 17th April 2018. Apropos to this, DBT and Vinnova organised a digital healthcare workshop In New Delhi in April. Based on the consultations in the workshop the call has been drafted to advance AI based healthcare in both the countries.

3 Purpose of the Call

DBT and Vinnova through the Digital healthcare call aims to ensure sustainable and equitable spread of technology in advancing healthcare access and affordability across India and Sweden.

The call seeks to provide scalable and implementable innovative, sustainable and flexible public health solutions across both the countries using AI-based technologies as a tool.

DBT and Vinnova want to drive advancements in healthcare, nursing and care and thereby contribute to sustainable development, improved public health and good, equal care. Aided by AI, the aim is to benefit Swedish and Indian residents and businesses by creating solutions that facilitate disease prevention, earlier and safer diagnoses, better treatments, improved medicines and vaccines as well as more effective processes. The primary aim is not to develop new methods within AI, but to use AI to measure needs within healthcare.

Collaboration, power gathering, and innovation will be crucial to achieve the United Nations' Sustainable Development Goals (SDG's). With this call, Vinnova and DBT seek to promote collaboration leading to increased innovative capacity and the creation of new solutions contributing to the SDG's, within the framework of the priorities of the call.

This call addresses groupings of at least two project partners of differing expertise; artificial intelligence plus healthcare, nursing or care. Vinnova and DBT would like to see new inter-sectorial collaboration, and AI experts working in other industries such as finance technology to tackle and release the potential of AI in healthcare, nursing and care. The aim is for these partnerships to result in new products and services, which can be commercialised, thus helping enhance Sweden and India's international competitiveness within the field.

The solutions which are produced must also contribute indirect economic value through such things as improved healthcare or streamlining of nursing or care. For this reason, proposed solutions should be scalable and implementable during the lifetime of the project. Projects should have a clear user perspective.

Gender equality is a prerequisite for sustainable growth and is found in Agenda 2030, as an objective in itself, but also as a perspective that should permeate the work on all objective. The call should therefore contribute to an equal development of society linked to two main perspectives.

One aspect is that both women and men share the grant in an equal way, participate in and have influence over the project. Another important aspect is to analyse and determine if there are gender equality aspects that are relevant within the problem area and utilization of the solution.

4 Who can Apply?

This call addresses Indian and Swedish consortium partners of differing expertise; artificial intelligence plus healthcare, nursing or care. The project parties should be legal entities and independent of each other with base operations in respective countries. Applicants might include start-ups, companies, incubators, universities, research institutes, hospitals, county councils, state municipalities, primary or tertiary care centres.

At least one requirement owner must be included as a project collaborator in the group. In this call, a requirement owner means someone who needs the solution which the project intends to develop. The requirement owner is responsible for the solution corresponding to a genuine need and that the solution can be implemented within the allotted duration of the project. Users, customers, patients, the public sector, medicine or vaccine developers or manufacturers are examples of possible requirement owners.

5 Criteria Governing Funding

5.1 What will be funded?

Funding may be sought for projects which, aided by AI methods, produce a solution of great potential to improve public health, nursing or care in India or Sweden. The product, process or service must be innovative and with the potential to create impact.

The joint project may focus on such things as disease prevention, diagnosis, treatment, nursing, healthcare access, automation or improved efficient processes in medicine and vaccine discovery and manufacturing (smart drug manufacturing).

The project should be able to add economic value, either by bringing about new products and services, which can be commercialised, or other things such as improved healthcare or streamlining of access, electronic health record (EHR) interoperability, more cost-efficient production of drugs through smart manufacturing. The solution should be scalable, and feasibility shown or implemented during the lifetime of the project.

Early-stage projects are not suitable for this call for proposals. For example, projects which measure or search for data, or which cannot deliver something new during the allotted project duration.

Innovation over existing solutions must be clearly defined. The need for partnership between Sweden and India must also be articulated with clarity. That is, why the same solution cannot be delivered independently by the Indian or Swedish group.

5.2 Eligible costs

The funding is in the form of grants. Grants to organisations which are conducting economic activity are restricted by rules on state support. These rules govern such things as the type of costs and what proportion of them may be covered by a grant.

6 Size of grants

Indian collaborators would be funded by DBT or BIRAC and Swedish partners by Vinnova.

6.1 DBT and BIRAC

Applicants from research institutes, academia or not-for-profit research organizations will be funded by DBT subject to fulfilment of their eligibility conditions and verifiable documents. Companies or start-ups will be funded by BIRAC (on a matching grant for costs above Rs 50 lakhs).

6.2 Vinnova

In Sweden, under this call for proposals, grants are made under the framework for experimental development in accordance with Vinnova's regulations, SFS 2015:208 on state support on research, development and innovation. Grants in this call for proposals is provided with support under Vinnova's Regulation (SFS 2015: 208) on state support for research, development and innovation. The basis for support is Experimental development according to Article 25 of Commission Regulation (EU) No 651/2014. This means that organisations which are conducting economic activity may be given a grant of 25–60 % of the eligible costs³ for each party. The level of grant depends on such things as the size of the company, the project parties and how they plan to disseminate their results. More information about this may be found on Vinnova's webpage⁴.

Grants to research organisations and publicly funded nursing and care in Sweden do not count as state support when these organisations are involved in their non-economic activity. In this call, those organisations which do not fall under the state rules may be given a grant of up to 100 % of their eligible costs.

