REQUEST FOR PROPOSAL
(RFP)

Engagement of Consultant for the
Preparation of a Feasibility Report
for
Establishing a Semiconductor Fabrication Facility in Kerala

KSUM/RFP/EC/SFF/2024-25/01

Kerala Startup Mission,
G3B,Thejaswini Building, Technopark Campus, Thiruvananthapuram
Kariyavattom, Thiruvananthapuram

KERALA STARTUP MISSION®

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Request for Proposal (RFP) The Engagement of a Consultant for the Preparation of a Feasibility Report for Establishing a semiconductor fabrication facility in Kerala

RFP Reference : KSUM/RFP/EC/SFF/2024-25/01

Kerala Startup Mission invites Request for Proposals from Qualified Consultants for the Preparation of the **Feasibility Report for Establishing a Semiconductor Fabrication Facility in Kerala**

Interested Consultant firms who meet the pre-qualification criteria may furnish their proposals with all necessary documents, as detailed in this document, along with the covering letter duly signed by an authorised signatory through the KSUM website of the Government of Kerala on or before April 1, 2025, 18:00 hrs.

Note: KSUM reserves the right to cancel this Request For Proposal (RFP) and or invite a fresh one with or without amendments, without liability or any obligation for RFP and without assigning any reason whatsoever. Information provided at this stage is indicative and KSUM reserves the right to amend/ add further details in the RFP.

Assignment Data Sheet

Assignment Name	The Engagement of Consultant for the Preparation of Feasibility Report for Establishing a semiconductor fabrication facility in Kerala
Method of Selection	Quality and Cost-Based Selection: ● 80% weight to the Technical Proposal ● 20% weight to Finance Proposal
Virtual Meeting	26th March 2025 Time: 11:00 AM IST Link: https://meet.google.com/woj-vvzo-rgv
Submission Date of Technical and Financial Proposals	Proposals are to be submitted by 6 pm, 9th April 2025. Any proposal delivered after the deadline will not be considered and will be returned unopened.
Tentative date of commencement of services	By the second Week of May
Essential Items to be Included in the Financial Proposal	Refer to Point 7, Part III
Validity of Proposal	Technical and Financial Proposals are to be valid up to 180 days from the date of submission
Evaluation criteria	Refer to Part II
Contact Person for any clarifications	varun@startupmission.in , procurement@startupmission.in
Facilities/documents to be provided by KSUM	● Background documents ● Counterpart staff with whom the consultants will work
Collaboration between firms for this project	Consortium bidding is not permitted.

PART 1: General Terms

1. Goals of This Request for Proposal

The objective of this RFP is to solicit proposals from interested bidders/ qualified consulting firms to conduct a comprehensive feasibility study for establishing a state-of-the-art semiconductor fabrication facility in Kerala. This initiative is a part of Kerala's strategic vision to develop a high-technology electronics and semiconductor ecosystem in the region. The feasibility study will evaluate the technical, economic, and operational aspects of setting up a semiconductor fab, including site analysis, infrastructure requirements, market demand, financial viability, and potential socio-economic benefits for the state. Qualified consultants with relevant experience are invited to submit detailed proposals in response to this RFP.

2. RFP Issuing Authority

This RFP is issued by the Kerala Startup Mission (KSUM) with the intent to select qualified Consulting Firms to build the proposal. KSUM's decision concerning the short-listing and selection of bidders through this RFP shall be final and KSUM (or GoK) reserves the right to reject any or all the RFP received without assigning any specific reason thereof.

RFP Initiator Details:
The Chief Executive Officer
Kerala Startup Mission G3B, Thejaswini, Technopark Campus,
Kariyavattom Trivandrum- 695581
Kerala
Phone: 0471- 2700270
Email: ceo@startupmission.in
Website: www.startupmission.kerala.gov.in

2. Tentative Calendar of Events

Sl.no	Milestone	Date
1	Release of RFP	19 March 2025
2	Pre-submission Meeting	26 March 2025, 11:00 AM
3	Last date to Submit RFP	09 April 2025, 05:00PM
4	Opening of Technical Bid	10 April 2025, 11:00AM

3. Availability of the RFP Documents

RFP can be downloaded from the website of the Kerala Startup Mission https://startupmission.kerala.gov.in/tenders

The applicants are expected to examine all instructions, forms, terms, requirements and other details in the RFP documents. Failure to furnish complete information as mentioned in the RFP documents or submission of a proposal not substantially responsive to the RFP documents in every respect will be at the applicant's risk and may result in the rejection of the proposal.

