

# Cooperation India – Netherlands

## Technology for a Sustainable Healthcare: Minimally invasive techniques

Call for proposals 2016

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सत्यमेव जयते

In cooperation with:



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Netherlands Organisation for Scientific Research

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# 1 Introduction

The Department of Biotechnology (DBT), Government of India and the Netherlands Organisation for Scientific Research (NWO) / the Netherlands Organisation for Health Research and Development (ZonMw) will open a joint call for proposals in September 2016. The topic of the call is *Technology for a Sustainable Healthcare: Minimally invasive techniques*. This programme offers funding opportunities for joint research cooperation between Dutch and Indian research groups.

This call for proposals sets out information about the possibilities for submitting applications, the conditions that applications must meet and the procedure for assessing the applications.

## 2. Aim

### 2.1 General

The aim of the call for proposals is to stimulate sustainable Indian-Dutch research collaboration by funding joint research projects in the area of medical devices that have the explicit goal to contribute to a more sustainable health care either in India or in The Netherlands. The aim is to develop innovative technology for a sustainable healthcare system. We define sustainable healthcare as a high quality system that is affordable and accessible for every *individual*, and affordable and sufficiently staffed for *society as a whole*.

Three strategic questions to address are:

1. How can technology support health and wellbeing of people in order to help them function and participate in society, outside of organized care? The point is to focus on health rather than healthcare. By focusing on prevention, health and wellbeing you will reduce the need for professional healthcare.
2. How can technology enable care to be delivered closer to home? In many cases it is more cost effective and better for patients to deliver care outside of care institutions. Chronic care should not be managed in hospitals. Rehabilitation should take place closer to home or even at home.
3. How can technology enable more efficient and personalized care? Technology enables us to do more with less. Technology can allow early and individualized diagnosis and prognosis, less invasive treatment and change work processes all together.

Besides providing solutions to above questions, an additional goal is to stimulate the Dutch and Indian research fields of medical devices on: *Minimally invasive techniques*.

### 2.2 Budget

A budget up to € 1.470.000,- is available for the 2016 call on the Dutch side, this contribution will be matched by DBT. This budget covers for funding for two joint research projects, jointly funded by DBT and NWO / ZonMw.

### 2.4 Thematic focus call for proposals

In general a proposal should (1) meet the [WHO-definition](#) for medical devices; (2) contribute to a more sustainable health care either in India or The Netherlands as defined in this call; (3) involve (pre)clinical research with the objective to start phase I/II trial (within the term of the project or directly following the project); (4) address the topic defined below.

**Minimally invasive techniques:** The means and methods used to minimize damage of healthy tissue that occurs during diagnostics and treatment. Examples of minimally invasive techniques: endoscopy; the use of catheters for treatment or diagnostics, and image-guided non-invasive treatment. Robotic surgery; the use of robotics during surgery. Contributing to a greater control and vision during surgery, allowing to perform safe, less invasive, and precise surgical procedures. Innovative techniques specific for the support of a minimally invasive intervention in a low resource setting are preferred .

Successful implementation of translational research is not only depended on scientific quality but is also determined by the extent to which the research is in line with the wishes and needs of the (end)users<sup>1</sup>. The term used within in this call to refer to the set of activities aimed at maximising the possibility of research results being applied by third parties is 'utilisation'. Involvement of (end)users is explicitly encouraged, and (end)users should be involved in the project from the beginning to the end. Potential (end)users should be indicated in the utilisation plan of the project.

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<sup>1</sup> **Endusers** are civilians (e.g. clients, patients, parents, chronically ill and disabled) for whom the results of the project are intended. **Users** are care workers, scientific associations or umbrella organizations thereof, policy makers, fellow researchers, companies (pharmaceutical industry, SME etc.)

## 3. Guidelines for applicants

### 3.1 Who can apply?

Eligible research teams are composed of Dutch and Indian researchers, with active involvement in the project of a senior Principal Investigator on both the Indian and the Dutch side. We encourage active collaboration of applicants and undertakings<sup>2</sup>.

Any Dutch or Indian Principal Investigator may be involved in one application / project only. One person can be involved in a maximum of two applications, but only in one of these applications as Principal Investigator.

