



# GENERAL INFORMATION

(FOR SUBMISSION OF PROJECT PROPOSALS FOR FINANCIAL ASSISTANCE)

Under

## TECHNOLOGY DEVELOPMENT PROGRAMME



सत्यमेव जयते

GOVERNMENT OF INDIA

MINISTRY OF SCIENCE & TECHNOLOGY

DEPARTMENT OF SCIENCE & TECHNOLOGY

TECHNOLOGY BHAVAN, NEW MEHRAULI ROAD,

NEW DELHI - 110 016

**Last Date and Time of Online Submission: 30.06.2023, 5.00 P.M**

## **GENERAL INFORMATION**

The Department of Science & Technology (DST) plays a pivotal role in promotion of science & technology in the country. The Department has wide ranging activities ranging from promoting high end basic research and development of cutting-edge technologies on one hand to service the technological requirements of the common man through development of appropriate skills and technologies on the other. Through an *umbrella scheme* of **Innovation Technology Development and Deployment**, the Department under its **Technology Development Programme (TDP)** has been promoting and supporting activities related to indigenous development of innovative technologies in identified areas. During recent past, DST has supported the development of technologies at various R&D laboratories/ institutions. This has resulted in development and deployment of technologies.

### **Technology Development Programme (TDP):**

One of the key objectives of the Department of Science & Technology is to promote technology development in various fields. The Department has been supporting Technology development projects which include materials, devices and processes. The Programme supports activities aimed at developing technologies both in the advanced/emerging areas and in traditional sectors/areas. Under the Programme, feasibility of fresh ideas/ concepts is also assessed for their potential conversion into useful technology/product.

### **Mandate of TDP:**

The mandate of Technology Development Programme is to convert proof-of-concepts for technologies/ techniques/ processes/products into advance prototypes for validation and demonstration in actual field settings. The commercialization of these technologies needs further assessment/incubation, which does not fall in the scope of the Technology Development Programme. Transfer of technology developed under the project to the industry should ideally be the onus of the host institutions. Proposals for incremental R&D over the existing technologies are also considered for support. Projects related to design and development of Software/IT, as required for products and processes, as a part of technology development project shall be considered. Pure software development **does not fall** in the scope of the Programme.

### **AIM:**

- Support R&D for development of innovative technologies in identified areas.
- Promote application of advanced technology for improving the performance and value addition to existing technology.
- Capacity building in the area of technology development. Identify and support R&D groups which have developed depth/strength in a particular scientific domain.

### **IDENTIFIED AREAS FOR NEW CALL FOR PROPOSAL:-**

In 2023, a **New Call for Proposal** is planned to invite proposals from scientists/engineers/technologists working in academic institutions/R&D institutions/laboratories having adequate

infrastructure/ facilities to carry out Technology Development work/prototype building. Financial support will be provided for indigenous development of innovative technologies in identified areas.

The specific objectives of the Programme are to

- Develop and integrate technologies following a holistic approach in identified areas;
- Promote application of modern/advanced technologies to socio-economic problem solving;
- Encourage developments in application of R&D activities; and
- Promote activities aimed at improving technology, technique, material, methods and other appropriate activities conducive for development of technology status in identified areas.

As parts of a wider set of nation-building initiatives, some of the areas (as given below) are identified from 'Make in India' initiative. Also Hon'ble Prime Minister made a clarion call for an “**Aatmanirbhar Bharat**” or a self-reliant India that would be a source of local ingenuity creating global impact.

1. **Advanced Manufacturing Technologies (AMT)**
2. **Waste Management Technologies (WMT)**
3. **Biomedical Device and Technology Development Programme (BDTD)**
4. **Technology Development Programme (TDP)**
5. **Therapeutic Chemicals (TC)**

## **1. Advanced Manufacturing Technologies (AMT)**

The Department of Science & Technology has initiated a technology development program named “Advanced Manufacturing Technologies (AMT)” during 2015 aligned with the Make in India mission. The scope of R & D efforts envisaged under the “Advanced Manufacturing Technologies” Program encompass the following:

- Design and process innovations to overcome the limitations in conventional manufacturing technology
- Improvements in materials and their processing for better properties and commercial scale production
- Enhancement of productivity and better utilization of resources through ICT
- “Industry 4.0” enablers such as additive manufacturing, near net shape manufacturing, assistive robotics and process automation, industrial IoT implementation, etc.

