

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

**TECHNOLOGY INTERVENTIONS FOR ELDERLY (TIE)**

**Call for R&D and Technology Development Proposals**

The Department of Science & Technology (DST) has introduced a focused initiative on S&T interventions for benefit of elderly population in the country under Science for Equity, Empowerment & Development Division (SEED). Under these initiatives, Proposals on R&D for technological solutions with multidisciplinary approach to ameliorate problems and improve quality of life of the elderly population will be considered:

Some indicative areas are:

- 1. Development of simple solutions/ assistive devices required by the elderly population in the urban/semi-urban/rural areas characterized by:**
  - Cost effective and affordable by elderly of different segments in society
  - Inclusive designs
  - Potential for commercialization
- 2. Field testing of newly developed technology for acceptance evaluation and further adaptation.**
- 3. Modulation of already existing technology specific for use of elderly to suit Indian conditions.**
- 4. Development of technology package for healthcare of elderly to include preventive care in the area of:**
  - area specific nutritional package
  - Cost effective visual/hearing aids.
  - Cost effective dentures/dental implants, etc.
  - Documentation and validation of traditional health practices for elderly in codified Indian health system.
  - Cognitive support for elderly (Alzheimer/Parkinson/Dementia, etc)
- 5. Safe Kitchens for elderly.**
- 6. Some indicative technology areas are given below:**
  - Assistive devices for improving functionality, cognitive and assisted safety measures, excretory defects & related issues.
  - Assistive Device for various form 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.

In addition to the above themes, DST would welcome any other novel/innovative idea/concept related to enablement and comfort of elderly people in the country. Projects can be undertaken by academic/R&D institutions in collaboration with NGOs or industry, wherever feasible. The proposals should include clearly defined 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 for development/testing/verification/adaptation trials of technologies. Networked projects involving a number of agencies will be welcome. Please note that proposals covering areas of social sciences are not under the purview of this programme.

Project proposals (10 hard copies & 1 soft copy) can be submitted in the prescribed format available on the website [www.scienceandsociety-dst.org](http://www.scienceandsociety-dst.org) to the address mentioned below.

#### **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, E.mail:vinita.sharma@gmail.com).**

The envelope should mention on top "**PROPOSAL UNDER TIE-PROGRAMME**".  
The proposals can be submitted throughout the year. However, proposals received up to **30.06.2010** can be considered for evaluation in the next PAMC meeting.

Further information or assistance may be obtained from **Incharge TIE-Programme, Science For Equity, Empowerment & Development Division (SEED), Department of Science & Technology, Technology Bhavan, New Mehrauli Road, New Delhi-110016** ([usha.dixit@nic.in](mailto:usha.dixit@nic.in), phone: 011- 26590322).