

**Cooperation between India and the Netherlands
on Medical Devices for Affordable Health**

Call for proposals 2010

(Closing date in India : 21st May 2010)



सत्यमेव जयते

Government of India



Netherlands Organisation for Scientific Research



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1 Introduction

The Department of Science and Technology (DST), Government of India and the Netherlands Organisation for Scientific Research (NWO)/The Netherlands Organisation for health research and development (ZonMw) open a joint call for proposals in February 2010. The topic of this call is New Medical Devices for Affordable Health. This program offers funding opportunities for bilateral 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 Indo-Dutch research collaboration by funding joint research projects on the topic medical devices that have the explicit goal to reduce the costs of health care either in India or in the Netherlands. An additional goal is to stimulate the Dutch and Indian research field of medical devices on five topics: (1) Minimally invasive techniques, (2) Medical optics and acoustics, (3) Medical image processing, (4) High precision instrumentation, (5) Safe extramural care.

2.2 Budget

The budget covers funding for a minimum of four joint projects, jointly funded by DST and NWO/ZonMw. In an approved project two PhD positions or post-doc positions are provided: one in India (duration and fellowship amount as per terms and conditions of DST) and one in the Netherlands (duration and fellowship amount as per terms and conditions of NWO/ZonMw).

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.

For Dutch scientists the NWO/ZonMw eligibility criteria are applied, i.e. the Dutch principal investigator (PI) should be affiliated to:

- a Dutch university; or
- (research) institutes affiliated to a Dutch university; or
- University Medical Centers; or
- a Dutch non-profit institute for scientific research; or
- Health care organisations; or
- Knowledge institutes.

The Principal Investigator (PI) and other investigators in India should be Scientists/ faculty members working in regular capacity in UGC recognized Universities/ Deemed Universities, Academic Institutes and National Research & Development Laboratories/ Institutes. The Indian PI should not be retiring or leaving the parent institute during the proposed duration of the project.

Private parties may co-finance projects. Cooperation with industry is encouraged, because this way medical devices will reach the market quicker.

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. Financial support for approved projects would cover:

1. Two PhD-students or post-doc positions. One in India and one in the Netherlands; duration and fellowship amount as per terms and conditions of DST/NWO respectively. In the Netherlands the duration of a PhD is 4 years and the duration of a post-doc is maximum 3 years. In India the fellowship would be co-terminus with the project.
2. Exchange visits for scientists in the research team: maximum 4 research persons x visits (in total) of max. 3 months each to PhD/Postdoc students; For senior researchers the max. stay will be 3 weeks in total.
3. Minor equipment/accessories (for the Netherlands at a max. of 20 k€ per year; for India around 500.000 rupees for equipment and around 200.000 rupees per year for consumables).
4. One project related workshop to enhance the exchange of ideas, experiences, knowledge and skills between the two research teams..

In the Netherlands a maximum budget of €280.000 can be applied for. Applications in the Netherlands with a budget higher than €280.000 will not be considered.

3.3 When can applications be submitted?

The deadline for submitting applications is 6 May 2010, 15.00 CET (Central European Time) in the Netherlands and 21st May 2010 in India. Additions or changes after this deadline are not possible. Applications received after the deadline will not be considered.

3.4 Drawing up an application

Research teams submit one single joint Indo-Dutch research proposal. The proposal must be submitted electronically (see 3.6) in the Netherlands. Please note that all applications are to be written in English. The Indian Principal Investigator would submit 5 hard copies by post through proper channel and one digital copy by e-mail of the same proposal to DST. If required, additional information may be requested as per national requirements

3.5 Specific conditions

In general a proposal should (1) meet the WHO-definition for medical devices, (2) address at least one of the five topics defined below, and (3) have the explicit goal to reduce the costs of health care either in India or in the Netherlands.