## **2. Waste Management Technologies (WMT)**

The Department of Science & Technology has initiated a technology development program in the name of “Waste Management Technologies (WMT)” during 2015 aligning to Swachh Bharath Abhiyan. Waste Management encompass a variety of interventions in the generation, prevention, characterization, monitoring, treatment, handling, reuse and ultimate residual disposal of solid wastes. The program aims to promote the development of suitable technologies with potential to ameliorate the environmental load from the huge amount of residuals generated by industrial development and consumption lifestyle. The objectives of WMT includes (i) Take stock of technological development, assess, analyse and look for material recycling systems with low environment loading and improve upon them or find better alternatives (ii) Develop waste management technologies that can be adopted in small & medium scale enterprises in order to improve their productivity and global competitiveness (iii) Establish techno-economic feasibility of proposed methodologies/ technologies.

## **3. Biomedical Device and Technology Development Programme (BDTD)**

Department of Science and Technology has initiated a programme on Biomedical Device and Technology Development (BDTD) during 2016. Department was earlier supporting development of

instruments for Medical and Healthcare applications through Instrumentation Development Programme. BDTD has been evolved considering the concern of medical device industry for R&D to develop new innovative products as per global standards. The mandate of BDTD is to evolve and support projects for design & development of devices for:

- a. Early-Stage Prototype Development: (The integration and testing of basic components in a laboratory environment)
- b. Late-Stage Prototype Development (Fabrication of compact prototype for testing and validation)
- c. 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.

The focus of DST-BDTD will be on development of devices and related technologies. The targeted categories include screening, diagnostic, surgical and life support equipments for clinical applications in healthcare sector.

#### **4. Technology Development Programme (TDP)**

Technology Development (TD) Programme supports activities aimed at developing and integrating technologies to evolve materials/process/techniques both in the advanced/emerging areas and in traditional sectors/areas. Under the Programme, feasibility of fresh ideas/ concepts is assessed for their potential conversion into useful technology/product. Applications of R&D for socio-economic benefits is consciously promoted under this programme. The primary objective of the Programme is to facilitate and support development of products or techniques/technology aimed at specific end use. The Programme stresses on clearly identifying the needs for development of the technology so that the developmental effort could be useful to the target beneficiary. It envisages active user involvement and association in the development effort. The intention is that the products/technologies developed under the Programme become useful for the benefit of the people at large.

#### **5. Therapeutic Chemicals (TC)**

Through "Therapeutic Chemicals" program of Technology Development and Transfer (TDT) Division, Department of Science and Technology (DST) is pursuing to have self-reliance on key starting materials, intermediates and other raw materials that are required by Indian Health care sector and also trying to develop therapeutic strategies for prevalent rare/orphan disorders as well as for Antimicrobial resistance (AMR). Through this call on AMR, DST aims to address the urgent need for innovative solutions to combat the growing threat of antimicrobial resistance. DST may support for creation of Centers with reasonable geographical spread in the country, for up-to a period of 5 years (3+2), to nurture an ecosystem of research, innovation and translation in AMR research. These centres are expected to work in collaborative mode.

#### **MODES OF PROJECTS:**

Under this Call for Proposals, Department is looking for development of technologies in the following modes of projects starting at TRL-3 [TRL 3 – Proof of Concept Demonstrated] :-

- ❖ Development of technologies in association with an industry/ user agency.
  - ❖ Pilot plant demonstration for techno-economic analysis.
  - ❖ Nationally coordinated project to develop a specific technology platform.
  - ❖ Development of a technology of societal importance with commercialization plan.
  - ❖ Field level demonstration of a developed technology for social acceptance.
- Priority will be given to the projects with industrial partners, leading to successful field deployable prototypes. TDP support shall be more relevant, if available knowledge-base is used to target newer applications having large market size / higher societal impact. Such Research

groups will be supported to take translational research projects with definitive outcome/timelines. Research groups, which have demonstrated and transferred technologies for certain applications, will also be given preference for diversifying the application demonstration / transfer of technology in other high impact fields.

- Preference should be given to such project proposals having clear roadmaps for field testing in carefully identified markets, for making a business case and for technology transfer / commercialization.
- Projects, integrating co-arising technologies with a potential impact on improved processes / products, should also be considered for elaborate assessment.