For the Dutch scientists the NWO / KNAW eligibility criteria are applied, i.e. the Dutch Principal Investigator should be affiliated to:

- a Dutch university or University Medical Centre; or
- an institute affiliated to NWO; or
- an institute affiliated to KNAW; or
- the Netherlands Cancer Institute NKI;
- the Max Planck Institute for Psycholinguistics in Nijmegen; or
- the DUBBLE Beamline at the ESRF in Grenoble; or
- Naturalis NBC; or
- the Advanced Research Centre for NanoLithography (ARCNL);
- TNO - Nederlandse Organisatie voor toegepast-natuurwetenschappelijk onderzoek;

AND

have an employment contract for at least the duration of the application procedure and the duration of the research the grant is applied for;

AND

have at least a PhD or an equivalent qualification.

For the Indian scientists patterning with the Dutch Scientist, the Indian Principal Investigator should be researcher from public or private nonprofit institution that develop and perform R&D activities. This includes universities and other academic institutions, research institutions, hospitals, non-governmental organisations and public foundations.

### 3.2 What can be applied for?

Funding can be requested for a joint research project between Indian and Dutch parties named in 3.1 (at least three consortium partners). Funding can be applied for:

- Equipment/accessories essential for the project, Consumables, Manpower, Travel, Workshop and Contingency.
- Manpower shall include employment costs for two-four PhD students (4 years) and/or Post-docs (three years). One or two in India and one or two in The Netherlands; of which at least one researcher with a medical background and one with a technical / engineering background. Duration and fellowship amount as per terms and conditions of DBT / NWO respectively. In The Netherlands the term for appointment of PhD student and Post-doc is respectively four years and three years.
- Travel shall include obligatory exchange visits for the subsidised scientists in the research team. The Post-doc and/or PhD student has to visit and be involved in lab research at a counterpart in the partner country at least once during the project, for a maximum period of three months.
- One workshop to enhance the exchange of ideas, experience, knowledge and skills between the research teams.

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<sup>2</sup> Undertakings are entities engaged in an economic activity, regardless of their legal status and the way in which they are financed.

The maximum budget that can be applied for on the Dutch side for an individual project will comprise up to **€ 735.000,-**. The Indian-Dutch consortium must consist of at least three consortium partners one or two Dutch and two or more Indian research institutions. The consortium must comprise of a collaboration between medical research institutes and technical/engineering research institutes.

### **3.3 When can applications be submitted?**

#### **3.3.1 Matchmaking workshop**

NWO, ZonMw and DBT will organise a matchmaking workshop for researchers to meet one another and present their research topics. This matchmaking workshop will be held on 2 and 3 March 2017 in Dehli, India. Representatives of the Dutch university medical centres, technical universities, and other relevant institutions will be invited to participate in the workshop. More information about the registration procedure of the workshop via the contact person of ZonMw and DBT (at the end of this document).

Researchers who do not participate in de matchmaking workshop can submit an abstract that will be presented to the Indian researchers during the workshop.

Researchers who do not participate in the matchmaking workshop are still eligible to submit a joint research proposal.

#### **3.3.2 Joint research proposals**

The deadline for submitting applications for joint research proposals is **2 May 2017, 14.00 CET**. Applications received after the deadline are not eligible for further assessment. After the deadline, improvements of or additions to applications are not permitted.

### **3.4 Drawing up an application**

Research teams submit one single joint Indian-Dutch research proposal. A proposal consists of two parts: a completed ProjectNet section and a core proposal in pdf format. The basic information listed in § 3.4.1 should be entered in the ProjectNet section. The descriptions in § 3.4.2 form the core of the proposal. Information on how to structure the core proposal is provided in the description below. A MS-Word template will be downloadable.

Please note that all applications must to be written in **English**, unless indicated otherwise.

#### **3.4.1 ProjectNet**

Please note that you will be asked to select an organisation if you want to register in the ProjectNet system. Because the individual Indian research institutes are not available in the ProjectNet system, for the co-applicants from India you should select:

- Department of Biotechnology (DBT), New Dehli, India

The basic information listed below should be entered in the ProjectNet section:

- Title of the proposal  
a short and specific title of the proposal.
- Concise summary  
give a short summary of the proposal, maximum of 300 words.
- Applicants  
enter the personal information for the Principal Investigators.

