Ministry of Science and Technology
Department of Science and Technology

Call for Proposals 2024-25: NSTMIS Programme

Announcement of Call for Proposals: 20.12.2024
Deadline for Submitting Proposals: 19.01.2025

Rationale: The Scientific and Technological activities play a vital role in the economic, social and physical development of a country. Scientific and technological research needs huge investments and calls for a judicious utilization of scarce resources like investment, trained manpower, raw materials etc. A better planning of S&T resources has become very crucial for the Government in directing and regulating Science and Technology. The growth of Science and Technology, its performance and impact on society and economy are indicators to assess the effectiveness of planning and policy formulation. For the development of Science and Technology, its effective utilization of available resources and for proper planning and for formulating S&T policies, it is necessary to build Science and Technology Information on a continuous basis. The National Science and Technology Management Information System (NSTMIS) Programme of Department of Science and Technology is entrusted with the task of collection, collation, analysis and dissemination of vital S&T information at a national level for evidence-based policy planning for the S&T sector.

The Scheme: The NSTMIS programme sponsors research projects/studies to potential investigators/organizations across the country. The broad areas of study include: S&T investment, S&T infrastructure, S&T output, S&T databases, S&T manpower, R&D productivity/efficiency etc. The thrust areas to be addressed for submission of research proposals under the present **Call for Proposals** are given below. However, proposals can also be submitted in other interrelated S&T areas for consideration. The preference will be given to project proposals focusing on mapping STI at regional/ sectoral/ national level, development of framework/ advanced tools for wider usage of STI data. Proposals should adhere to global standards in terms of methodology, approaches, best practices, etc.

Key theme areas for consideration for under the present **Call for Proposals 2024-25** under NSTMIS Programme:

Set-1	**Technology Studies**
	❖ Commercialization of technologies
	❖ Deep-Tech Technologies
	❖ Low-cost technologies for masses.
	❖ Technology Disruptions

Set-2	**STI intervention for Viksit Bharat 2047** ❖ Study on target setting/prioritizing the goals for STI indicators in terms of financial and human resources, infrastructure and outcomes for strengthening of STI ecosystem. ❖ AI tools for mapping and forecasting of STI indicators & other allied areas.
Set-3	**S&T Policy Studies** ❖ Policies, institutional structures and mechanisms for promotion of innovation & growth. ❖ Ease of doing research ❖ Empirical study on national and international collaboration on research & innovation in emerging areas. ❖ Impact studies on S&T key programmes/missions of government. ❖ CSR funding for research and its impact
Set-4	**Research Assessment Studies** ❖ Bibliometric studies and S&T mapping including Capacity Building ❖ R&D performance measurements in terms of public-private, strategic and social goods: Development of tools / methodologies / matrices / benchmarks

Who can apply: Scientists, Technologists, Statisticians, Economists, Sociologists, Development/ Planning/ Policy Experts, Management Specialists etc. from academic/research institutions, registered societies, Voluntary Agencies (NGOs), Professional bodies, etc.

Approval mechanism: Proposals would be screened first by the Division/Screening Committee and then referred to the Programme Advisory Committee (PAC) for technical evaluation before final approval.

How to apply: The call is open for proposal submission at ePMS (https://onlinedst.gov.in).

For detailed information, please go through General Guidelines at Annexure 1.

LAST DATE FOR RECEIPT OF APPLICATIONS

The online Application portal is open from **20.12.2024** to **19.01.2025** for proposal submission.