**Basic research proposals will not be supported under this Programme.**

### **ELIGIBILITY CRITERIA:**

1. Proposals must be submitted using **ONLINE portal (<https://onlinedst.gov.in/>)** only by Scientists/Engineers/ Technologists working in Universities and other Academic institutions; R&D institutions/ Laboratories having adequate infrastructure and facilities to carry out R&D work. PIs may submit the proposal under the division of “Technology Development and Transfer” after registration on portal or using their already registered IDs.
2. The project proposal will be reviewed only if the PI has completed proof of concept. The proposals falling under TRL 3 to 6 [TRL 3 – Experimental proof of concept, TRL 4 – Technology validation in lab, TRL 5–Technology validation in relevant environment, TRL 6 – Technology demonstrated in relevant environment] are only to be submitted. The fundamental R&D proposals will not be supported under this call.
3. It is mandatory to **demonstrate lab prototype** to become eligible for consideration under this call.
4. The PI or groups already having ongoing projects under any of the AMT, WMT, BDTD, TDP, and TC programs of DST may apply only if six months or less are due for the completion of the project.
5. For submitting application under the program area of Biomedical Device and Technology Development Programme (BDTD), a clinician should be involved with investigating team as Co-PI.

### **POINTS TO BE KEPT IN MIND WHILE SUBMITTING PROJECT PROPOSALS:**

1. Financial support is provided only for temporary staff salaries, equipment (if necessary, and not available with PI's Institute, and specific to project requirement), consumables, domestic travel and other miscellaneous items. **No support is provided towards basic infrastructure, buildings and International travel.**
2. The investigators/ R&D Group must have adequate experience and expertise in the relevant area of proposal. The proposals should be based on innovative technologies/ ideas. Proposals should have specific, concrete, quantifiable objectives/deliverables. Results of ongoing and completed projects of the PI must be reflected while the formulating new proposals.
3. Co-PI from host institute is mandatory.
4. The technology demonstration plan should be clearly spelled out with achievable milestones, timelines, justifiable budget requirement, and engagement with prospective technology transfer partners or technology transfer facilitating bodies.
5. It is envisaged that the end product of development shall be transferred to industries/suitable stakeholders for technology implementation. Hence, project should be proposed with appropriate industry/suitable stakeholder participation, clearly stating the technical as well as financial terms of participation.

6. No financial support will be provided to industry. An endorsement letter from the participating industry/stakeholder with a detailed breakup of their contribution for the proposed project has to be submitted.
7. **Fund support under non-recurring grant for the required equipment will be given only if the same or similar facility is not available in the PI's institution or nearby institutions.**
8. A PI can submit only one proposal against this DST-TDP Call. Submission of more than one proposal from a PI would be liable for disqualification.
9. It is desirable to have the contribution of the host institution/grantee institution for the capital cost of the project.
10. The quarterly deliverables should be clearly mentioned in the proposal in the form of a Gantt chart/ matrix.
11. The projects should be time-bound normally for duration of 2-3 years depending upon the device/technology to be developed.
12. Implementation of the projects will be monitored regularly through Progress Reports, Audited Financial Statements and Committee of Experts in Group review meetings and onsite review as well.
13. **The CoEs will be supported for period of five years (3+2).** The Centers will be evaluated after three years for continuity and will be further extended for two years depending upon their performance.
14. **Maximum two CoEs will be established under each thrust area.** CoE should be multi-institutional and collate the strength of partner institutes. Industry(ies) participation and contribution is mandatory for CoE applications.
15. Interested Institutes may submit the concept note/ full proposal of CoE within the duration of the call.

### **PROCEDURE FOR SUBMISSION OF PROJECT PROPOSALS:**

Application will be accepted only through online mode of project submission through e-Project Management System (e-PMS Portal) (<https://onlinedst.gov.in/>). Applicants should register as a PI in DST's Online Portal. Registered PIs may get an option of "submit proposal", under calls that are open. Soft copy of the project proposal along with requisite/supporting documents should be submitted in the enclosed format. Please ensure that following documents have been completed and attached in the proposal.

- i. Certificate from the investigator; and
- ii. Endorsement from Head of the institution on Letter Head

Application received without compliance with eligibility criteria/above documents/with incomplete information/ will not be entertained. PIs are advised not to send any hard copy of the project to the DST.