5. Pre-Submission Meeting

KSUM will host an online pre-submission meeting (Google meeting) using the link below.
Date: 26 March 2025
Time: 11:00 AM IST

Link: Pre Submission Meeting | Semiconductor Report
Wednesday, March 26 · 11:00am – 12:00pm

Google Meet joining info
Video call link: https://meet.google.com/woj-vvzo-rgv

The representatives of the interested organizations (Maximum 2) may attend the meeting. The purpose of the meeting is to provide applicants with any clarifications regarding the RFP. It will also provide each applicant with an opportunity to seek clarifications regarding any aspect of the RFP.

6. Deadline for Submission of Proposals

Proposals that are complete and meet all requirements outlined in the RFP, must be submitted to KSUM latest by April 9, 2025. In special cases, KSUM may extend the submission deadline at its discretion by publishing an addendum on the tender portal. In such cases, the rights and responsibilities of KSUM and the applicants will follow the new extended deadline.

7. Submission of Proposals

The proposals shall be submitted as hard copies as two cover (Technical & financial) RFP documents along with all the supporting documents to the below

The Chief Executive Officer,
Kerala Startup Mission,
G3B Thejaswini, Technopark Campus,
Kariayvattom, Thiruvananthapuram

PART 2: Background, Objectives and Expectations

About Kerala Startup Mission

Kerala Startup Mission (KSUM) plays a pivotal role in fostering entrepreneurship and innovation in Kerala. It functions as the state's primary government body for promoting and supporting startups thereby creating a technology entrepreneurial culture in the State. Established in 2006, it is responsible for creating a vibrant and dynamic environment for startups, fostering innovation, and facilitating the growth of entrepreneurial ventures. KSUM plays a multifaceted role in building and nurturing the startup ecosystem across various sectors, from technology and healthcare to social innovation and rural entrepreneurship.

The mission of KSUM is to create a conducive environment for potential innovations to transform as scalable and sustainable startups in Kerala. This includes Startup Policy Advocacy & Implementation, Providing Coworking Spaces, Infrastructure and Incubator Networks, Funding and Investment Facilitation Assistance, Prototyping Fab Labs and High-end Tool & Startup Services Supports, Mentoring and Capacity building, Networking, Global Market Access, Community Creation and Ecosystem development. KSUM's FabLab's in Kerala have been recognized globally for providing startups with access to cutting-edge prototyping and manufacturing tools, aiding in product development.

KSUM implements the Startup Programmes through Government Support and it is a Govt supported organisation under the Department of Electronics and Information Technology, Government of Kerala.

KSUM is the nodal agency for implementing the Government Schemes: Youth Entrepreneurship Development Programme (YEDP) and Technology Innovation Zone (TIZ) through the State's Budget .As of today KSUM along with sector-specific partner organisations, boast of 6200 + registered startups, 10 Lakh + sq. feet of incubation space, 60+ incubators and 525+ mini incubation centres across the state of Kerala

KSUM has garnered several achievements and awards, both nationally and internationally, for its role in promoting and nurturing the startup ecosystem in Kerala. These accolades reflect its success in creating a supportive environment for innovation, entrepreneurship, and the development of scalable startups. Kerala was ranked as a **"Best Performer"** in the **States' Startup Ranking 2022** by the Department for Promotion of Industry and Internal Trade (DPIIT), Government of India. This recognition highlighted Kerala's success in fostering a conducive startup ecosystem, particularly in supporting women entrepreneurs and student startups. Kerala was also recognized in previous editions of the national ranking, demonstrating the state's continuous growth in the startup ecosystem.

Background

In response to the rising global demand for semiconductor chips and the pressing need for localized manufacturing, India is positioning itself to become a key player in the semiconductor industry. Currently, the semiconductor market in India is estimated to reach $64 billion by 2026, driven by rapid growth in sectors such as consumer electronics, automotive, and telecommunications. The 'Make In India' Initiative has elevated Kerala's vision of becoming an Electronics & Hardware Hub. With three significant projects already in the pipeline, India is actively working to establish semiconductor manufacturing hubs that will bolster its presence on the global stage.

In this context, Kerala is exploring the feasibility of establishing a semiconductor manufacturing facility, leveraging its strategic advantages, including a skilled workforce, robust infrastructure, and a supportive government policy framework. By investing in a semiconductor facility, Kerala aims to not only meet local demand but also contribute to the global supply chain, enhancing the state's economic landscape and creating numerous job opportunities.

The proposed feasibility study will evaluate the potential for establishing such a facility in Kerala, assessing market conditions, investment requirements, and operational efficiencies to ensure a successful venture.

