

CALL FOR PROPOSALS

For

BIOMEDICAL DEVICE AND TECHNOLOGY DEVELOPMENT PROGRAMME

under

(TECHNOLOGY DEVELOPMENT PROGRAMME)

Last Date of Submission: 30th October, 2020

Department of Science and Technology has initiated a programme on **Biomedical Device and Technology Development (BDTD)** during the year, 2016. BDTD has been evolved considering the concern of medical device industry to develop new innovative products as per global standards. The focus of DST- BDTD is on development of devices and related technologies. The categories listed for support include under this call include:

- a) **Late-Stage Prototype Development** (Fabrication of compact prototype for testing and validation)
- b) **Pilot Scale Testing and validation:** (Upon completion of the technology's design, fabrication final testing with limited number of prototypes) with mandatory (manufacturer) industry participation.

IDENTIFIED AREAS

Following areas have been identified for development of innovative devices:

1. Medical devices for early detection of women's diseases
 - *Breast cancer detection using non-invasive, non-ionizing radiation techniques*
 - *Ovarian diseases, ovarian cancer, polycystic ovary syndrome, endometriosis, cancers of uterus and cervix.*
 - *Early detection of various common cartilage and bone diseases.*
2. Maternal health panel
 - *Devices that monitor maternal health issues including – Anaemia, Folic acid deficiency, Gestational diabetes, Hypertension, Pre-eclampsia, Eclampsia, Urinary tract infections etc.*
3. Devices related to brain monitoring and non-invasive gadgets used during surgery or treatments.
4. Point-of-care devices for diagnosis of viral diseases.
 - *Respiratory illnesses, including Corona virus, Influenza virus and Respiratory Syncytial virus (RSV) infections*
 - *Diarrhoeal diseases, including Rota virus infections*
 - *Liver diseases by hepatotropic viruses including Hepatitis A, B, C and E*
 - *Vector-borne viral illnesses, including Dengue, Japanese encephalitis, Chikungunya*

5. Rapid/POC test devices for diagnosis of microbial diseases and microbial drug resistance.

Any proposal beyond the scope of the call will not be entertained.

WHO CAN SUBMIT PROJECT PROPOSALS

The Project Proposal should be submitted for financial support through **ONLINE MODE ONLY** by scientist/ engineers/ technologists working in Universities and other academic institutions; R&D institutions/ laboratories having adequate infrastructure and facilities to carry out R&D work.

The investigators/ R&D Group should have adequate experience and expertise in the relevant area of proposal. **A Clinician from reputed hospital should be a part of investigating team as Co-PI**

Financial support is provided only for temporary staff salaries, equipment, consumables, domestic travel and other miscellaneous items. No support is provided towards basic infrastructure, building and International travel.

Kindly note that:

- The PI(s) should have relevant experience as evident from previous prototype commercialization or development or practical experience in the chosen area/topic with field knowledge.
- Autonomous Remote / point-of-care diagnostic and therapeutic devices to bridge rural-urban divide in healthcare will be encouraged.
- The proposal should arise out of clinical demand, as identified by clinicians, who should be part of the teams.
- The proposed device should be bridging an existing gap in diagnosis or treatment or surveillance, or should significantly enhance the performance with indigenization at affordable cost.
- Inventive or Innovative to generate IPR and other rights.
- The commercialization plan should be clearly spelled out with achievable milestones, time lines, justifiable budget requirement and engagement with prospective technology transfer partners or technology transfer facilitating bodies/Technology Business Incubators.
- The laboratories and institutions should be well-equipped and preferably have all the essential equipment and infrastructure for the prototype development.
- Information regarding Proof of Concept and Early prototype should be provided in the project proposal.
- The PI can submit only one proposal against this BDTD 2020 Call. Submission of more than one proposal from a PI, would liable to be disqualification of all the submitted proposals.
- The ethical clearances, wherever necessary, may be appended with the proposal.
- No support will be provided for Large Scale Clinical Trials and Certification of Device. The support is available only for limited validation at two or three centres.
- No financial support will be provided to the industry partner.
- **The bioengineering products without any electronic component, hospital consumables and chemicals, implants and implantable devices, biomaterials development, standalone software and applications development, telemedicine modules are beyond the scope of this call.**

POINTS TO BE KEPT IN MIND WHILE SUBMITTING PROJECT PROPOSALS

1. Involvements of clinician and industries

The mandatory participation of clinician as a Co-PI is required to understand the users perspective.

It is envisaged that the end product of development shall be transferred to industries for commercial production. Hence it is desirable that industry (s) may be associated with project right from the beginning with defined participation in technical terms.

As far as possible the proposed device should have sufficient users in the country and there should be adequate demand for the product.

2. Project Duration

The projects should be time-bound normally for duration of 2-3 years depending upon the device/technologies to be developed.

3. Monitoring of the Project

Implementation of the projects is monitored regularly through Progress Reports, Financial Statements and Committee of Experts in Group review meetings and onsite as well.

4. Incomplete Application formats will be summarily rejected.

PROCEDURE FOR SUBMISSION OF PROJECT PROPOSALS

The Project Proposal should be submitted through **ONLINE MODE ONLY** (www.online.dst.gov.in). **Hard copies are not required.**

For any queries related to Call, please contact:

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