### **NO HARD COPY REQUIRED**

Any query/correspondence regarding the above Call for Proposal may be mailed to the following address: -

**Dr. Akhilesh Mishra** (TDP, & BDTD)  
Scientist 'E'  
Technology Development & Transfer Division  
Department of Science & Technology  
Ministry of Science & Technology  
Technology Bhawan, New Mehrauli Road

New Delhi – 110 016  
(Tel: 011 -26590 254)  
**Email:** [akhilesh.mishra@nic.in](mailto:akhilesh.mishra@nic.in)

**Dr. Krishna Kanth Pulicherla** (AMT, WMT, & TC)  
Scientist 'E'  
Technology Development & Transfer Division  
Department of Science & Technology  
Ministry of Science & Technology  
Technology Bhawan, New Mehrauli Road  
New Delhi – 110 016  
(Tel: 011-26590 493)  
**Email:** [kkpulicherla.dst@gov.in](mailto:kkpulicherla.dst@gov.in)

**Shri Pramod S**  
Scientist 'C'  
Technology Development & Transfer Division  
Department of Science & Technology  
Ministry of Science & Technology  
Technology Bhawan, New Mehrauli Road  
New Delhi – 110 016  
(Tel: 011-26590 219)  
**Email:** [pramod.snkr@nic.in](mailto:pramod.snkr@nic.in),

and

**Dr. Dileep Krishna Mathi**  
Scientist 'C'  
Technology Development & Transfer Division  
Department of Science & Technology  
Ministry of Science & Technology  
Technology Bhawan, New Mehrauli Road  
New Delhi – 110 016  
(Tel: 011- 29512 324)  
**Email:** [dileep.krishna@gov.in](mailto:dileep.krishna@gov.in)

**Last Date and Time of Submission: 30.06.2023, 5.00 P.M**

(Note: Please complete the online submission of proposal well in advance to avoid last day rush)

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Department of Science & Technology (DST)  
Technology Development & Transfer (TDT) Division

Proposal for Centre of Excellence (CoE)  
under  
TECHNOLOGY DEVELOPMENT PROGRAMME (TDP)  
DST/TDP/ CoE\_Proposal\_Format



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## Section-1. Overview of Centre of Excellence (CoE)

1.1. Thrust Area (Refer Annexure-1):

1.2. Details of the proposed CoE - Coordinator with Proposing Agency

Name of Coordinator	
Designation	
Agency & address	
Telephones (Mobile; Landline)	
E-mail	
Date of Birth	

1.3. Details of the collaborating Institutes/Industries/Laboratories

Name	
Designation	
Agency & address	
Telephones (Mobile; Landline)	
E-mail	

Name	
Designation	
Agency & address	
Telephones (Mobile; Landline)	
E-mail	

Name	
Designation	
Agency & address	
Telephones (Mobile; Landline)	
E-mail	

1.4. Significance of the proposed CoE

1.4.1. Targeted Beneficiaries

1.4.2. Major Applications of the centre

1.5. Detailed Objectives

1.6. Components of CoE

S.NO.	Targeted sub components	Deliverables

### 1.7. Components of Industry

S.NO	Targeted sub components	Deliverables

1.8. What Specialised services will be offered in the proposed domain to scientist/researcher/startup/industry through CoE:

1.9. Milestones (Preferably in the form of Gantt Chart)

## Section-2. Budget Summary (in ₹ lakhs)

### 2.1. Consolidated budget

	Item	1st Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	Total
1.	Manpower				
2.	Consumables				
3.	Contingency				
4.	Other Costs				
5.	Travel				
6.	Permanent Equipment				
	Sub Total				
7.	Overhead Charges				
	Total				

Total Budget = ₹ lakhs

### ***Norms for Manpower, Travel, Contingency & Overheads***

Refer the following Office Memorandums for the manpower positions suitable for R&D

1. Positions for JRF/SRF/RA - OM: SR/S9/Z-05/2019 dated 10 July 2020
2. Positions other than JRF/SRF/RA - OM: SR/S9/Z-08/2018 dated 30 January 2019
3. For HRA OM No. 2/5/2017-E. II (B) issued by Ministry of Fin. dated 07 July 2017  
(HRA has been revised to 27%, 18% and 9% with respect to the cities under the category of X, Y and Z respectively)

### ***Travel & Contingency***

₹50,000/- each per annum will be provided for Travel and Contingencies. Higher amount, based on the recommendations of the Expert Committee, to be provided where the research work involves field work or/and project has many investigators/institutions and larger manpower. The contingency amount may also be used for paying Registration Fees for attending international conferences.