For any enquiry, please contact:

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Format for Submission of Project Proposal

1. Project Title :

2. Name and Address of the Institute/organisation where the project will be implemented.

3. Principal Investigator (PI) (Name, Designation, Age, Gender)

4. Category : General/SC/ST/OBC (please tick the appropriate)

5. Institute Name (Address, City, Pincode, State, Phone No. (landline & mobile) and Email.)

6. Co-Investigator(s): (Name(s), Designation, Age, Gender, Category (General/SC/ST/OBC), Institute Name, Address, Phone No. (landline &mobile) and Email)

7. Total Cost (in Rupees) :

8. Duration (in months):

9. Ideation of the study (give brief elaboration under select option (s)) -in 50 words max. i. Based on own experience ii. Evolved upon discussions with the NSTMIS, DST iii. Other (s)

10. Introduction (max two pages)

11. Review of Literature (Both National & International Status) (max 3-4 pages)

12. Objectives (in bullet points) not exceeding 100 words.

13. Methodology (to be specific to carry out the project objectives):

    i.   Target population and sample size to be covered
   ii.   Methods of data collection
  iii.   Sources of the data
  iv.   Reference period of the data to be covered
   v.   Method of processing and analysing
  vi.   Time schedule of activities giving milestones

14. Expected Benefits :

15. Stakeholders having interest in the study (not exceeding 100 words):

16. Limitations of the Study along with appropriate measures to be taken up:

17. Name of the External Experts(s) in the related field with affiliations and contact details (3-4 names):

18. Other Projects in hand: (please give details):

19. Budget Estimate: (Rupees)

Item	Budget (Year-wise)			
	1st Year	2nd Year	3rd Year	Total

A. Recurring
 	
   1. Salaries/Wages (Category-wise)
 	
   2. Consumables (Please specify)
 	
   3. Travel
 	
   4. Contingency
 	
   5. Other costs (Please specify, also attach justification)
 	
   6. Permanent equipment (Please specify, also attach justification)				

B. Overhead charges(**) (add 10% of total cost for educational institutions & NGOs and 8% for laboratories and institutions under Central Government departments/agencies)				
GRAND TOTAL (A+B)				

* Justification for all the items under various heads has to be given for (Recurring A & B Permanent equipment)

** Subject to change.

20. Bio-data of PI and Co-PI

Endorsement from the Head of Institution*(To be given on letterhead)

Project Title:

1. Certified that the Institute welcomes participation of Shri/Smt……………………..… as the Principal Investigator and Shri/Smt…………………………………………………. as the Co-Investigator(s) for the project and that in the unforeseen event of discontinuance by the Principal Investigator, the Principal Co- Investigator will assume the responsibility of the fruitful completion of the project (with due intimation to DST).

2. Certified that all basic facilities such as library, office equipment and other administrative support etc. will be extended to the investigator(s)throughout the duration of the project.

3. Institute assumes to undertake the financial and other management responsibilities of the project.

4. Certified that staff salaries proposed in the project proposal is in accordance to the approved norms of the institution.

Name and signature of Head of Institute

Date:

Place:

*Co-Investigator(s)from a different institution may also provide a similar certificate from their Head of Institute.

Certificate from Project Investigator

Project Title:

1. I / We agree to abide by the terms and conditions of the grant set forth by DST including time submission of annual Audited Statements of Accounts and Utilization Certificates.

2. I/ We did not submit the project proposal elsewhere for financial support.

3. We have explored and ensured that equipment and basic facilities will actually be available as and when required for the purpose of the project. We shall not request financial support under this project, for procurement of these items.

4. I/ We have enclosed the necessary documents as required. The list of documents enclosed is given below:

Item	No. of Copies
A. Endorsement from the Head of the Institution (on letter head)	
B. Certificate from Investigator	
C. Name and address of experts/institution interested in the subject/ outcome of the project	

Date:

Name and Signature of Principal Investigator

Place:

Name and Signature of Co-Investigator

GENERAL GUIDELINES FOR SUBMISSION OF PROJECT PROPOSALS

I. Scope and Objectives

The Scientific and Technological activities play a vital role in the economic, social and physical development of a country. Scientific and technological research needs huge investments and calls for a judicious utilisation of scarce resources like investment, trained manpower, raw materials etc. A better planning of S&T resources has become very crucial for the Government in directing and regulating Science and Technology. The growth of Science and Technology, its performance and impact on society and economy are indicators to assess the effectiveness of planning and policy formulation. For the development of Science and Technology, its effective utilisation of available resources and for proper planning and for formulating S&T policies, it is necessary to build Science and Technology Information on a continuous basis. The National Science and Technology Management Information System (NSTMIS) under the Department of Science and Technology is entrusted with the task of collection, collation, analysis and dissemination of vital S&T information at a national level for evidence based policy planning for the S&T sector. Some of the broader areas where resources studies could be taken up are:

- S&T Manpower
- S&T Investment
- S&T Infrastructure
- S&T Output

While some of the data would be collected and processed in -house, it has become necessary to involve other interested individuals/organisations to take up programmes in a project mode. A list of such suggested areas where projects could be formulated is enclosed. The guidelines for formulating projects, the prescribed format for submission of projects and the related documents to be submitted are also given in this document.

II. Who can submit a proposal

Scientists, Technologists, Statisticians, Economists, Sociologists, Development/ Planning/ Policy Experts, Management Specialists etc. from academic/research institutions, registered societies, Voluntary Agencies (NGOs), Professional bodies, etc.

III. When can submit the proposal

The proposal can be submitted online on specific Call basis.

IV. Address for sending the proposals:

The proposal can be submitted in respect of specific call by visiting online DST portal (https://onlinedst.gov.in) .

V. Suggested Areas

S&T Manpower

Scientific & Technological (S&T) Manpower constitutes one of the major input resources to Scientific and Technological activities. S&T Manpower is also an indirect measurement of the strength of the country by contributing to the socio-economic development through S&T activities. Such contributions would be substantial if planning based on data/analysis is made for identifying and developing the types of scientific, technical and professional skills that the economy needs. For this purpose, manpower studies relating to the following areas are relevant:

- Assessment of mismatch between out-turn and deployment of S&T personnel.
- Assessment of S&T personnel gainfully employed with regard to their education and training.
- Assessment of anticipated gaps in demand and supply position of S&T manpower in the present and future years keeping in view of the national priorities and the new/emerging areas including globalization.
- Analysis of the salary structures of S&T personnel in different sectors.
- Establishment of computerized information system on S&T manpower, supply demand, deployment, migration and related issues.
- Analysis of professional S&T Manpower migrating to areas other than their specialisation especially non-scientific/technical spheres.

S&T Investment

Investments on R&D and related S&T activities are carried out by Central Sector, State Sector and Private Sector. The investments are by way of in-house R&D (National laboratories, Grants-in-aid R&D institutions, Public Sector undertakings, Private Industries and State Governments) and through Extramural time bound R&D projects (by Central Government Ministries/Departments/Agencies and to some extent by State Governments).The Department of Science and Technology brings out on a regular basis a publication entitled R&D Statistics which gives the details of R&D and related S&T expenditure at a global level. The Department maintains a database of extramural R&D projects funded by major Central S&T Departments since 1990-91. However, this database needs further updation in terms of objectives of the projects, equipment provided, manpower, expertise of investigator, areas of research, output of the projects etc. Further, information have to be collected for the in-house R&D projects carried out by Public Sector and Private Sector Industries. Towards this end, the project proposals in the following areas are relevant:

- Subject area-wise studies of R&D and identification of the gap areas as well as emerging areas that need further attention/thrust.
- Assessment of the R&D investment in comparison with other countries.
- Successful models of stimulating private sector participation in Investment in R&D and related S&T activities at state level.
- Stimulating research in universities.
- R&D and innovation in SMEs.
- Investment on R&D by MNCs.
- Innovation assessment in traditional industries and sectors.
- Innovation in Public Research Organisations.

