

**PROJECT PROPOSAL**  
**FOR CONSIDERATION UNDER**  
**TECHNOLOGY SYSTEMS DEVELOPMENT**  
**(TSD) PROGRAMME**

**PROJECT TITLE**

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**SUBMITTED BY**

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*(Name of Principal Investigator)*

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*(Name and Address of the Organisation)*

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*(Date of Submission)*

# FORMAT FOR SUBMISSION OF PROPOSAL FOR SUPPORT UNDER TECHNOLOGY SYSTEMS DEVELOPMENT (TSD) PROGRAMME

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# 1. COVER SHEET

For office use
File No:
Date of Receipt:

1. **Project Title:**

2. **Principal Investigator (PI):**

**Name:**

**Designation:**

**Address:**

**Telephone No:**

**E-mail:**

**Date of birth:**

3. **Co-Principal Investigator (Co-PI)**

**Name:**

**Designation:**

**Address:**

**Telephone No:**

**E-mail:**

**Date of birth:**

4. **Names and Addresses of Collaborating Organisations**

5. **Name and Address of participating Industry** *(if any)*

6. **Duration of the Project**

7. **Budget for the Project**

*(Amount in Lakhs of Rupees)*

<b>S.No</b>	<b>ITEM</b>	<b>DST Share</b>	<b>Other Agencies' Share</b>
<b>Total</b>			

8. **Project Objectives** *(In bullet form)*

9. **Deliverables** *(In bullet form)*

10. **Names and Addresses of identified User Agencies**

11. **Names and Addresses of identified other Beneficiaries**

12. **List of Equipment with Cost**

## 2. PROJECT SUMMARY

1. **Project Title:**
2. **Principal Investigator:**  
(Name, Designation and Affiliation)
3. **Collaborating Agencies/Industries:**
4. **Duration:**
5. **Total Budget:**
  - 5.1 **DST Share:**
  - 5.2 **Collaborators' Share:**
6. **Objectives** (*In bullet form*):
7. **Innovative Elements/Components of the Project:**
8. **Outcome/ Deliverables and their Expected Impact** (*In bullet form*):
9. **Target Beneficiaries:**
10. **Brief Technical Details** (*300 words*), **giving Justifications for the Project, the underlying Scientific Basis and the Methodology:**

### 3. CORE PROPOSAL

**1. Title of the Project**

**2. Duration**

**3. Names of participating Organisations**

**4. Objectives of the Proposal** (*precise and preferably quantified; use Bullet Form*)

4.1 Overall Development Objectives

4.2 Intermediate Objectives (*corresponding to each milestone*)

**5. Fulfillment of Technology Qualifiers' Criteria:**

*Please tick if the proposal is*

based on established R&D outcome/results	
conforming to national / international specifications	
potentially useful, demand driven and required by other agencies and users	
a development of technology for multiple applications	
an adaptation of existing technology for its applications other than originally intended	
meeting a critical national need ( present/ future ) and strengthening technological capabilities for the same	
an application of advanced science and technology with a promise of giving competitive solutions	

**6. Critical Review of R,D&E Scenario** (*include references*) **identifying Gaps**

6.1 National Status Review

6.2 International Status Review

**7. Origin and Justification of the Proposal**

*( Please justify based on the identified Qualifiers' criteria)*

**8. Summary Outline of the Project** (*with Schematics, where possible; Define the Problem and give technical details*)

**9. Expected Outcome in Physical Terms**

- i) New/ Upgraded Product
- ii) New/ Upscaled Process
- iii) New/ Upgraded System
- iv) Services (including Software)
- v) Feasibility Analysis
- vi) Any other

**10. Targeted Specifications of the Expected Outcome**

**11. Deliverables of the Project** *(precise and in bullet form)*

**12. Methodology**

*(Please highlight how success in the project execution will be ensured)*

**13. Milestones with Dates, Work Elements for each and the Organisation responsible for each Work Element**

S. No.	Milestone	Target Date	Work Elements	Responsible Organisation
			1. 2. 3.	
			1. 2. 3.	
			1. 2. 3.	

**14. Work Plan**

*(Provide a bar chart giving project activities and milestones. Highlight milestones)*