### ***Overheads***

Overhead amount is towards meeting the cost of academic expenses including infrastructural facilities at the host institutes, and is permissible as given below:

- a) For projects costing upto ₹1 crore, 10% of the total cost for educational institutions and NGOs and 8% for laboratories and institutions under Central Government Departments/Agencies;
- b) For projects costing more than ₹1 crore and upto ₹5 crore, overheads of ₹15 lakh or 10% of total cost whichever is less;
- c) For projects costing more than ₹5 crore and upto ₹20 crore, ₹20 lakh will be provided as overheads; and
- d) For projects costing more than ₹20 crore, the quantum will be decided on a case to case basis.

## Section-3. Itemised Budget

### 3.1. Manpower

#### Budget for Salaries- DST Grant(in ₹ lakhs)

Designation	Qualification	Salary per month	Number of Persons	Amount (in ₹ lakhs)	Role Description
				₹ lakhs	

### 3.2. Consumables

Please provide the quantified list of consumables along with cost estimates/quotations in the Annexure (*Item, Quantity & Unit cost*)

#### Budget for Consumable Materials – DST Grant (in ₹ lakhs)

1st Year	2nd Year	3rd Year	Total
₹	₹	₹	₹
₹	₹	₹	₹
₹	₹	₹	₹

### 3.3. Contingencies

Please provide the basis of cost estimates in the Annexure.Budget for Contingencies- DST Grant (in ₹ lakhs)

1st Year	2nd Year	3rd Year	Total
₹	₹	₹	₹
₹	₹	₹	₹

### 3.4. Other Costs

Please provide the basis of cost estimates/quotations in the Annexure.

#### Budget for Other Costs-DST Grant (in ₹ lakhs)

Item	1st Year	2nd Year	3rd Year	Total
Others (Define if any)	₹	₹	₹	₹

### 3.5. Domestic Travel – DST Grant (in ₹ lakhs)

Please provide the basis of cost estimates in the Annexure. (journeys, purpose)

1st Year	2nd Year	3rd Year	Total
₹	₹	₹	₹
₹	₹	₹	₹
₹	₹	₹	₹

### 3.6. Equipment proposed to be procured

Please provide justification in Annexure on the use of equipment in CoE. Provide supporting Quotation

#### Budget for Permanent Equipment – DST Grant

Description of Equipment	Foreign/Indigenous	Unit Landed Cost	Number	CIF, Custom Duty of Items etc.)	Total(in ₹ lakhs)
		₹			₹
		₹			₹
		₹			₹

### 3.7. List of equipment/facilities available with participating agencies, relevant to the project

## **Section-4. Annexure: Justification for Itemized Budget**

Please provide justification against each sub-heading below, along with supporting Quotation.

4.1. Consumables

4.2. Contingency & Travel

4.3. Other Costs

4.4. Permanent Equipment

## **Section-5. Biodata of CoE Coordinator(s)**

5.1. Name, Designation, Agency:

5.2. Gender & Date of Birth:

5.3. Qualifications:

5.4. Employment Experience (Last 10 years):

5.5. Publications (Last 5 years):

5.6. Patents:

5.7. Research Thesis Guided:

5.8. Technologies Developed

5.9. Technologies Transferred

5.10. Centres/Facility extramural funding from industry/Government managed by co-ordinator.



## Section-6. Forwarding Letters

### 6.1. CERTIFICATE FROM THE INVESTIGATOR(S)

**Project Title:**

1. I/We agree to abide by the terms and conditions of the R&D grant.
2. I/We did not submit the Proposal elsewhere for financial support.
3. I/We have explored and ensured that equipment and basic facilities (enumerated in the proposal) will actually be available as and when required for the purpose of the projects. I/We shall not request financial support under this CoE, for procurement of these items.
4. I/We undertake that space time on permanent equipment (listed in the proposal) will be made available to other users.
5. I/We hereby submitting the Proposal complete in all respect, along with (a) Endorsement from the Head of the Organisation (on letter head), and (b) Undertakings from the Collaborating Industries/Agencies.
6. I/We shall ensure that the CoE will be executed as per the General Financial Rules of (GFR) 2017 and the project fund will be kept only in a Zero Balance Subsidiary (ZBS) account of the Host Institute in Union Bank of India. I/We shall also ensure that the above said account will be registered in the Public Funds Management System (PFMS) and the EAT module has been successfully implemented before the submission of the proposal.
7. I/We shall acknowledge DST and the TDT division in all the Papers, Publications and Patents generated out of the proposed research work in every possible platform.

