

F. No. 15012/14/25-R&N
Government of India
NITI Aayog
(Research and Networking Division)

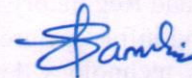
Sansad Marg, New Delhi-110001

Dated: - 15th July, 2025

PUBLIC NOTICE

Subject: Request/Invitation for Expression of Interest (REoI) for Research Projects - reg.

1. NITI Aayog hereby requests/invites expressions of Interest (EoI) for conducting research/study from institutions/organisations of repute (including university/deemed university) for undertaking a Research Study on “**Analytical study and Framework Development for Science & Technology (S&T) Outlook of States**” The details of the studies are placed in **Annexure I** to this Request for Expressions of Interest (REoI). The detailed Research Scheme of NITI Aayog-2024 (RSNA-2024) guidelines and its amendments, if any: read with this REoI will govern the process and may be seen at NITI Aayog’s website at <http://www.niti.gov.in/guidelines>.
2. All the institutions/organisations are requested to go through the Guidelines of the **Research Scheme of NITI Aayog 2024 (Guidelines/RSNA-2024)** before responding to this public notice, especially to satisfy themselves that they fulfil all the eligibility criteria for availing of a grant under the said scheme and also that they can conduct the research study project as per the Guidelines.
3. No Applicant or its Associate shall submit more than one Application for the Consultancy. An Applicant applying individually or as an Associate or as part of the consortium shall not be entitled to submit another application either individually or as a member of any consortium, as the case may be. Applicants are advised to provide sufficient details in their applications to allow for an informed and fair evaluation/review.
4. The hard copy of EoI as per the format prescribed in **Annexure- II** along with the undertaking as per **Annexure -III** must be submitted by hand or by Registered post to Sh. Sanchit Jindal, ASO (R&N) **Room No 435**, NITI Aayog, Sansad Marg, New Delhi-110001 by the interested applicants. The EoI must be sent in envelopes superscribed with the words “EoI on (name of the topic as mentioned in the corresponding Annexure)” and the same must reach the NITI Aayog within 21 days of the notified date of Public Notice i.e before 4:00 PM of 5th August, 2025 (Tuesday). EoI through E-mail may be sent at the address pdresearch-niti@gov.in. However, it must be supplemented with submission of the physical copy.
5. For any query in this regard, R&N Division may please be contacted over email at pdresearch-niti@gov.in.



(Dr Banusri Velpandian)
Senior Specialist (Research and Networking)

Analytical Study and Framework Development for S&T Outlook of States 2025

1. Background

India stands at a transformative moment in its technological and economic journey, guided by the Viksit Bharat 2047 vision, a comprehensive strategy that prioritizes scientific and technological innovation alongside economic growth and global competitiveness. Over the past decade, India has made significant progress in Science and Technology S&T, ranking 3rd globally in science and engineering research publications, doubling patent filings (notably resident filings), and rising steadily in the Global Innovation Index.

Given India's federal structure and the diverse capacities of its states, a uniform approach to Science, Technology, and Innovation (STI) is neither feasible nor effective. Achieving the goals of Viksit Bharat 2047 will require robust state-level contributions, aligned with local strengths and challenges. Recognizing the shared roles of both central and state governments in Science, Technology, and Innovation (STI) policy and investment, there is a clear need for systematic data on both inputs (e.g., funding, manpower) and outputs (e.g., publications, patents) across states.

To address this, a state-wise S&T Outlook dashboard is proposed, anchored in NITI Aayog's principles of cooperative and competitive federalism, the dashboard will offer an interactive platform for data-driven reporting and analytics. This initiative aims to enhance Centre-State engagement in the S&T domain, support targeted policy interventions, and foster a collaborative yet competitive environment for strengthening the national STI ecosystem.

Rationale and Objectives of the Project

The broader objective of the exercise is to understand and document the overall S&T ecosystem of states, with focus on the key input indicators (like GERD, FTE, etc.) and major output indicators (such as Publications, Patents, Technologies, etc.). The exercise will aim to develop an appropriate framework for data collection, reporting, analytics of relevant indicators for each of the states. Efforts will be made for identifying and capturing major S&T outputs and outcomes from each state and correlating them with other relevant indicators and parameters (like GSDP etc.).