**15. Names of 5-6 Area Experts**

*(Please give complete postal address, telephone numbers and e-mail addresses)*

**16. Items for Outsourcing**

S. No.	Item	Justifications	Agency to which outsourced		
			First Year	Second Year	Third Year

**17. Any other Information relevant to the Project Proposal and its Execution**



**13. Sponsored Research Projects**

<b>S. No</b>	<b>Title</b>	<b>Sponsoring Agency</b>	<b>Period</b>	<b>Amount</b> <i>(Rupees in lakhs)</i>	<b>Achievements</b>

**14. Consultancy Projects**

<b>S. No</b>	<b>Title</b>	<b>Sponsoring Agency</b>	<b>Period</b>	<b>Amount</b> <i>(Rupees in Lakhs)</i>

**15. Sponsored Research/Consultancy Projects submitted for approval.**

<b>S. No</b>	<b>Title</b>	<b>Agency to whom submitted</b>	<b>Duration</b>	<b>Date of Submission</b>	<b>Amount</b> <i>(Rupees in Lakhs)</i>

## 5. BUDGET ESTIMATES

### 1. Break-up of the Total Budget

(Amount in Rupees in Lakhs)

S.No	Item	1 <sup>st</sup> Year		2 <sup>nd</sup> Year		3 <sup>rd</sup> Year		Total	
		DST	Collaborator*	DST	Collaborator*	DST	Collaborator*	DST	Collaborator*
1.	Manpower								
2.	Consumables								
3.	Contingency								
4.	Other Costs ( <i>Outsourcing, Fabrication, Testing, Patents, etc.</i> )								
5.	Travel								
6	Permanent Equipment								
7	Overhead Charges								
	Total								

Grand Total:

DST SHARE:

COLLABORATORS' SHARE:

\* Give Financial Contributions of each Collaborator separately.

## 2. Itemised Budget

*(Please provide justification)*

### 2.1. Manpower

#### Budget for Salaries (DST Component)

Designation	Qualification	Salary per month	Number of Persons	Amount <i>(Rupees in Lakhs)</i>	Justification

#### Budget for Salaries (Collaborator's Component)

Designation	Qualification	Salary per month	Number of Persons	Amount <i>(Rupees in Lakhs)</i>	Justification

## 2.2. Consumables

### Budget for Consumable Materials (DST Component)

*(Amount in Rupees in Lakhs)*

1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	Total	Justification including the basis of cost estimates/quotations

### Budget for Consumable Materials (Collaborators' Component )

*(Amount in Rupees in Lakhs)*

1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	Total	Justification including the basis of cost estimates/quotations

### 2.3. Contingencies

#### Budget for Contingencies (DST Component)

*(Amount in Rupees in Lakhs)*

1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	Total	Justification including the basis of cost estimates

#### Budget for Contingencies (Collaborators' Component)

*(Amount in Rupees in Lakhs)*

1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	Total	Justification including the basis of cost estimates

## 2.4. Other Costs (Outsourcing, Fabrication, Testing and Patenting, etc.)

### Budget for Other Costs (DST Component)

*(Amount in Rupees in Lakhs)*

Item	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	Total	Justification including the basis of cost estimates/quotations
Outsourcing					
Fabrication					
Testing					
Patenting					
Others					

### Budget for Other costs (Collaborators' Component)

*(Amount in Rupees in Lakhs)*

Item	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	Total	Justification including the basis of cost estimates/quotations
Outsourcing					
Fabrication					
Testing					
Patenting					
Others					

## 2.5. Domestic Travel\*

### Budget for Domestic Travel (DST Component)

*(Amount in Rupees in Lakhs)*

1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	Total	Justification; indicating journeys, mode and class of transport

(\*) No foreign travel is permitted under DST grants. Class and mode of transportation should be as per the entitlement of the concerned staff in the Organisation. Travel component of visits of the Project Review Committee would be added by DST separately in the Project cost)

### Budget for Domestic Travel (Collaborator's Component)

*(Amount in Rupees in Lakhs)*

1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	Total	Justification; indicating journeys, mode and class of transport