Name & Designation:	Date:
Signature:	Place:
Stamp/ Seal:	

## 6.2. Endorsement from Head of Organisation (*On the official letter-head*)

Project Title: “\_\_\_\_\_”

Cost:

Duration:

1. Affirmed that the Organisation welcomes the participation of Dr./Mr./Ms. .... as the Coordinator and Dr./Mr./Ms. .... as the other Coordinator(s) for the Project and that in the unforeseen and legitimate event of discontinuation by the Coordinator, the other Coordinator(s) will assume full responsibility for the proper functioning of Centres. Information to this effect, endorsed by me, will be promptly sent to DST
2. Affirmed that the equipment and basic as well as other administrative facilities as per the terms and conditions of the award of the CoE, will be made available to the Coordinator(s) throughout the duration of the CoE. All the equipment purchased under the projects will remain the administrative custody of the DST unless any order regarding the same issue by the DST.
3. The Organisation shall ensure that as per the rule of GFR 2017, purchase of the equipments may done through the Government e-Marketplace (GEM), to the extent available there as the CoE involves government funding.
4. The organization shall ensure that under any circumstances, parking of Government Fund will not be done. The Fund will be utilized only for the purpose it was granted.
5. The organization/ institute shall ensure to use Expenditure Advance & Transfer (EAT) module of PFMS.
6. The Organisation shall provide timely the Audited Statement of Expenditure and the Utilization Certificate of the Funds under the Grant as required by DST in the prescribed format and all interests and other earnings against released Grant shall be remitted to Consolidated Fund of India (through Non-Tax Receipt Portal (NTRP), i.e. [www.bharatkosh.gov.in](http://www.bharatkosh.gov.in)), immediately after finalization of accounts, as it shall not be adjusted towards future release of Grant.
7. The organisation will abide by all the terms and conditions mentioned in the sanction order.

**(Head of Organisation)**

**Seal/Stamp**

**Date:**

**Place:**

### **6.3. Undertaking from collaborating Industries/ Agencies**

1. Name of Agency: \_\_\_\_\_
  
2. I have gone through the Proposal entitled \_\_\_\_\_ submitted by Dr./Mr./Ms. \_\_\_\_\_ of \_\_\_\_\_ (Name of the Organization) for DST funding and I hereby affirm that my Organization/ Company is committed to participate in the CoE to the full extent as indicated in the Proposal including following the technical and financial commitments described in the proposal.
  - a) Technical
  
  - b) Financial

Name & Designation:	Date:
Signature:	Place:
Stamp/ Seal:	

## **6.4 Conflict of Interest**

### **DEPARTMENT OF SCIENCE AND TECHNOLOGY**

#### **POLICY ON CONFLICT OF INTEREST**

#### **FOR REVIEWER & COMMITTEE MEMBER or APPLICANT or DST OFFICER ASSOCIATED/ DEALING WITH THE SCHEME/ PROGRAM OF DST**

Issues of Conflicts of Interest and ethics in scientific research and research management have assumed greater prominence, given the larger share of Government funding in the country's R & D scenario. The following policy pertaining to general aspects of Conflicts of Interest and code of ethics, are objective measures that is intended to protect the integrity of the decision making processes and minimize biasness. The policy aims to sustain transparency, increase accountability in funding mechanisms and provide assurance to the general public that processes followed in award of grants are fair and non-discriminatory. The Policy aims to avoid all forms of bias by following a system that is fair, transparent and free from all influence/ unprejudiced dealings, prior to, during and subsequent to the currency of the programme to be entered into with a view to enable public to abstain from bribing or any corrupt practice in order to secure the award by providing assurance to them that their competitors will also refrain from bribing and other corrupt practice and the decision makers will commit to prevent corruption, in any form, by their officials by following transparent procedures. This will also ensure a global acceptance of the decision making process adopted by DST.