Objectives

KSUM is seeking qualified consultants to conduct a comprehensive feasibility study for establishing a semiconductor fabrication facility in Kerala. This study aims to assess the viability of the project by evaluating economic and technical factors while highlighting Kerala's advantages as an ideal location. The consultant will develop a framework for collaboration with semiconductor companies, the government and KSUM, also studying the possibilities of dedicating a certain capacity to academic research and R&D initiatives. The study will also explore options for considering ideal location for the facility and outline investment and operational strategies, design concepts, budget estimates and regulatory requirements.

The feasibility study should be presented as a detailed **project report** covering the following titles, but not limited to –

1. Introduction
2. Need and Scope
3. Market Research & Demand Assessment
4. Identification of Technology & Industry Sectors
5. Recommendations on Infrastructure Requirements for Fabrication
6. Resource requirements
7. Marketing strategy
8. Financial projections & Investment Feasibility
9. Regulatory & Compliance requirements
10. Risk Analysis & Mitigation
11. Recommendations & Conclusion

The above titles are explained in detail:

1. Introduction

   The report should start with a comprehensive overview of the proposed study, outlining the objectives and the significance of establishing a semiconductor fabrication facility in Kerala. The introduction should highlight the strategic importance of this initiative and its potential to strengthen Kerala's position in the global semiconductor industry.

2. Need and Scope

   This section should elaborate on the background and need for a semiconductor fabrication facility in the location. It can also cover the prospective strengths and opportunities this facility will have in future.

3. Market Analysis & Demand Assessment

Conduct a thorough analysis of the global semiconductor market, examining key industry trends, growth forecasts, and technological advancements that are shaping the industry. Assess the market potential across various sectors, such as healthcare, automotive, consumer electronics, defence, space etc, both within India and internationally. This can also include studies on end-user industries, published studies of demand forecasting in semiconductors, basic competitor analysis, and the support system (eg: government policies & incentives, benefits etc) impacting demand.

4. Identification of Technology & Industry Sectors

Conduct a detailed analysis of the various Technology Sectors and matching Industry domains feasible for integrating with this facility. They should align with Kerala's strength and growing market segments at global level.

5. Recommendations on Infrastructure Requirements for Fabrication

Assess Kerala's existing industrial ecosystem, including infrastructure, workforce capabilities, potential for growth and development in the future. Based on the findings from the market research, recommend the most appropriate type of semiconductor fabrication facility for the state, including the specific scale and technical specifications. Provide an in-depth analysis of the recommended facility type, possible collaborations and its alignment with market trends.

6. Resource Requirements

Identify the critical resources required for setting up the semiconductor fabrication facility, including technology, equipment, skilled labor, power, water, and necessary regulatory approvals. Describe the supply chain, from sourcing raw materials to the final delivery of manufactured semiconductor chips.

7. Marketing Strategy

Outline a go-to-market strategy for promoting the semiconductor fabrication facility both within India and internationally. This strategy should focus on positioning the facility in key markets, leveraging Kerala's competitive advantages, and attracting potential customers and partners.

8. Financial Projections & Investments Feasibility

Develop a detailed financial model, outlining the estimated initial investment, ongoing operational costs, revenue forecasts, and potential funding options. This section should also propose a timeline for investment and revenue generation, offering a clear picture of the financial viability of the project.

9. Regulatory & Compliance Requirements

   Provide an overview of the regulatory framework and approvals required to establish and operate the semiconductor fabrication facility. This includes both national and local regulatory requirements, as well as any industry-specific standards that need to be met, study on environmental impact.

10. Risk Analysis & Mitigation

    Conduct a PESTEL (Political, Economic, Social, Technological, Environmental, Legal) analysis to identify potential risks associated with the project. Based on the findings, propose effective strategies for mitigating these risks and ensuring the smooth execution of the project.

11. Conclusions & Recommendations

    Summarize the key findings from the study, offering actionable recommendations for the establishment of the semiconductor fabrication facility in Kerala. Conclude with insights on how the project can contribute to Kerala's industrial growth, technological advancement, and economic development.

Expectations:

Based on the detailed project report submitted, KSUM should be able to infer the following:

1. Trends in the growth of demand for semiconductor chips in the global and regional markets, along with key drivers and projections for future demand.

2. Market opportunities for semiconductor chip production in India especially in the major sectors- healthcare& lifesciences, automotive, consumer electronics, space & defence etc. and the demand assessments thereof.