## 2.6. Equipment\*

### Budget for Permanent Equipment (DST Component)

Description of Equipment	Foreign/Indigenous	Unit Landed Cost (CIF+Custom Duty+ others )	Number of Items	Total (Rupees in Lakhs)	Justification in relation to Project requirement

### Budget for Permanent Equipment (Collaborator's Component)

Description of Equipment	Foreign/Indigenous	Unit Landed Cost (CIF+Custom Duty+ others )	Number of Items	Total (Rupees in Lakhs)	Justification in relation to project requirement

\* A List of equipment and facilities available to the investigators and **relevant to the project** be provided separately.



## 7. ENDORSEMENT FROM HEAD OF ORGANISATION

*(On the official letter-head)*

### **Project Title**

1. Affirmed that the Organisation welcomes the participation of Dr/Mr/Ms .....as the PI and Dr/Mr/Ms.....as the Co-PI for the Project and that in the unforeseen and legitimate event of discontinuation by the PI, the Co-PI will assume full responsibility for completion of the Project. 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 Project, will be made available to the Investigator(s) throughout the duration of the Project
3. The Organisation shall ensure that the financial and purchase procedures are followed as per the prevailing norms of the Organisation, within the allocated budget.
4. The Organisation shall provide timely the Statement of Expenditure and the Utilisation Certificate of the Funds under the Grant as required by DST in the prescribed format.

**(Head of Organisation)**  
**Seal/Stamp**

**Date**  
**Place**

## 8. Endorsement from collaborating Industry/ Agency

*(On the official letter- head)*

I have gone through the Project Proposal entitled..... submitted by ..... *(Name of PI)* of ..... *(Name of the Organisation)* for DST funding and noted the obligations and responsibilities indicated in our name as stated below :

1. Contribution in financial terms *(Rupees in Lakhs)*
2. Contribution in kind *(List activities)*

I hereby affirm that my Organisation/Industry is committed to participate in the Project to the full extent as indicated in the Project Proposal including the financial liabilities accruing therefrom as detailed above. A summary profile of my Organisation is given below:

Name of Organisation  
Nature of Business  
Number of Employees  
Annual Turn over

The Annual Report for the preceding financial year is enclosed.

**(Head of the Industry/Agency)**  
**Seal/Stamp**

**Date**  
**Place**

# **TECHNOLOGY SYSTEMS DEVELOPMENT (TSD ) PROGRAMME**

## **GUIDELINES FOR SUBMISSION OF PROPOSALS**

These guidelines provide assistance for the preparation and submission of Project Proposals for support under the Technology Systems Development (TSD) Programme of the Department of Science and Technology (DST).

### **I Introduction**

Technology Systems Development (TSD) Programme supports activities aimed at developing and integrating technologies to evolve technology systems 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.

### **II Objectives**

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. 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;
- promote modernization of traditional technologies, tools and skills;
- facilitate enhancing quality and performance of the traditional/non-traditional items;
- 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.

### **III Technology Qualifiers' Criteria**

The Proposal to qualify consideration under the TSD Programme should meet one or more of the following criteria. The technology should be

- based on established R&D outcome/ results
- conforming to national/ international specifications
- potentially useful, demand driven and required by other agencies and users
- a development of technology for multiple applications
- an adaptation of existing technology for its applications other than originally intended

- meeting a critical national need ( present/ future ) and strengthening technological capabilities for the same
- an application of advanced science and technology with a promise of giving competitive solutions

#### **IV Spectrum of Activities Qualified for Support**

Under the Programme, primarily those Projects/ Activities are supported for which “proof of concept” has already been established. The Proposals aimed at applied R&D are encouraged. Proposals involving basic/ exploratory research are not considered under this Programme. Specifically, following activities are supported under the Programme:

- Applied Research and Analysis
- Development and Engineering (D&E)
- Application oriented Research, Design and Development (RD&D) having Production Potential
- Prototype Development of Product/ System/ Services/ Software Development (new, upgradation of the existing, field trials and demonstration)
- Process Development (new, up-scaling of the existing, field trials and demonstration)
- Data Generation and Feasibility Study
- Provision for Production Facility on a limited scale for a specific Technology Segment to enable the Technology to become competitive
- Sophisticated Equipment and Technology based Job-Shops for cost-effective Fabrication Techniques
- Scientific Knowledge leading to future Technology Development
- Technological Capability Development

#### **V Who can Submit ?**

- Project Proposals can be submitted for financial support by scientists/engineers/technologists working in academic institutions/registered societies/R&D institutions/laboratories having adequate infrastructure/facilities to carry out technology development work. The Programme encourages multi-disciplinary Proposals envisaging network/collaboration of various Organisations having diverse expertise and facilities for synergistic implementation of the Projects. Participation of industry is important.
- Project Proposals are also welcome from Industry having DSIR recognized R&D Laboratories either alone or in collaboration with academic/R&D Institutions.

#### **VI Niche Areas**

Some of the typical areas in which Proposals can be submitted are listed below:

- Glass and Ceramics Technology Up-gradation.
- Molecular Electronics/Conducting Polymer and Biosensors.
- Water Purification and Rural Micro-Water Management
- Waste Utilization and Management
- Public Health and Safety
- Surface Engineering Techniques for Rejuvenation of Traditional Crafts.
- Laser/ Plasmas/ Microwave Technology

- Decentralized Energy Generation and Harvesting
- Alternate Fuels, Fuel Conservation, Efficient Utilization of Fuels
- ICT- driven Technologies
- Innovative Civil Infrastructure Technologies
- Platform Technologies for a Range of Applications

The above list is not exhaustive and Proposals in other areas are equally welcome if the activity is perceived to be useful by DST for technology advancement in the country and is not being taken up under any other major R&D programme of the Government of India.

## **VII Forms of DST Grants**

**For Institutions:** Project staff salaries, equipment, supplies and consumables, contingency expenditure, patent filing charges, outsourcing charges, internal travel, fabrication costs, testing charges, overheads, etc.

**For Industry:** Only cost of consumables upto 50%.

**For Institution/Industry Joint Programmes:** Support to the Industry upto 50% of the cost of consumables.

The IPR will be under the purview of DST, Institution and Industry. If, however, the Industry returns the amount received as grant from DST, the IPR, at the discretion of DST, shall be appropriately assigned to the Institution and the Industry.

## **VIII Mechanism of Evaluation, Implementation and Monitoring**

The Technology Qualifiers' Criteria and the Niche Areas requiring intervention are identified by DST in consultation with Programme Advisory Committee (PAC). The Coordinators identified by PAC are actively involved in mobilizing the Projects by identifying the required capabilities and pooling the expertise of individuals and infrastructure of Organisations. The Project Proposals are also received directly, which are screened with a view to assess their suitability for consideration under the Programme mandate. After initial scrutiny, both directly received as well as mobilized Proposals are peer reviewed by experts and the Investigators are advised to revise the Proposal, if needed. The Proposals along with the Reviewers' Comments are placed before the Expert Advisory Committees (EAC) of the respective areas for their recommendation. Principal Investigators are called for presentation before EAC, if required. The recommended Proposals are processed for financial concurrence and administrative approval as per DST procedure.

The Projects are periodically monitored usually at site by the Project Review Committees (PRC) and/ or Group Monitoring Committees (at a common location at various stages of the progress of Projects). Close association between PI and PRC is ensured to achieve the Project Objectives. PI is advised to take necessary action on the recommendations of the Reviewers. Project Completion Reports (PCR) are sent to experts for comments. A presentation is also required to be made by PI on completion of the Project for final assessment and identification of the future course of action on the Project.

## **IX Submission of Proposals**

- (i) The Project Proposals for consideration under the Programme can be submitted anytime throughout the year.