Topics to be covered:

1. Minimally invasive techniques: The means and methods used to minimize damage of healthy tissue that occurs during invasive diagnostics and treatment. Endoscopy and the use of catheters for treatment or diagnostics are examples of minimal invasive techniques. Invasive techniques (open surgery), and non-invasive techniques (radiography, MRI, PET, SPECT) etc are not included in this topic. Innovative techniques specific for the support of a certain minimal invasive intervention (e.g. optical and tactile feedback) are included.

2. Medical optics and acoustics: Medical optics (including near ultraviolet and near infrared light) and acoustics (including audible as well as the ultrasonic field) cover methods used to acquire images as well as therapeutic treatment such as eye corrections using laser light and treating kidney stones with ultrasound. Also included are the instruments specifically for measuring the optical properties of the eye (ophthalmology) and acoustic properties of the ear.

3. Medical image processing: Processing of medical images such that the end-user is able to better assess the images or that even a

quantitative analysis is possible. Visualization, CAD systems, multimodal and molecular imaging are examples.

4. High precision instrumentation: Development of instruments with higher sensitivity and/or a higher specificity and/or a higher accuracy to enable detection of smaller signals, (sometimes to the level of a (bio)molecule or a subatomic particles) and reduction of noise or false-positive signals. High precision instrumentation covers equipment for detection or diagnosis, as well as instruments sending out signals, such as radiation equipment used for therapeutic purposes.

5. Safe extramural care: Health technology in the extramural care (e.g. public health services, GPs, home care, self care) to enable people to live longer at home (in stead of e.g. a home for the elderly). Safety and usability are important aspects of these instruments. User-friendly and safe tools are essential for a more effective and efficient extramural care.

Grant conditions

For Indian and Dutch researchers, this 'Call for Proposals' is subject to DST and ZonMw's general grant Conditions respectively. Additionally, publications resulting from the research project should be jointly published by the researchers from India and the Netherlands.

3.6 Submitting an application

The applications must be submitted in an electronic form using the ProjectNet system, ZonMw's system for electronic applications <https://projectnet.zonmw.nl>.

When filing the application in the ProjectNet system, only one PI can be written down by the contact information. Because the organization where this PI works must be recognized by the ProjectNet system, we suggest that the Dutch PI writes down his/her contact information.

If one has never worked with ProjectNet before, one must first choose their language from the menu on the leftside (e.g. English). To create your own ProjectNet account, click on the link 'New user'. The helpdesk can be contacted for problems with ProjectNet between 08.00 and 17.00 CET on +31 (0)70 349 5178 or by email at projectnet@zonmw.nl.

In India, the Indian Principal Investigator would submit 5 hard copies of the same proposal by post through proper channel and one digital copy by e-mail to the following address – Dr Rajiv Sharma. Scientist 'G', International Cooperation Division, Department of Science & Technology, technology Bhawan, New Mehrauli Road, New Delhi-110016. (E-mail : rajivdst@nic.in).

4 Assessment procedure

4.1 Procedure

Research teams submit one single joint Indo-Dutch research proposal to NOW/ZonMw and DST as mentioned in para 3.6. NOW/ZonMw collects the digital proposals and sends the proposals to DST. The assessment procedure includes (1) eligibility check, (2) peer review (3) scoring and ranking by an assessment committee of independent scientific experts (4) funding decision by the Indo-Dutch joint committee.

STEP 1: Eligibility of joint research projects

The eligibility of the proposals is checked by both NWO/ZonMw and DST. Eligible proposals enter the assessment procedure, non-eligible proposals are rejected and will not enter the assessment procedure. An eligible proposal should (1) meet the WHO-definition for medical devices (www.who.int/medical_devices/en) and (2) address at least one of the five topics defined (see 3.5). This will be checked by the program officers of NWO/ZonMw and DST.

After the first step NWO and DST will assess the proposals in parallel. This means NWO/ZonMw and DST both follow their own assessment procedure. The assessment procedure of both NWO/ZonMw and DST include peer review and scoring and ranking by a committee of scientific experts. As a last step funding decision is made by NWO and DST in the Indo-Dutch joint committee.