3. Proposed semiconductor fab projects in India and the percentage of demand they are expected to cater upon completion.

4. How Kerala will be able to leverage the existing strengths, opportunities and advantages of setting up a fab in the state of Kerala including the growth of ancillary industries

5. The type of fab that would be most suitable to set up in Kerala considering gaps in the existing market and possible customer base inside and outside India. Deep dive into the exact specifications including type, scale, and specialization. Eg: a speciality technology ,medium to large volume ,200mm fabrication facility

6. Resource requirements for the fab - water, power, raw materials, labour, land, financial investments, supply chain & logistics, policy support from Government

7. Financial projections on investments required, operational costs and ROI estimation plans, related risk forecast and mitigation plans.

8. Regulatory requirements, Compliances and associated approvals, key stakeholders to be involved, any pre-requisites for the project.

9. Marketing strategy for commercial production facility and the feasibility of dedicating a percentage of the lab for R&D activities or academic research

The report should aim to provide KSUM with a clear understanding of the strategic, operational, and financial aspects involved in setting up the semiconductor fabrication facility in Kerala, guiding the decision-making process.

9. Pre-qualification Criteria:

Bidders must meet the following minimum eligibility criteria to be considered for further evaluation. Failure to meet any of these criteria will result in disqualification.

No.	Criteria	Mandatory Requirements
1	Legal Entity	The bidder must be a registered legal entity (Company, LLP, Partnership, or equivalent) with at least 5 years of operational experience in consultancy services or academic institutions or well experienced individuals.
2	Relevant Experience	The bidder must have successfully completed at least three (3) feasibility studies related to manufacturing facilities, preferably in semiconductors/electronics or high-tech industries.
3	Financial Capacity	The bidder must have an average annual turnover of at least INR 1 crore (or equivalent in other currencies) in the last 3 financial years (Audited financial statements must be submitted).

No.	Criteria	Mandatory Requirements
4	Technical Expertise	The consulting team must include industry experts with experience in semiconductor fabrication, electronics manufacturing, financial modeling, market research, and policy analysis.
5	Key Personnel	The proposal must identify and provide CVs of at least three key personnel, including a Project Lead with at least 10 years of relevant experience in semiconductor/electronics manufacturing consulting.
6	Past Client References	The bidder must provide at least three (3) client references from past feasibility studies, along with contact details for verification.
7	Regulatory Compliance	The bidder must comply with all applicable statutory, tax, and regulatory requirements in India (e.g., GST registration, PAN, company incorporation certificate).
8	Blacklisting Declaration	The bidder must submit a self-declaration stating that the firm has not been blacklisted by any government agency, PSU, or international organization.
9	Local/Global Presence	The bidder should have an office in India or a local partner/subsidiary that can support on-ground activities in Kerala (preferred but not mandatory).
10	Proposal Completeness	The bidder must submit a complete proposal with all required documents as per the Proposal Format & Submission Details section. Incomplete submissions will be disqualified.
11	Signed RFP Form	**Refer Annexure I**
12	**Company profile**	The bidder must submit a **Company profile** to briefing the activities, teams, projects etc.

Eligibility and Technical Evaluation Criteria

Bid is open to all Bidders who meet the eligibility criteria (Part 9) of this document. The Bidder must submit the documents substantiating eligibility criteria as mentioned in this RFP document. Bidders should also submit the technical proposal as per Annexure I.

No Bidder or its Associate shall submit more than one Bid for the RFP. A Bidder applying individually or as an Associate shall not be entitled to submit another Bid either individually or through Associates, as the case may be.

10. Selection Process

The evaluation will be conducted in 2 stages, followed by a presentation:
a) Technical Evaluation

Technical Evaluation Criteria

No.	Criteria	Max Points	Key Considerations / Sub-Criteria
1	Proposed Approach & Methodology	30	- Soundness & Creativity: Innovative and effective methods to conduct the study - Local Context Understanding: Demonstrated awareness of Kerala's ecosystem - Analytical Rigor: Use of relevant tools/methods Feasibility: Practicality of approach
2	Project Team Qualifications	25	- Relevant Expertise: Experience in semiconductor/electronics or large-scale feasibility projects - Technical & Domain Knowledge: Engineering, finance, market research, etc. - Team Structure & Availability: Roles/responsibilities and time commitment Past Performance & References: Track record on similar assignments

No.	Criteria	Max Points	Key Considerations / Sub-Criteria
3	Work Plan & Timeline Adherence	25	- Clarity of Milestones & Deliverables: Well-defined schedule and deadlines - Efficiency & Detail: Step-by-step execution plan - Contingency & Risk Management: Handling potential delays -Resource Allocation: Availability of relevant resources and personnel
4	Stakeholder Engagement Strategy	20	- Identification of Key Stakeholders: Government bodies, industry, academia, etc. Approach to Engagement: Workshops, interviews, surveys, etc. - Local Collaboration: Leveraging Kerala's networks/expertise

Minimum Pre-Qualification Process: Only the Consultants that satisfy the Minimum Pre-Qualification Criteria (PQC) after initial screening will be considered for the Technical Evaluation.