³ Information for Swedish applicants: www.vinnova.se/globalassets/huvudsajt/sok-finansiering/regler-och-villkor/dokument/guide-till-vinnovas-villkor-om-stodberattigande-kostnader.pdf

⁴ More information for Swedish applicants in table on page two: <https://www.vinnova.se/globalassets/huvudsajt/sok-finansiering/regler-och-villkor/dokument/stodnivaer-statligt-stod.pdf>

7 Grant Guidelines

7.1 Proposal details

It is for the applicant to determine what type of data and which AI methods will be used in their project. The project plan must state clearly why the chosen method is best suited for its purpose.

The expertise the project collaborators in the chosen method must be stated clearly with supporting documentary evidence.

7.2 Conditions for us to consider an application

Vinnova and DBT will only consider applications which meet the following:

- The grants must be jointly applied for by Indian and Swedish partners
- The application should meet call objectives (see Purpose of call above)
- The application must be submitted as per the format on DBT's website (<https://dbtepromis.nic.in/pi/frmOpenCallList.aspx>) for Indian applicants and at Vinnova's application service, the eServices Portal (<https://portal.vinnova.se/>) for Swedish applicants.
- All project parties must be legal entities
- Project duration is to be maximum 3 years
- The application is submitted between 15th of February and the 28th of August at 2 p.m. local time for Swedish applicants and 8 p.m. local time for Indian applicants.

7.3 Grant assessment

7.3.1 Scientific merit of proposal

- Alignment to call objectives (see Purpose of call above)
- Innovation over existing processes or products
- Sustainable and flexible healthcare solutions based on AI

7.3.2 Approach and methodology

- Relevance of the choice of AI method to the proposed solution
- Project's integration in the requirement owner's organisation
- Realistically planned activities in regard to time and budget

7.3.3 Organization and investigator capabilities

- Project parties' expertise and experience in the chosen AI method.
- Project parties' capability and reliability in regard to implementing the project

- Commitment of the respective project parties to implementation and funding
- Advantages of partnering between Indian and Swedish groups
- Project's integration in the requirement owner's organisation
- How well the project team (key people) is composed regarding gender distribution, including commitment and influence

7.3.4 Impact and deliverables

- Potential to improve healthcare accessibility and affordability in Sweden and India (especially in rural India)
- Potential to contribute economic value (smart drug manufacturing)
- Potential to contribute increased gender equality
- Well-articulated implementation or demonstration plan during the project period
- Scalability and potential for national and international dissemination of results
- Potential to increase Sweden and Indians international competitiveness in the field.

7.4 How do we assess?

The grants would be evaluated independently by Indian and Swedish expert committees and then jointly reviewed for decision on award.

With reference to the equal treatment principle, only those applications meeting the requirements under point 7.2 will be considered. Applications which meet the requirements under point 7.2 will be assessed according to the above assessment criteria in competition with each other. The applications will be assessed by Vinnova and by experts appointed by the Agency. Applicants may be called to interview. Vinnova will then make its decision on funding and notify this to all applicants.

8 Decision and terms

8.1 About our decisions

Grants are made under the framework for experimental development in accordance with Vinnova's regulations SFS 2015:208 R&D support (§ 9 / Art. 25).

The decision to award or decline an application will be made by e-mail no later than 15th December 2020. Decisions may not be appealed. If funds have been awarded in error, or an overpayment made, the recipient may be liable for repayment.

8.2 Terms for granted funds

DBT's and Vinnova's general terms apply to granted funds and are in force from the date a decision is made. These terms include rules on project contracts, conditions of payment, monitoring, reporting and utilisation of results.

In addition to DBT's and Vinnova's general terms and conditions, the following special conditions apply: for its duration, a project must be represented by at least one project partner at any programme seminars and conferences which DBT or Vinnova arranges. The costs of such participation may be claimed.

Additional special terms may be stipulated for individual projects.

9 Who may read applications?

Applications submitted to DBT or Vinnova become public documents. However, DBT and Vinnova may not lawfully disclose information on commercial or operational conditions, inventions and research results, if it may be assumed that individual financial loss would occur upon publication of such information.

In practice, this means DBT and Vinnova must supply documents if requested, but that it is marked as confidential any information deemed personally damaging were it to be released.

Further information on confidentiality rules can be found on Vinnova's website⁵.

10 Contact details

10.1 Vinnova, Sweden's Innovation Agency

- Malin Petersen, Programme Manager
Tel: +46 (0)8 473 31 31, E-mail: malin.petersen@vinnova.se
- e-Services portal (Intressentportalen), Vinnova's IT-support
Tel: +46 (0)8 473 32 99, Email: helpdesk@vinnova.se

10.2 Department of Biotechnology, Government of India

- Dr Kalaivani Ganesan, Scientist E
E-mail: k.ganesan@nic.in
- DBT Application support – e-promise team
Tel: 011-24365136, E-mail: epromise.dbt@nic.in

⁵ www.vinnova.se/en/apply-for-funding/rules-for-our-funding

11 Grant Timelines

Grant submission	15 Feb–28 Aug 2020 ⁶ (please note time)
Grant application evaluation	Sep–Oct 2020
Joint review	Nov–Dec 2020
Communication of funded projects	No later than 15 th of Dec 2020
Award of grant	Jan 2021
Project start	15 th Dec 2020–26 th Feb 2021

⁶ At 2 p.m. for Swedish applicants and 8 p.m. for Indian applicants (local time)