



**Government of India  
Ministry of Science and Technology  
Department of Science and Technology**

**TECHNOLOGY INTERVENTIONS FOR DISABLED AND ELDERLY (TIDE)**

**CALL FOR RESEARCH & DEVELOPMENT  
AND TECHNOLOGY DEVELOPMENT PROPOSALS**

**TECHNOLOGY INTERVENTIONS FOR DISABLED AND ELDERLY (TIDE)**

The restructured Technology Intervention for Elderly (TIE) programme now called as Technology Interventions for Disabled and Elderly (TIDE), in addition to providing technological solutions with multidisciplinary approach to resolve the problems and improve quality of life of the elderly population with focused initiative on S&T interventions, also aim in providing individual autonomy and independence to persons with disability through holistic development by creating enabling environment for their empowerment through application of Science and Technology

**SCOPE**

The Science for Equity, Empowerment & Development Division (SEED), Department of Science and Technology has instigated a focused initiative on Science and Technology interventions for the benefit of elderly population and disabled persons in the country. Proposals on Research and Development for technological solutions with multidisciplinary approach to improve the quality of life of elderly population and disabled persons and in making them self sufficient will be considered for financial assistance under this programme. The proposal submitted under this initiative, though not restricted may address the following themes.

1. Design and Development of simple solutions/ assistive devices required by the elderly population and disabled persons in different built environments in the urban/peri - urban/rural areas characterized by:

- *Cost effective and affordable assistive devices for improving functionality, cognitive, assisted safety measures methods for learning etc.*
- *Cost effective visual/hearing aids.*
- *Cost effective dentures/dental implants, etc.*
- *Inclusive designs potential for commercialization*
- *Assistive devices for improving excretionary defects & related issues.*
- *Various forms of monitoring devices/ non-invasive measuring devices/systems (injury preventions, blood parameters for non communicable, diseases, standing and balance training).*

- *Assistive Devices for frequently occurring musculo-skeletal problems such as Osteoarthritis of knee, ankle joints and the osteoporosis.*
- *Special devices/footwear for Diabetic foot and care, biosensors for clinical diagnosis, automated pill box and methods for learning and analyzing computer signals of medical changes.*
- *Devices/programmes for fitness of elderly.*
- *Simple controlled devices for operating household devices.*

2. Development of technology package for healthcare of elderly to include preventive care

- *area specific nutritional package*
- *Documentation and validation of traditional health practices for elderly in codified Indian health system.*
- *Cognitive support for elderly (Alzheimer/Parkinson/Dementia, etc)*

3. Development of multi-disciplinary research materials/R&D programme for disabled people that are

- *Genetic in nature (Thalasseminas-inherited blood disorders, etc.*
- *Nutritional deficient based (Spinal bifida-folic acid deficiency, etc.)*
- *Hormonal discrepancies/metabolic disorder*
- *Institutional delivery (mental retardation)*
- *Acquired through Accidents (safety features in agriculture equipments etc.)*

4. Field testing of newly developed technology for acceptance evaluation and further adaptation.

5. Modulation of already existing technology specific for use of elderly to suit Indian conditions.

6. Preventive technology packages for persons having disabilities of locomotors, blindness, low-vision, hearing, mental retardation/illness cerebral palsy, autism, spectrum disorder, multiple in nature and other acquired conditions.

7. Safe Kitchens for elderly population and disabled persons.

*In addition to the above themes, any other novel/innovative idea/concept related to enablement and comfort of elderly people and disabled sector in the country will also be considered.*

## **APPLICATION PROCESS**

1. Proposals can be submitted by Academic/R&D Institutions/Potential Voluntary Organizations (NGO's) with proven track record in executing S&T based projects. The proposal should clearly define the statement of the problem based on

identified needs and state-of-the-art survey, objectives focusing on the proposed solution, project deliverables, market potential and well defined tie up with professional agencies/ industries for technology development/testing/verification/adaptation/production and commercialization wherever possible. Networked projects and collaborative proposals involving a number of agencies/institutes are encouraged. Organizations with a specific interest in the application of the outputs of this programme may be involved as partners.

2. The “problem identification” and “user group” are mandatory in all the proposals. The desirable conditions include industry partnerships (Government/Private/NGO) and standing tie ups with end users without which the proposal may not be considered for further processing.

3. Proposals covering areas of social sciences, pure biomedical/pharma/clinical research and merely exhibit training programmes and workshops does not come under the purview of this programme

Academic/R&D Institutions/Potential Voluntary Organizations (NGO's) fulfilling the above conditions may submit project proposals (10 hard copies & 1 soft copy) in the prescribed format as per the requirements of the DST. The format and guidelines for submitting the project proposal is available on the website [www.scienceandsociety-dst.org](http://www.scienceandsociety-dst.org). The envelope containing the proposals should be superscribed “PROPOSAL UNDER TIDE PROGRAMME” and should be submitted to

The Head

Science for Equity, Empowerment & Development Division (SEED)

Department of Science & Technology,

Technology Bhavan, New Mehrauli Road,

New Delhi-110016

Tel: 011-26590339, Telefax: 011-26964793

Dr. Konga Gopikrishna, Scientist – ‘C’, Science for Equity, Empowerment & Development Division (SEED), Department of Science & Technology, Technology Bhavan, New Mehrauli Road, New Delhi – 110016 (E – Mail: [kongagopikrishna@yahoo.com](mailto:kongagopikrishna@yahoo.com) & Phone: +91 11 26590298) is the Scientist in Charge for this programme and should be contacted for any questions/queries relating to the TIDE programme and submission of project proposals.

*The proposals can be submitted throughout the year. However, proposals received by 28<sup>th</sup> September 2012 and meeting the above requirements will be considered for evaluation in the next Programme Advisory & Monitoring Committee Meeting.*

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