#### **Definition of Conflict of Interest:**

Conflict of Interest means "any interest which could significantly prejudice an individual's objectivity in the decision making process, thereby creating an unfair competitive advantage for the individual or to the organization which he/she represents". The Conflict of Interest also encompasses situations where an individual, in contravention to the accepted norms and ethics, could exploit his/her obligatory duties for personal benefits.

#### **1. Coverage of the Policy:**

- a) The provisions of the policy shall be followed by persons applying for and receiving funding from DST, Reviewers of the proposal and Members of Expert Committees and Programme Advisory Committees. The provisions of the policy will also be applicable on all individuals including Officers of DST connected directly or indirectly or through intermediaries and Committees involved in evaluation of proposals and subsequent decision making process.
- b) This policy aims to minimize aspects that may constitute actual Conflict of Interests, apparent Conflict of Interests and potential Conflict of Interests in the funding mechanisms that are presently being operated by DST. The policy also aims to cover, although not limited to, Conflict of interests that are Financial (gains from the outcomes of the proposal or award), Personal (association of relative / Family members) and Institutional (Colleagues, Collaborators, Employer, persons associated in a professional career of an individual such as Ph.D. supervisor etc.)

#### **2. Specifications as to what constitutes Conflict of Interest.**

Any of the following specifications (non-exhaustive list) imply Conflict of Interest if,

- (i) Due to any reason by which the Reviewer/Committee Member cannot deliver fair and objective assessment of the proposal.
- (ii) The applicant is a directly relative# or family member (including but not limited to spouse, child, sibling, parent) or personal friend of the individual involved in the decision making process or alternatively, if any relative of an Officer directly involved in any decision making process / has influenced interest/ stake in the applicant's form etc.
- (iii) The applicant for the grant/award is an employee or employer of an individual involved in the process as a Reviewer or Committee Member; or if the applicant to the grant/award has had an employer-employee relationship in the past three years with that individual.

- (iv) The applicant to the grant/award belongs to the same Department as that of the Reviewer/Committee Member.
- (v) The Reviewer/Committee Member is a Head of an Organization from where the applicant is employed.
- (vi) The Reviewer /Committee Member is or was, associated in the professional career of the applicant (such as Ph.D. supervisor, Mentor, present Collaborator etc.)
- (vii) The Reviewer/Committee Member is involved in the preparation of the research proposal submitted by the applicant.
- (viii) The applicant has joint research publications with the Reviewer/Committee Member in the last three years.
- (ix) The applicant/Reviewer/Committee Member, in contravention to the accepted norms and ethics followed in scientific research has a direct/indirect financial interest in the outcomes of the proposal.
- (x) The Reviewer/Committee Member stands to gain personally should the submitted proposal be accepted or rejected.

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# The Term "Relative" for this purpose would be referred in section 6 of Companies Act , 1956.

### **3. Regulation:**

The DST shall strive to avoid conflict of interest in its funding mechanisms to the maximum extent possible. Self-regulatory mode is however recommended for stake holders involved in scientific research and research management, on issues pertaining to Conflict of Interest and scientific ethics. Any disclosure pertaining to the same must be made voluntarily by the applicant/Reviewer/Committee Member.

### **4. Confidentiality:**

The Reviewers and the Members of the Committee shall safeguard the confidentiality of all discussions and decisions taken during the process and shall refrain from discussing the same with any applicant or a third party, unless the Committee recommends otherwise and records for doing so.

### **5. Code of Conduct**

#### **5.1 To be followed by Reviewers/Committee Members:**

- (a) All reviewers shall submit a conflict of interest statement, declaring the presence or absence of any form of conflict of interest.
- (b) The reviewers shall refrain from evaluating the proposals if the conflict of interest is established or if it is apparent.
- (c) All discussions and decisions pertaining to conflict of interest shall be recorded in the minutes of the meeting.
- (d) The Chairman of the Committee shall decide on all aspects pertaining to conflict of interests.
- (e) The Chairman of the Committee shall request that all members disclose if they have any conflict of interest in the items of the agenda scheduled for discussion.
- (f) The Committee Members shall refrain from participating in the decision making process and leave the room with respect to the specific item where the conflict of interest is established or is apparent.
- (g) If the Chairman himself/herself has conflict of interest, the Committee may choose a Chairman from among the remaining members, and the decision shall be made in consultation with Member Secretary of the Committee.
- (h) It is expected that a Committee member including the Chair-person will not seek funding from a Committee in which he/she is a member. If any member applies for grant, such proposals will be evaluated separately outside the Committee in which he/she is a member.