STEP 2: Peer Review by NWO/ZonMw

The joint research proposals are sent to external referees, who report on the applications using the criteria (see 4.2). NWO/ZonMw makes sure each proposal is reviewed by a minimum of two, but preferably four experts.

NWO/ZonMw anonymises the review reports of the referees, combines them and sends them to the applicants for rebuttal: the review reports NWO/ZonMw collects are sent to the Indo-Dutch research team via the Dutch PI. If

The Indo-Dutch research team is given the opportunity to provide a written reply to the written anonymous review reports. In the Netherlands the rebuttal may not exceed three pages.

STEP 3: Committees

Both NWO/ZonMw and DST form an assessment committee to rank the proposals. Committee members do not themselves act as referees, neither in peer review nor in the committee meetings. The members of the committee are selected on the basis of individual expertise. Committee members should declare any potential conflict of interest.

The two assessment committees from NWO/ZonMw and DST both make a ranking of the proposals. They determine the quality and the relevance on each proposal on the basis of the criteria in 4.2, the reviews and the applicants' response (rebuttal).

To come to the final ranking, NWO/ZonMw places the proposals in the prioritizing matrix below.

Prioritizing matrix

Relevance Quality	Very relevant	Relevant	Moderately relevant
Excellent	1	2	-
Very good	3	4	-
Good	5	6	-
Adequate	-	-	-
Insufficient	-	-	-

Following, the prioritizing matrix is used to determine the ranking. The proposals which are excellent and very relevant (number 1) will be on top of the ranking, the proposals which are excellent and relevant (number 2) will be below them, etc. Proposals which are moderately relevant and/or have adequate or insufficient quality will not be considered for funding

Step 4: Joint Committee/Decision Making

The results of the Indian and Dutch assessment committees (scores and ranking) will be combined by a Joint Committee into a single ranking of projects to be funded. The Joint Committee decides which projects will be funded and which aren't.

The Joint Committee consists of NWO and DST. If necessary, a subset of the Dutch and Indian committee members can discuss the ranking and advise the Joint Committee. NWO/ZonMw will inform the Dutch PI's about the grants. DST will also inform the Indian PI's about the results and contact the Indian PI's of jointly recommended projects regarding required clearances followed by financial releases for the finally cleared projects.

4.2 Criteria

Assessment criteria for quality:

- Scientific quality: Challenging content, originality of the proposal, potential to make an important contribution to the advancement of science and technology
- Methodological quality of the research proposal; suitability of the proposed methods, feasibility of the project, potential that the research questions will be answered
- Composition and Quality of the Research group; medical & technological knowledge & skills levels clear from past performance (scientific publications/citations, devices developed/patented/produced/applied in health care)

- Indo-Dutch cooperation: Added value of the Indo-Dutch cooperation to the research project, degree of inter-institutional cooperation between the project partners and the prospects for long term scientific collaboration beyond the duration of the research project

Assessment criteria for relevance:

- Potential that a new device will be produced
- Its potential contribution to affordable and accessible health care.
- Collaboration with intermediate and/or ultimate target group (the patient/client perspective) is required.

5 Other information

5.1 Contact

The Netherlands

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Ms. Saskia Matheussen
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India

Dr Rajiv Sharma
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5.2 Timetable

6 May 2010	Deadline for the submission of joint proposals in the Netherlands
21 May 2010	Deadline for the submission of hard copies of joint proposals in India
May- June 2010	Consult with referees
July-September 2010	Rebuttal (in case of the Dutch scientists)
September 2010	Meeting of the assessment committee
October 2010	Funding decision by the Joint Committee in the Netherlands

5.3 Workshop

A workshop will be organized 2-2,5 years after the start of the projects to evaluate the projects and as a networking opportunity between the selected projects.