#### **3.4.2 Core proposal**

The descriptions stated below make up the core proposal. An application form will be available at the ZonMw website (<http://www.zonmw.nl/nl/subsidies/subsidiekalender/>).

### **Composition of the research team**

List the names of the researchers involved in the project, both in The Netherlands and in India.

### **Institutional environment**

Please indicate the host institutions in The Netherlands and in India.

### **List of key publications**

Please list five key publications by the applicants related to the proposed research. The publications should give evidence of the qualifications of the applicants in this field.

### **For joint research projects: Description of proposed research**

- Relevance to the theme of the call (maximum of 500 words)
  - Fit of the proposal into the thematic focus
- Research Programme (maximum 3,000 words)
  - Overall aim, key objectives, scientific background
  - Originality and/or innovative elements of the topic
  - Research plan including practical timetable over the grant period
  - Experimental techniques and/or methodology
  - Originality and/or innovative elements of the approach
  - Translational character of the study

Description of the research programme should take into account the criteria specified under 'scientific quality of the research proposal' in § 4.2.


- Utilisation plan (maximum of 750 words)
  - Focus on innovative aspects, implementation potential, and added value compared to current best practices. Contribution to a sustainable healthcare system.
- Indian-Dutch co-operation (maximum of 750 words)
  - Added value of Indian-Dutch co-operation to the research project, including the complementary of the Dutch and Indian research teams;
  - The degree of inter-institutional co-operation between the project partners. Description of the plan for exchange of ideas, experiences, knowledge and skills during the term of the project. Including the obligatory workshop and exchange visits of the scientists;
  - The prospects for long term scientific collaboration beyond the duration of the research project;
- Expected results and knowledge utilisation (milestones / deliverables / timetable)

### **Budget**

Provide a clear budget for the costs of the proposed activities. Please consider § 3.2 when preparing your budget.

### **Curriculum vitae of the Dutch Principal Investigators and Indian Principal Investigators**

#### **3.4.2 Submitting an application and specific conditions**

Applications must be submitted online, and in accordance with the guidelines, via ZonMw's ProjectNet system. If you experience any problems with ProjectNet, please contact the helpdesk between 08.00 and 17.00 on 070 349 5178 or by e-mail at [helpdesk@zonmw.nl](mailto:helpdesk@zonmw.nl). Please specify a telephone number in your e-mail so we can call you, if necessary. If you have never worked with ProjectNet before, you must first register as a  [New user](#) (121 KB). We recommend that, before submitting your application online, you print out a PDF of the application and check it for any irregularities. It may be that some characters (such as quotation marks) have not been converted properly, particularly if you first drafted your application in MS Word and then copied into to ProjectNet. Such errors can be corrected in ProjectNet.

**The Dutch Principal Investigator (also on behalf of the Indian Principal Investigator) must submit the entire joint research proposal in ProjectNet.**

The electronic application consists of three parts: (1) ProjectNet section, (2) the core proposal, and (3) a specified budget (Dutch part of the application). The ProjectNet section should be completed in ProjectNet and contains personal information of the applicants.

For Dutch researchers, this Call for Proposals is subject to ZonMw's general grant conditions. And must provide a data management plan after granting of the proposal and before the start of the project in cooperation with a data expert. It is recommended to involve the data expert at an early stage and to assess how the ZonMw requirements for the data management plan can be taken into account. More information: [www.zonmw.nl/ttd](http://www.zonmw.nl/ttd).

For Indian researchers, this call for proposals is subject to DBT's general grant conditions.

#### *Participation of (end)Users*

As mentioned above, the involvement and/or participation (end)Users in projects is highly recommended. In case of any participating undertaking<sup>3</sup> in granted projects, ZonMw will make arrangements about the access to and use of project results.