S&T Infrastructure

Over a period of time considerable infrastructural facilities have been created for the Research and Development activities. Creation of institutions in the specialised areas of research and acquiring new sophisticated scientific equipment at various institutions etc. add to the infrastructural facilities. For the proper planning and policy making one has to take stock of the existing infrastructural facilities. Creation of databases/studies in the following areas are relevant:

- Creation of information directories on S&T institutions, giving details of facilities available, areas of research, functions and achievements, manpower, R&D projects being handled etc.
- Assessment of S&T system, infrastructure, resources input and output of R&D in India and also between countries.
- Identification of the newly emerging areas as well as gap areas where new institutions have to be established.
- Analysis of investments of major facilities created/equipment procured under R&D efforts.
- Research (University/National Labs)-Industry Linkages

S&T Output

In order to measure the output of S&T investments, various models have to be developed, project proposals in the following areas are relevant:

- Analysis of S&T output in terms of publications, patents, new products and processes developed.
- Development of models for assessment of the S&T endeavour and economic and social well being.
- To evolve a mode to measure the output of R&D projects.
- Development of new indicators in R&D and innovation.
- Appropriability of IPR in Indian firms in S&T sector.
- Technology Transfer and commercialization of patents in public and private sector R&D.
- Measurement of the outcome of the completed projects vis-à-vis with the R&D investments.
- Assessment of the impact of R&D on socio-economic development.
- Highlight of the major achievements of R&D efforts.

Note: The areas suggested above are indicative only. Proposals are invited on specific call basis.

VI. General Terms and Conditions

• The project proposals should clearly focus on any of the areas listed in this document and should be in conformity with the scope of the scheme.

• The proposal should be routed through the Head of the Institute and should be submitted in the prescribed format given in this document at any time during the year.

• The scheme does not provide funds for infrastructure like vehicles, buildings, permanent equipment etc. However, if any dedicated equipment required for the project work exclusively can be considered in exceptional cases.

• Each ongoing project is monitored and guided by experts through the Project Advisory Committees (PAC) /Local Project Advisory Committee (LPAC) constituted by DST and mid-term review mechanisms. The implementation mechanism of the programme is also being monitored at regular intervals for introducing changes required, if any.

• The institute shall submit to DST the necessary expenditure statement, Audited Statement of Expenditure (SE), Utilisation Certificate (UC) in respect of the funds released in connection with the implementation of the projects.

• Upon completion of the project, the Project Completion Report (PCR) is evaluated and accepted by the LPAC/PAC with suggestions, if any. Simultaneously, the financial statements, UC/SE, are also obtained to process the final settlement of the project accounts.

• DST shall release subsequent installment of project grant under the ongoing/completed projects upon receipt of UC/SE, Annual Progress Report/ final Project Completion Report subject to their acceptance.

• The institution where the project is proposed to be implemented assumes administrative responsibilities of the project.

• The manpower recruited for the project should be paid as per the rules of the institute and guidelines of Government of India.

• The proposals are scrutinized by experts in the field and if necessary, the Principal Investigator will be invited to DST to make a presentation to the experts.

• The DST reserves the right to terminate the grant at any stage if it is convinced that the grant has not been properly utilised or appropriate progress is not being made.

• The project will become operative with effect from the date on which the grant is received by the institute.

• The date of start of project will be intimated by the Institute to the DST. It will, in no case, be later than one month after the receipt of the grant by the Institute. If the PI to whom a project has been sanctioned wishes to leave the Institute where the project is based, the Institute/investigator will inform the same to the DST and in consultation with DST, the Institute shall evolve with DST, steps to ensure successful completion of the project before relieving the PI.

• Association of a Co-Investigator is essential to ensure smooth implementation of the project. In case, the PI is not able to continue with the project, the institute would nominate Co-PI associated with the project for its successful completion.

• The funds will be released in the name of the institute only.

• Overheads on project to be provided at the rate of 10% of the total project cost for educational institutions & NGOs and 8% for laboratories & institutions under Central Government departments/agencies.

• The project shall become operative from the day the grant is received by the grantee institutions from the government department.

VII. Documents required at the time of online submission of project proposal

• Research proposal as per the prescribed format
• Endorsement from the Head of the Institute on letter head
• Certificate from Investigator(s)
• 3-4 Names and address of Experts/Institutions/Government Departments interested in the subject/outcome of the project
• Status of the Institute (in case of Registered bodies, Registration Certificate voluntary agencies, non-profitable charitable institutions, consulting organisations etc.)
• Biodata of the Principal Investigator and Co-Investigator(s) to be included in each copy of the proposal.

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