- (ii) The Investigators are required to submit 15 copies of the complete Proposal printed on both sides of A4 size paper, with an electronic copy of the Proposal on a CD in MS Word.
- (iii) The Proposal should be prepared and submitted strictly according to the formats prescribed in this Document.
- (iv) The duration of the Project should preferably be for a maximum period of 3 years. Projects for development of integrated systems requiring development of various sub-assemblies at multiple Organisations may be of longer duration. They should, however, be broken up in different phases in such a way that there are clearly defined deliverables at the end of each phase (of not greater than three years)
- (v) Copies of the Proposal and other required documents must be sent in one lot through proper channel to Shri Sanjay Bajpai, Scientist-E and Member Secretary (Technology Systems Development Programme), Department of Science & Technology, Technology Bhavan, New Mehrauli Road, New Delhi-110016.
- (vi) DST may be contacted if the acknowledgement letter intimating the registration number of the Project is not received within one month from the date of dispatch of the Proposal.
- (vii) It may be ensured that the registration number/ letter number (given by DST) and title of the Proposal are quoted in all subsequent communications.
- (viii) It is expected that PI will remain in the service of the Organisation throughout the duration of the Project.

## **X General Requirements**

- (i) The coordinating Organisation implementing the Project is required to take all the financial and administrative responsibilities for the Project.
- (ii) In case of a multi-organisational Project, PI has to obtain formal consent from the collaborating organisations/scientists. Formal MoU/ Agreement may be worked out detailing the obligations and arrangements stated in the Proposal and got approved by DST subsequent to the sanctioning of the Project, before the funds are released by DST.
- (iii) International travel is not normally permissible under the Project.
- (iv) The Project personnel recruited for the Project are temporary and they should be paid according to DST norms.
- (v) It is the policy of DST that the equipment procured under the Project be optimally utilized. The Principal Investigator shall permit the use of any spare or idle capacity of the equipment to legitimate users from the parent and other Organisations.

**Department of Science & Technology**  
**Technology Systems Development (TSD) Programme**  
**Terms & Conditions of the Grant**

1. Approval of the Research Proposal and the grant released for it is for the specific Project sanctioned and the released grant should be exclusively spent on the Project within the stipulated period. The Institution may use funds obtained from any other Organisation with the concurrence of DST, for the Project. **Any un-spent balance out of the amount sanctioned must be surrendered to the Government of India through a crossed Cheque/ Demand Draft drawn in favour of Drawing & Disbursing Officer, DST.**
2. For permanent, semi-permanent Assets acquired solely or mainly out of the Project grant, an audited record in the form of a register shall be maintained by the Organisation. The term “Assets” include (a) the immovable property acquired out of the grant; and (b) movable property of capital nature where the value exceeds Rs 1000/-. The Organisation is required to send to the Department of Science & Technology a list of Assets acquired from the grant. The grant shall not be utilized for construction of any building unless a specific provision is made for that purpose. Full infrastructural facilities by way of accommodation, water, electricity, communication, etc. for smooth implementation of the Project shall be provided by the Organisation.
3. All the Assets acquired from the grant will be the property of the Government of India and should not be disposed off or encumbered or utilized for purposes other than those for which the grant had been sanctioned, without the prior sanction of DST.
4. At the conclusion/ termination of the Project, the Government of India will be free to sell or otherwise dispose off the Assets which are the property of the Government. The Organisation shall render to the Government necessary facilities for arranging the sale of these Assets. The Government of India has the discretion to gift the Assets to the Organisation or transfer them to any other Organisation if it is considered appropriate.
5. The Organisation / PI will furnish Six-Monthly Progress Report (5 copies) of the work on the Project on half-yearly basis. The first half-year period shall be rounded off to the last date of the sixth month. The subsequent periods of six months shall begin from the first day of the following calendar month. In addition, DST may designate a Scientist/ Specialist or an Expert Panel to visit the Organisation periodically to review the progress of the work being carried out and to suggest suitable measures to ensure realisation of the objectives of the Project. During the implementation of the Project, the Organisation will provide all facilities to the visiting scientist/ specialist or the Expert Panel by way of accommodation, etc. at the time of their visit. On completion of the Project, ten copies of a self contained Project Completion Report as per the DST format on the work done on the Project should be sent to DST.
6. At the time of seeking further instalment of the grant, the Organisation / PI has to furnish the following documents:

- a) Utilisation Certificate (UC) and Statement of Expenditure (SE) for the previous financial year (in original or copy if sent earlier);
- b) An authenticated Statement of Expenditure (SE) including committed Expenditure for the Project until the previous month.
7. Request for specific approval of DST to **carry forward** the unutilised grant to the next financial year for utilisation for the same Project, should be sent along with UC and SE, after completion of the financial year.
8. **The Comptroller & Auditor General of India, at his discretion, shall have the right of access to the books and accounts of the Organisation maintained in respect of the grant received from the Government of India.**
9. The Organisation will maintain separate audited accounts for the Project. If it is found expedient to keep a part or whole of the grant in a bank account earning interest, the interest thus earned should be reported to DST and should be reflected in the Statement of Expenditure. The interest thus earned will be treated as a credit to the Organisation to be adjusted towards further instalment of the grant.
10. The Organisation will not entrust the implementation of the work (except the out-sourced part as approved) for which the grant has been sanctioned to any other Organisation nor will it divert the grant receipts to any other Organisation as assistance. In case the Organisation is not in a position to implement or complete the Project, it should, forthwith, refund to DST the entire grant received by it or the balance grant remaining with it.
11. All the personnel including Research personnel appointed under the Project, for the full/part duration of the Project, are to be treated as temporary employees and will be governed by the administrative rules/ service conditions (for leave, TA/DA, etc.) of the implementing Organisation. They are not to be treated as employees of the Government of India and DST will have no liability, whatsoever, for the project staff after the completion of the Project duration.
12. For expeditious implementation of the research Project, PI will take the assistance of the Organisation in the process of selection and appointment of staff and payment to them. Pay Scale and emoluments for the posts not covered under DST's OM are governed by the norms prevalent in the implementing Organisation or as agreed upon in consultation with DST.
13. **DST reserves the right to terminate the Project at any stage if it is convinced that the grant has not been properly utilised or satisfactory progress is not being made.**
14. **The Project becomes operative with effect from the date on which the Draft/ Cheque is received by the implementing Organisation. This date should be immediately intimated by the Organisation authorities/ Principal Investigator to DST.**
15. If PI to whom a grant for a Project has been sanctioned wishes to leave the Organisation where the Project is based, PI/ Organisation will inform DST of the same and in consultation with DST, take steps to ensure successful completion of the Project, before PI is relieved.
16. Investigators wishing to publish technical/ scientific papers based on the research work done under the Project should acknowledge the support received from DST, indicating the Programme. Investigators are expected to publish a few of their research papers emerging out of the Project in leading Indian Journals.

17. If the results of research are to be legally protected, the results should not be published without securing legal protection for the research results. For Projects identified to have a distinct potential for generating know-how, in the form of product/ process, that could be protected through patenting, copyrights etc., PI should carefully follow the “**Guidelines/ Instructions for Technology Transfer and Intellectual Property Rights**” provided in the **Guidelines for Implementing Research Projects** booklet issued by DST. For further information/ clarification on this subject, Advisor-Patent Facilitating Cell, Department of Science & Technology, Technology Bhavan, New Mehrauli Road, New Delhi - 110 016, (Phone- 011 26859581, Email: [raghav@nic.in](mailto:raghav@nic.in)) may be contacted.

## REFEREE'S REPORT

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Please tick in the boxes and enter your comments in the space provided. Please be as objective as possible, as PAC relies substantially on referees' reports.

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**DST Reference No :**

**PROJECT TITLE :**

**PRINCIPAL INVESTIGATOR :**

### 1. Suitability under Technology Qualifiers' Criteria *(Tick one or more)*

*The Technology is*

- Based on established R&D outcome/ results.
- Conforming to national / international specifications
- Potentially useful, demand driven and required by other agencies and users (name them)
- A development of technology for multiple applications
- An adaptation of existing technology for its applications other than originally intended
- Meeting a critical national need ( present/ future ) and/or strengthening technological capabilities for the same
- An application of advanced science and technology with a promise of giving competitive solutions

Please tick one :

Suitable

Not Suitable

If considered `Suitable', indicate the Qualifiers' criteria being satisfied by ticking the appropriate box (es). If considered `Unsuitable', skip all other items and directly go to item (9)

