

भारत सरकार/**GOVERNMENT OF INDIA**
अंतरिक्ष विभाग/**DEPARTMENT OF SPACE**
विक्रम साराभाई अंतरिक्ष केंद्र/**VIKRAM SARABHAI SPACE CENTRE**
तिरुवनंतपुरम/**THIRUVANANTHAPURAM – 695 022**

विज्ञा. सं. वीएसएससी/पी/विज्ञा./एमएमई/30/2025 दि. 16.05.2025
ADVT. NO. VSSC/P/ADVT/MME/30/2025 DT. 16.05.2025

विक्रम साराभाई अंतरिक्ष केंद्र (वीएसएससी), भारत सरकार प्रमोचन यान परियोजना के लिए परियोजना आयु चक्र प्रबंधन प्लैटफॉर्म के कार्यान्वयन, प्रचालन एवं अंतरण के लिए देश के अंदर इच्छुक प्रतिष्ठानों से अभिरुचि की अभिव्यक्ति आमंत्रित करता है।

Vikram Sarabhai Space Centre [VSSC], Govt. of India invites Expression of Interest from interested firms within the country for Implementation, Operation and Transfer of Project Life Cycle Management Platform for Launch Vehicle Project

विस्तृत तकनीकी विनिर्देशन तथा एवं शर्तें हमारे वेबसाइट www.isro.gov.in और www.vssc.gov.in पर उपलब्ध हैं।

Detailed Technical Specification and Terms & Conditions are available in our website www.isro.gov.in and www.vssc.gov.in .

इच्छुक प्रत्याशी निर्माता हमारे संदर्भ सं. **1900 2024 00 6293 01** का उल्लेख करते हुए **दिनांक 16/06/2025 को 4 बजे अपराह्न या उससे पहले** निम्नलिखित पते पर अपनी अभिरुचि की अभिव्यक्ति प्रस्तुत कर सकते हैं।

Interested prospective Manufacturers can furnish their Expression of Interest quoting our reference No. **1900 2024 00 6293 01 on or before 16/06/2025; Time : 4 pm** to the following address.

वरि. क्रय एवं भंडार अधिकारी
Sr. Purchase & Stores Officer
क्रय यूनिट, एमएमई क्रय,
Purchase Unit V, MME Purchase,
आरएफएफ क्षेत्र, इसरो पोस्ट- 695 022
RFF Area, ISRO Post – 695 022
तिरुवनंतपुरम/Thiruvananthapuram

हस्ताक्षरित/Sd/-

वरि. प्रधान, क्रय एवं भंडार / Sr. Head, Purchase & Stores

भारत सरकार / GOVERNMENT OF INDIA
अंतरिक्ष विभाग / DEPARTMENT OF SPACE
विक्रम साराभाई अंतरिक्ष केंद्र / VIKRAM SARABHAI SPACE CENTRE
तिरुवनंतपुरम / THIRUVANANTHAPURAM – 695 022

Ref No.: VSSC/NP/PLM/EOI-01/2025

Date: 16.05.2025

**INVITATION
FOR
EXPRESSION OF INTEREST**
*Implementation, Operation, and Transfer of
Project Life Cycle Management Platform
for
Launch Vehicle Project*

Attention to bidders:

1. The document shall be carefully read and all points shall be duly addressed. Respondents are advised to study all the instructions, scope, bidding process, eligibility criteria, review & selection process, terms & conditions, timelines, and all annexures with due importance. EOI shall be deemed to have been done after a careful study and examination of this document with full understanding of its implications.
2. Respondents should peruse this EOI only if they consider themselves eligible and if they are in possession of all documents / information required as per this document.
3. This document seeking EOI is not an offer and is issued with no commitment. Service Receiver reserves the right to modify or withdraw this document or change any part thereof at any stage, without assigning any reasons what so ever.
4. The requirements stated herein are minimum criteria and Service Receiver reserves the right to request for any additional information and also reserves the right to reject the EOI response of any Respondent, if in the opinion of Service Receiver, the data is incomplete or if the Respondent is found not qualified to satisfactorily perform the Contract.
5. The Respondents shall bear all costs and expenses, if any, associated with preparation and submission of EOI document including post EOI clarifications, discussions, technical and other presentations and Service Receiver will in no case be responsible or liable for such costs, regardless of the outcome of the process. The Respondents shall also not be entitled to claim any costs, charges and expenses incidental to or incurred by it through or in connection with the submission of EOI or its consideration by Service Receiver.

6. The response to this EOI invite should be full and complete in all respects. Failure to furnish all requisite information and / or documents sought through this document or submission of EOI not substantially responsive to this document to every respect will be at the risk of the Respondent and may result in rejection of the offer. Responses which are not in compliance with the terms & conditions shall be rejected, without assigning any reasons thereof. Also, if a Respondent is found ineligible after opening the EOI, the EOI submitted by the Respondent shall become invalid ipso facto, and any cost borne by the Respondent while responding to this document shall not be refunded. No further correspondence shall be entertained with respect to this.
7. The EOI document must be neatly typewritten. Handwritten submissions shall be avoided.
8. Canvassing in connection with the EOI is strictly prohibited and such canvassed EOI submitted by a Respondent Agency are liable to be rejected.
9. Respondent shall not submit multiple EOIs through other Affiliates.
10. Addendum / Corrigendum, if any, to this document, will be hosted at our website, www.isro.gov.in. Respondents shall regularly monitor.