These arrangements will be concluded in a project agreement, which will meet the following principles:

- Maximum utilisation of the outcome of the research projects
- Results will be made publicly available through publications
- Companies can obtain rights to results meeting the regulations of state-aid
- DBT encourages (end)Users participation with cash or kind contribution. No funds are available for industry from DBT or ZonMW/NWO.

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<sup>3</sup> Undertakings are entities engaged in an economic activity, regardless of their legal status and the way in which they are financed.



## 4. Assessment procedure

### 4.1 Procedure

Selection of the proposals is performed according to a joint Indian-Dutch assessment and selection procedure.

After the deadline of the Call, the proposals are screened to ensure they comply with the formal requirements. The eligibility is checked in The Netherlands by ZonMw and in India by DBT. All applicants and their institutions must fulfill national eligibility rules for research proposals as set by the relevant organisation. Please see § 3.1 (who can apply?). Only proposals which are eligible both in The Netherlands and in India will be processed for assessment.

The quality of the proposals will be assessed by (international) independent scientific experts ('referees'), according to the criteria specified in § 4.2. Each proposal is sent to preferably three to four scientific experts, who will review the proposal.

The anonymised written reviews are sent to the applicants. The applicants are given the opportunity to write a single reply ('rebuttal') to the comments of the referees. This reply should not exceed three pages.

The English version of the proposal, the referee reports and the applicants' response are sent to the Assessment Committee. The Assessment Committee is appointed by NWO and ZonMw, and by DBT, and comprises of independent scientific experts from The Netherlands and India. The Assessment Committee convenes once to moderate, rank and recommend proposals for funding on the basis of the criteria specified in § 4.2. The ranking of the Assessment Committee is sent as an advice to NWO and ZonMw, and to DBT.

ZonMw and DBT jointly decide on the advice to the boards of NWO and DBT on projects to be funded. Funding decisions will be taken by the board of NWO in The Netherlands and DBT in India. Positive funding decisions will be taken once the participating funding organisations have confirmed funding.

The NWO Code of Conduct on Conflicts of Interest applies to all referees and members of the Assessment Committee, and NWO and ZonMw staff involved in the assessment and/or decision-making process.

### 4.2 Criteria

In assessing and ranking the proposals, the Assessment Committee will consider the following equally weighted criteria:

- **Relevance to the theme of the call**
  - Fit of the proposal into the thematic focus (as specified in § 2.2)
  - Added value of Indian-Dutch cooperation to the research project, including the complementarity of the Dutch and Indian research teams;
  - The degree of inter-institutional cooperation between the project partners, and the prospects for long-term scientific collaboration beyond the duration of the research project.
- **Scientific quality of the research proposal**
  - Challenging content;
  - Originality of the topic;
  - Innovative elements;
  - Potential to make an important contribution to the advancement of science or technology and sustainable healthcare;
  - Suitability of the approach (including pitfalls and solutions) / plan including time scheme / milestones;
  - Expected results, deliverables in terms of scientific publications and other output.

- Quality of the research group. The research group should be top in the field; track records of the institutes / research groups / applicants should be excellent.
- **Utilisation**
  - Potential use and relevance of the knowledge generated beyond the applicants' field(s) of research or beyond the academic world (economical, technical, societal or cultural).
  - Potential implementation risks (commercial proposition, existing patents, eligibility or societal acceptance)
  - Competence of research group concerning the transfer and application of research results

### **4.3 Composition of the Assessment Committee**

The Assessment Committee is composed of scientific experts appointed by NWO and ZonMw, and by DBT, and will be established as soon as the call for proposals has been published. The Assessment Committee reports to NWO and ZonMw, and to DBT.

## 5. Other information

### 5.1 Contact

#### The Netherlands

ZonMw

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### 5.2 Indicative timetable

December 2016	Call for proposals 2016 launched
2 and 3 March 2016	Workshop in New Delhi, India
<b>2 May 2017</b>	<b>Deadline for submitting proposals for joint research projects</b>
16 May 2017	Eligibility check
May-August 2017	Consult with referees
28 August – 8 September 2017	Possibility for rebuttal by applicants
October 2017	Assessment by Assessment Committee
November 2017	Decision on proposals by NWO, ZonMw and DBT, decision to applicants
May 2018	Start joint research projects