#### **5.2 To be followed by the Applicant to the Grant/Award:**

- (a) The applicant must refrain from suggesting referees with potential Conflict of Interest that may arise due to the factors mentioned in the specifications described above in Point No. 2.

(b) The applicant may mention the names of individuals to whom the submitted proposal should not be sent for refereeing, clearly indicating the reasons for the same.

### **5.3 To be followed by the Officers dealing with Programs in DST:**

While it is mandatory for the program officers to maintain confidentiality as detailed in point no. 6 above, they should declare, in advance, if they are dealing with grant applications of a relative or family member (including but not limited to spouse, child, sibling, parent) or thesis/ post-doctoral mentor or stands to benefit financially if the applicant proposal is funded. In such cases, DST will allot the grant applications to the other program officer.

## **6. Sanction for violation**

### **6.1 For a) Reviewers / Committee Members and b) Applicant**

Any breach of the code of conduct will invite action as decided by the Committee.

### **6.2 For Officers dealing with Program in DST**

Any breach of the code of conduct will invite action under present provision of CCS (conduct Rules), 1964.

## **7. Final Appellate authority:**

Secretary, DST shall be the appellate authority in issues pertaining to conflict of interest and issues concerning the decision making process. The decision of Secretary, DST in these issues shall be final and binding.

## **8. Declaration**

**I have read the above "Policy on Conflict of Interest" of the DST applicable to the Reviewer/ Committee Member/ Applicant/ DST Scheme or Program Officer # and agree to abide by provisions thereof.**

I hereby declare that I have no conflict of interest of any form pertaining to the proposed grant \*

I hereby declare that I have conflict of interest of any form pertaining to the proposed grant\*

\* & # (Tick whichever is applicable)

**Name of the Reviewer/ Committee Member or Applicant or DST Officer**

*(Strike out whichever is not applicable)*

**(Signature with date)**

**Proposals are invited under the following categories/Thrust areas:**

Applications are invited to create CoE from Scientist/Engineers/ Technologists working in Universities, Academic institutions, R&D institutions, laboratories in association with Other Institutes, Laboratories and with mandatory contribution from Industry/ Industry bodies. CoE should target capacity building along with 4Ds (design, development, demonstration, and deployment) of following technologies.

**Advanced Manufacturing Technologies (AMT): -**

S.NO	Theme	Proposals invited for
1	<b>Creation of Centre of Excellence (CoE) on Sustainable Technologies for Bulk Chemicals</b>	Sustainable Technologies for Bulk chemicals from fossil fuels including petroleum. The proposed process should confine to net zero principles. The end deliverable should be pilot plant process.

**Waste Management Technologies (WMT): -**

S.NO	Theme	Proposals invited for
1	<b>Creation of Centre of Excellence (CoE) in the Domain of Agricultural Waste Management</b>	Technologies in the management of Agricultural waste viz., Post-harvest agro residue and lignocellulosic biomass e.g. straws, stalks, etc., Flower waste, Fruits and vegetable waste, Primary processing waste, Cereals, pulses, legumes and millets waste.

**Biomedical Device and Technology Development (BDTD): -**

S.NO	Theme	Proposals invited for
1	<b>Creation of Centre of Excellence (CoE) for Medical Device Development</b>	Medical device development from TRL 4-6, testing & validation covering 6-8 medical devices.

**Technology Development Programme (TDP): -**

S.NO	Theme	Proposals invited for
1	<b>Creation of Centre of Excellence (CoE) for Validation of Agro Technologies*</b>	Validation of agro technologies developed through DST supported projects.

**Therapeutic Chemicals (TC): -**

S.NO	Theme	Proposals invited on AMR for
1	<b>Creation of Centre of Excellence (CoE) on Antimicrobial resistance (AMR)</b>	<ol style="list-style-type: none"> <li>1. Multipronged approaches focused on "Leads to Pre-clinical studies with I.P. potential".</li> <li>2. New formulations of existing antibiotics.</li> <li>3. Pathogen microbiology including focus on host derived targets and therapies.</li> <li>4. Diagnostics, devices and the scope of development of POC devices for clinical settings.</li> </ol>

**Note:** Maximum two CoEs will be established under each thrust area.