Technical Bid: The Technical Bids will be opened by the evaluation committee and marks will be given based on the criteria detailed in the technical bid section of this RFP. The Technical Marks obtained will be referred to as Technical Scores (St). Consultants will be ranked based on the Technical Score (St), and only Consultants who have scored 60 or more marks, will be qualified for financial evaluation.

Financial Bid: The financial bid will carry a weightage of 20%. It represents the amount in Indian Rupees sought by a bidder from the KSUM for the work of onboarding and managing Fund of Fund partners, as specified in the Financial Bid Proforma.

The financial score (Sf) will be calculated using the formula:

$$Sf = 100 \times Fm/F;$$

in which Sf is the Financial Score, Fm is the lowest Financial Proposal, and F is the Financial Proposal under consideration.

Combined Technical and Financial Score

For the final evaluation, the Firms will be ranked in accordance with their combined Technical (St) and Financial (Sf) scores with weightage. The Technical Score (St) will be given 80% weightage, and the Financial Score (Sf) will be given 20% weightage so that the combined Score will be:

$$S = St \times Tw + Sf \times Fw;$$

Where S is the Combined Score, and Tw and Fw are weights assigned to the Technical Score and Financial Score that will be 0.80:0.20

11. Selection of the Consultant

With the highest Combined Technical & financial Score (S) will be selected, based on the above QCBS System. If two or more Firms obtain the same highest Combined Technical & financial Score (S), the Firms with the maximum technical score will be selected.

Annexure I

Bidders are required to complete the following form and submit it as part of their proposal. All responses must be supported by appropriate documentation where applicable. The bid form must be signed by an authorized signatory of the bidding entity.

Sl. No.	Criteria	Bidder's Response (Yes/No)	Supporting Document Attached (Yes/No)	Remarks (If any)
1	Legal Entity – Registered Company/LLP/Partnership/Equivalent with at least 5 years of operations in consultancy or academic services (Certificate of incorporation/ deed/ MSME reg.)			
2	Relevant Experience – Minimum 3 feasibility studies in manufacturing, preferably in semiconductors/ electronics/high-tech (Workorders and work completion certificate)			
3	Financial Capacity – Average annual turnover of INR 1 crore in the last 3 financial years (Attach audited financials for last 3 years)			
4	Technical Expertise – Team includes experts in semiconductor fabrication, electronics manufacturing, financial modeling, market research and policy analysis			
5	Key Personnel – At least 3 key personnel identified, including Project Lead with 10+ years relevant experience (Attach CVs)			

Sl. No.	Criteria	Bidder's Response (Yes/No)	Supporting Document Attached (Yes/No)	Remarks (If any)
6	Past Client References – Minimum 3 client references with contact details			
7	Regulatory Compliance – Compliance with statutory, tax, and regulatory requirements in India (Attach GST, PAN, etc)			
8	Blacklisting Declaration – Self-declaration of no blacklisting (Attach declaration)			
9	Local/Global Presence – Office in India or local partner/subsidiary in Kerala (Preferred). Details of Such office location and address.			
10	Proposal Completeness – All required documents submitted as per RFP			
11	Signed RFP Form – Annexure I submitted			
12	Company Profile – Submitted with activities, team, and projects			

Annexure II

FINANCIAL BID PROPOSAL

For the Engagement of a Consultant for the Preparation of a Feasibility Report for Establishing a Semiconductor Fabrication Facility in Kerala

Reference: KSUM/RFP/EC/SFF/2024-25/01

Submitted To:
The Chief Executive Officer
Kerala Startup Mission
G3B, Thejaswini, Technopark Campus, Kariyavattom
Thiruvananthapuram - 695581

Submitted By:
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Financial Proposal Summary

Item No.	Description	Cost (INR)
1	Professional Fees (Consultant Team)	
2	Market Research & Data Collection	
3	Travel & Accommodation	
4	Infrastructure & Technology Support	
5	Report Preparation & Documentation	
6	Administrative & Miscellaneous Expenses	
Total (Excluding Taxes)		

Item No.	Description	Cost (INR)
GST @ [Rate]%		
Grand Total (Inclusive of Taxes)		

Authorized Signatory

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