More specifically, the exercise will attempt to build an interactive analytical dashboard showcasing an analytical framework for assessment, evaluation, reporting and analysis in the following major input and output indicators:

<u>INPUT INDICATORS</u> (suggestive)	<u>OUTPUT INDICATORS</u> (suggestive)
<ul style="list-style-type: none">• Gross domestic expenditure on research and development (GERD) Estimation of the state• FTE estimation of the state• Policy and Regulatory Framework• Enabling infrastructure, including SIRO's, technology development and transfer etc.	<ul style="list-style-type: none">• Research Publications & Citations: overall and sector-wise• Patent filings and grants• Sectoral strengths and expertise• Institutional output shares• Expertise mapping at different levels• Correlation with State S&T needs• Technology Development

This exercise will also attempt to analyse the thematic focus and structure of science and technology outcomes of states and to see their alignment with the state-specific S&T

intervention needs. The state-specific distinctive strengths and expertise reflected in science and technology outcomes will be analysed. The necessary support structures for the overall growth of Science and Technology - Research and development in the state will be assessed.

Methodology

The proposed exercise aims to develop a comprehensive framework for understanding, analysing, and reporting the S&T outlook of Indian states. It will assess both the volume and proportionate contribution of each state to national outcomes, while accounting for regional diversity and strengths. The analysis will rely on standardized data sources to measure key input and output indicators—both quantitative and qualitative.

The study will be structured in two parts:

Part A: Macroscopic Analysis

- State-wise share of national research publications (e.g., from WoS/Scopus)
- Patent statistics by state (e.g., from WIPO Patent scope, Derwent)
- Distribution of R&D institutions across states
- Comparative analysis of States based on S&T outputs and their correlation with economic indicators like GSDP

Part B: State-Level Analysis

- Basic state profiles: establishment year, population, GSDP, number of R&D institutions, and S&T policies
- Analysis of input indicators
- Research publications: trends (2020–2023), citation metrics, disciplinary spread, institutional contributions (central vs. state), UIG collaborations, and alignment with state-specific needs
- Patents: volume, thematic areas, ownership patterns, institutional contributions, UIG trends, and expertise mapping
- Technology development: key growth areas, institutional frameworks, and notable successes

The initial phase will be completed in 6–8 months, following which the dashboard will be periodically updated. An annual static report summarizing key insights will also be published.

2. Terms of Reference

- i. To understand and analyze the overall innovation ecosystem of the country by focusing on state level contributions, including inputs, overall operating framework, and the relevant outputs in core S&T sectors.
- ii. Identify and measure quantitative as well as qualitative indicators (input as well as output) related to S&T innovation in Indian States and UT, while considering regional disparities in the sectors across different States. Standardized international and

National data sources that can act as key reference documents.

- iii. Determine reliable and transparent sources for data collection for each input and output parameter from different states and UTs and to coordinate with them for the same purpose.
- iv. Development of an interactive, dynamic, web-based dashboard offering comprehensive profiles and analytics on S&T inputs (such as funding and human resources) and outputs (such as publications, patents, and innovations) for all Indian States and Union Territories.
- v. The dashboard should be refreshed regularly with periodic updates to datasets to ensure ongoing relevance and usability
- vi. Recommend future improvements in the design and development of the dashboard if required.
- vii. In addition to the dashboard, an annual report summarizing key findings and trends will be published.
- viii. Following the completion of the study, data pipelines and analytical methodologies will be optimized for periodic updates.

3. Conditions for Minimum Eligibility of Applicants

To be eligible for evaluation of its Proposal, the applicant shall fulfil the following:

- i. The Applicant must be a legal entity as per Applicable Laws (which would include, inter-alia, academic institutions/profit/non-profit organisation).
- ii. The Applicant shall have, more than 5 (five) years of experience preceding the Proposal Due Date (PDD), have undertaken a minimum of 1 (one) assignment related to developing a dashboard for Ministries/Department of Government of India.
- iii. The Applicant should have well-equipped 'in-house' expert team.
- iv. The Applicant should have a minimum turnover of Rs. 2 (two) crore per annum during each of the 3 (three) financial years viz. FY 2023-24, FY 2022-23 and FY 2021-22.
- v. The Applicant should enclose copies of audited balance sheet for FY 2023-24, FY 2022-23 and FY 2021-22.
- vi. The Applicant must not be blacklisted by any Central Govt./State Govt./PSU/Govt. Bodies.

4. Duration and Expected Team Strength

The project is expected to run for a period of 6-8 months. The Research proposal may require a team of 4-5 professionals with at least 1 Team Leader, 1 Deputy Team Leader, 1 or 2 Senior Researcher/Consultant, and 1 Junior Researcher/Consultant.