### 2. Objectives:

Please tick one :

Precise and well  
formulated

Vague and lacking  
precision/ focus

### **3. Work Plan including Methodology and Time Schedules:**

Please tick one :

Well planned and practical

Needs revision

Impractical

### **4. Opinion on Proposed Budget and Manpower :**

4.1 Justification for Equipment in relation to the Project Objectives:

4.2 Spares and Consumables:

4.3 Travel :

4.4 Expenditure on other Items (Fabrication etc):

4.5 Total Budget :

4.6 Manpower requested :

### **5. Opinion on Professional Competence of PI and the Project Team with regard to the Project under review:**

5.1 PI's Publication Record in the related Area

- a) International Journals
- b) National Journals
- c) International Conferences/National Conferences

5.2 Patents

5.3 PI's Experience in the related Area(s)

5.4 General Opinion on Competence of PI, Co-PI and the Team

**6. Track Record and Commitment of the Industrial Collaborator, if any.** *(Opinion may be given only on the basis of reliable information)*

**7. Comments on Involvement of PI in other Projects** *(too many or unrelated)*

**8. General Comments on the Project Proposal as a whole**

**9. Rating of the Project**

*(Please tick one)*

**Excellent:**

**Very Good:**

**Good:**

**Fair:**

**Poor:**

**10. Recommendations**

*(Please tick one)*

**Recommended**

**Needs Revision**

*(Give Suggestions)*

**Not Recommended**

*(Give Critical View)*

Signature  
Name  
Address  
Phone(s)  
Fax  
Email

Date:



*For official Use Only*

Date on which the Proposal was sent to the Referee:

Date on which the Referee's Report was received:

**Technology Systems Development Programme  
Six Monthly Project Progress Report**

*(Five Copies to be Submitted)*

1. **DST File No**
2. **Project Title**
3. **Date of Commencement**
4. **Approved Date of Completion**
5. **Principal Investigator**
6. **Progress Report Serial No**
7. **Reporting Period**
8. **List of Activities as per the approved Project indicating the Organisation responsible for each Item.**
9. **List of Milestones as per the Approved Project indicating the Organisation responsible for each Item.**
10. **Accomplishments in Terms of Activities for the Review Period**

<b>Activity</b>	<b>Progress</b>	<b>Responsible Organisation</b>

11. **Accomplishments in Terms of Milestones for the Review Period**

<b>Milestone</b>	<b>Progress</b>	<b>Responsible Organisation</b>

12. **A brief Description of Technical/Scientific Achievements for the Period** *(Give 200 word Summary in bullet form)*

### 13. Shortfalls in Achievements of Activities for the Review Period

Activity	Shortfall <i>(if any)</i> in specific Terms	Responsible Organisation

### 14. Journal Publications during the Review Period

Title of the Paper	Journal, Issue, etc.	Authors

### 15. Presentations in Symposia/Conferences during the Review Period

Title of the Paper Presented	Symposium /Conference	Dates of the Symp/Conf.	Authors

### 16. Patents filed during the Review Period

- 16.1 Title
- 16.2 Inventors
- 16.3 Date of filing
- 16.4 Date of grant of patent

### 17. Other Achievements during the Period

*(New Facilities created, HRD, Technology Demonstration, Social Benefits, Notable Services rendered)*

### 18. Any other Comment of Significance

**19. Financial Status on the Day of Reporting**

- 19.1 Amount Sanctioned:
- 19.2 Amount Received:
- 19.3 Balance Amount:
- 19.4 Manpower Sanctioned:
- 19.5 Manpower in Position:

**20. Action taken on the Observations of the Project Review Committee in its preceding Meeting**

Observations	Action Taken

**21. Status of Shortfalls as indicated in all the previous Reviews:**

**Signature of PI**

**Name of PI**

**Place:**

**Date :**

(S.No of Review\_\_\_\_\_)

## PROJECT REVIEW COMMITTEE REPORT

### PROJECT PROGRESS REVIEW

1. DST File No : Period under Review:
2. Project Title : Date of Review:
3. Principal Investigator:
4. Duration of the Project:
5. Progress of Approved Activities for the Review Period