Annexure II

Format of Expression of Interest (EoI)

Respondents Ref No.:

Date:

Name-

Designation-

----- Division,

NITI Aayog,

Sansad Marg, New Delhi

Dear Sir/Madam,

Subject: RESPONSE TO – EOI FOR _____

We, the undersigned, offer the following information in response to the Expression of Interest sought by you vide your Notification No. _____, dated _____

1. Scope of work and organisation

- (i) The broad scope of work or service (briefly in about 100 words -Remember to tailor the content to the specific project or opportunity you're expressing interest in.)
- (ii) Type of Inputs to expected be provided by NITI Aayog on the subject
- (iii) Eligibility of the Applicant(s) for the EoI/study (Lead Applicant as applicable):

Type of organisation	Address of Organisation	Registration details	Single or Joint or collaboration (Name of all organisations)	Whether blacklisted By Govt. of India/ State Govt/any Other department

2. Required Documents:

- (i) Copy of Registration Certificate of the Institution/Organisation **OR** Articles of Association {Copy of the Constitution/MOA (Memorandum of Association) of the Institute/ Any letter issued by UGC if University}
- (ii) Registration number (Copy) in NGO-Portal “Darpan” of NITI Aayog, if applicable.
- (iii) Photo copy of PAN card of the organization.

- (iv) Other supporting documents to evaluate the bidder for minimum eligibility conditions.

3. Undertaking: As per **Annexure – III** [To be given separately on A4 size letter head of the Applicant/ Lead Applicant]

4. Information of PI and Organisation

Details of Bidder		
1.	Name of the Principal Investigator (PI)	
2.	Address of PI	
3.	Status of the Organisation (Public Ltd./ Pvt. Ltd./ NGO/ Society/Trust/ University/ Autonomous Body/ Deemed University)	
4.	Status as per Registration certificate/ Act	
5.	Name and Designation of the contact person:	
	Telephone No. (with STD code)	
	Mobile Number	
	Email of the Contact/ key person	
	Fax No. (with STD code)	
	Website:	
6.	Particulars of associate applicants/ JV members/ consortium members/ sub-contractors/collaborators	

- A. We have examined and have no reservations to the EoI Document, including the self-declaration or any addendum that may be issued by NITI Aayog.
- B. We are duly authorized to represent and act on behalf of all collaborating applicants, which shall include jointly and severally / JV/ consortium/ sub-contractors as applicable.
- C. Our response is valid till (Minimum validity is of three months from the submission deadline)

Yours sincerely,

(Sign)

NAME OF THE ENTITY

NAME OF THE AUTHORIZED PERSON

DESIGNATION

NATURE OF AUTHORISATION- BOARD RESOLUTION/LETTER OF AUTHORITY/ MOA/OM/POA

DATE

OFFICE SEAL/STAMP

Annexure III

SELF-DECLARATION FORM (to be printed on the applicants letter head)

----- hereby declares to NITI Aayog
that:

1. In the last three years, we, the lead applicant or any of our Associates / partners/ consortium members have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Applicant, nor been expelled from any project or contract by any public authority nor have had any contract terminated by any public authority for breach on our part.
2. We as Respondent(s) do not have any Conflict of Interest in accordance with the scope of the EOI in terms of projects or studies or assignments either ongoing or completed: having competing interests or constituting the same key personnel, during the preceding 3 (three) years as on the deadline of EoI submission.
3. We have not directly or indirectly or through an agent engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, in respect of any tender or request for proposal or convicted by a Court of Law or indicted or adverse orders passed by a regulatory authority which would cast a doubt on our ability to undertake the Consultancy for the Project.
4. In regard to matters relating to security and integrity of the country, we have not been charge-sheeted by any agency of the Government or convicted by a Court of Law for any offence committed by us or by any of our Associates.
5. We are solvent and **are not** having our management affairs administered by the Courts or IBC. We are in the position to continue being sustainable in connection to performance of the obligations for this Consultancy procurement action.
6. We shall abide by all the conditions of the REoI and the terms in respect of any matter arising out of the detailed RFP Document if to be submitted on being shortlisted or concerning or relating to the Selection Process including the award of Consultancy.

Yours sincerely,

(Sign)

NAME OF THE ENTITY

NAME OF THE AUTHORIZED PERSON

DESIGNATION

NATURE OF AUTHORISATION- BOARD RESOLUTION/LETTER OF AUTHORITY/

MOA/OM/POA

DATE

OFFICE SEAL/STAMP