Satisfactory

Not Satisfactory   
(Please comment)

6. Progress with Reference to Approved Milestones for the Review Period

Satisfactory

Not Satisfactory   
(Please comment)

7. Methodology Adopted

Satisfactory

Needs Revision   
(Please make suggestions)

## **8. Comments on the Achievements of the Team**

8.1 Technical and Scientific Achievements

8.2 Publications

8.3 Patents

8.4 Any other Achievement of Significance

*( New Facilities created, HRD, Technology Demonstration, Social Benefits, Notable Service rendered)*

## **9. Effectiveness of Participation of Collaborating Industry/Organisations**

## **10. Comments on Financial Status**

## **11. Overall Comments on the Progress of the Project**

*(Please tick one)*

- Satisfactory so far, timely successful completion of the Project can be expected.
- Satisfactory but behind Schedule. Successful completion is possible only if
  - i) Extension is given
  - ii) Objectives are modified
  - iii) Additional Funds are provided
  - iv) Project Team is strengthened

### **Please give suggestions**

- Not Satisfactory, Closure Recommended *(Please elaborate)*.

### **Signatures and Names of PRC Members :**

**Place:**

**Date:**

# PROJECT COMPLETION REPORT

## TECHNOLOGY SYSTEMS DEVELOPMENT (TSD) PROGRAMME OF DST

### PROJECT TITLE

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### SUBMITTED BY

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*(Name of Principal Investigator)*

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*(Name and Address of the Organisation)*

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*(Date of Submission)*

DST Reference No:

Project Duration: From.....to.....

## **PROJECT COMPLETION REPORT**

Ten bound hard copies of the Project Completion Report and a soft copy on CD should be submitted. The Report should consist of Part A- Summary Report and Part B- Comprehensive Report. The Cover Page of the report should be on the Standard Format provided.

**1. DST File No:**

**2. Project Title:**

**3. Duration of Project:** From \_\_\_\_\_ To \_\_\_\_\_

**4. Principal Investigator**

**Name:**

**Organisation:**

**5. Co-Principal Investigator**

**Name:**

**Organisation:**

**6. Collaborating Organisations**

<b>Organisation</b>	<b>Team Members</b>	<b>Activities/Tasks assigned</b>

## **Part A - Summary Report**

### **1. Project Objectives**

<b>Objective as per the approved Project</b>	<b>Fully Achieved/Partially Achieved (indicate shortfall)</b>	<b>Reason for Partial Achievement</b>

### **2. Deliverables**

<b>Deliverables as per the approved Project</b>	<b>Fully/Partially/Not Achieved</b>	<b>Reason for Partial/ Non Achievement</b>

### **3. Specific Benefits/Outcome**

*(Please give details)*

- i) Patent, if any
- ii) Product/Process developed/ technology transferred
- iii) List of Publications arising from the Project  
*(Indicate Impact Factors of the Journals; attach Copies of the Papers)*
- iv) Linkages developed
- v) Manpower trained *(Give details)*

### **4. Summary of significant S&T Achievements**

*(Provide in bullet form)*

### **5. Project Budget (Final)**

### **6. Suggestions for Utilization of Project Outcome** *(Give tangible road map, name specific Industrial Units)*

## **Part B – Comprehensive Report**

*(The Comprehensive Report should be precise in detail and self-contained)*

- 1. Project Title**
- 2. Product/Process as an outcome of the Project, identify Beneficiaries**
- 3. Scientific Description of the Product/Process, give Specifications/Standards for the same**
- 4. Methodology adopted for Development of the Product/Process** *(State briefly in 300 words)*
- 5. Scientific /Technological Formulation giving underlying Basis** *(Provide sufficient details)*
- 6. Further Work required, if any, to get full Benefits or enhance Utilization.**
- 7. Recommendations for Utilization of the Product/Process. Give Concrete Steps.**

**Signature of PI**

**Name of PI**

**Signature of Co-PI**

**Name of Co-PI**

**Names of Participating Organisations**