11. Pre-EOI Meeting:

- a. There shall be a Pre-EOI discussion for this proposal, before submission of EOI, to have a better understanding on scope of work, activities involved, and terms & conditions. **Participation in Pre-EOI meeting is mandatory.** Respondents shall clarify doubts, if any, during this Pre-EOI meeting. The Pre-EOI meeting shall be either in Offline mode or Online mode or both. However, Respondent(s) are encouraged to participate in offline mode to have in-person discussions and better communication. The schedule of Pre-EOI meeting is as follows:

Date : 29.05.2025
Time : 10:30 Hrs.
Venue : Vikram Sarabhai Space Centre,
Thiruvananthapuram – 695 022
Kerala

- b. Interested Respondent(s) are hereby requested to participate in the Pre-EOI meeting. Respondent(s) intending to attend the Pre-EOI meeting shall provide the details of their representative(s) attending the meeting on or before 23.05.2025 to the Addressee through E-mail.

E-mail ID of the Addressee: spso_mme_pur@vssc.gov.in

c. The details must be submitted in the form of an Authorization Letter on the official letterhead of the Respondent's Company / Firm / Organization. The Authorization Letter should include the following information for each representative:

- i. Full Name (as per a valid ID card)
- ii. Designation
- iii. Name & Address of the Company / Firm / Organization
- iv. Contact Details – Mobile Number and E-mail Address
- v. Valid ID Card Details – Type of ID [Aadhaar / Passport / Driving License / Voter ID] and ID Number
- vi. Mode of Participation [Online or Offline]

Note:

- Only the following ID cards will be accepted as valid: Aadhaar, Passport, Driving License, or Voters ID.
 - The online meeting link will be sent to the E-mail addresses provided in the Authorization Letter.
 - For participants opting for offline attendance, the meeting will be held at Vikram Sarabhai Space Centre, Thiruvananthapuram. Participants shall carry a valid ID card with them for offline participation.
- d. After attending the Pre-EOI meeting, the Respondents shall submit a written consent conveying that they have understood the scope & quantum of work and all the terms and conditions as per the document.
- e. Respondent(s) are requested to note that any request for advancing / postponement of Pre-EOI meeting will not be entertained under any circumstance.

12. EOI Schedules:

Pre-EOI meeting : 29.05.2025; 10:30 Hrs

Last date for submitting EOI : 16.06.2025; 16:00 Hrs.

Opening date of EOI : 17.06.2025; 14:00 Hrs.

13. Complete response to the EOI must be received at Service Receiver's end to the address given below, not later than date specified above. EOI in the prescribed format as per the requirements, terms & conditions mentioned in Annexure 1 shall be submitted in a sealed cover superscribed with our Ref. No. and due date for EOI. All the pages of the EOI submitted must be numbered and signed by the authorized signatory.
14. The EOI must be submitted on or before the due date. Service Receiver will not be responsible for non-receipt of offer due to any postal delays / loss of response documents in transit and delay due to customs / courier, etc. and it shall be the sole responsibility of the Respondents to ensure delivery of the offers within the time fixed. Offer received after stipulated time and date will be rejected outright.

15. **Submission of EOI by email will not be accepted.**
16. Respondent(s) are requested to note that any request for extension of last date for submission of EOI will not be entertained under any circumstance.
17. Details of addressee to whom EOI shall be sent:
 - Senior Purchase & Stores Officer
 - Purchase Unit V, MME Purchase,
 - RFF Area, Thumba P.O.,
 - Thiruvananthapuram – 695022
 - Kerala
 - Contact E-mail: spso_mme_pur@vssc.gov.in
 - Contact Phone: 0471 256 2831
18. Validity of this EOI is **6 [Six] months**

Annexure 1



**DOCUMENT INVITING
EXPRESSION OF INTEREST
FOR
IMPLEMENTATION, OPERATION, AND TRANSFER OF
PROJECT LIFE CYCLE MANAGEMENT PLATFORM
FOR
LAUNCH VEHICLE PROJECT**

**भारत सरकार / GOVERNMENT OF INDIA
अंतरिक्ष विभाग / DEPARTMENT OF SPACE
विक्रम साराभाई अंतरिक्ष केंद्र / VIKRAM SARABHAI SPACE CENTRE
तिरुवनंतपुरम / THIRUVANANTHAPURAM – 695 022**

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Definitions

“Expression of Interest”	: The document / response submitted by the Respondent based on this document.
“Service Receiver”	: Launch Vehicle Project at VSSC, Thiruvananthapuram and identified participating ISRO Centres represented by Head, Purchase & Stores acting on behalf of the President of India.
“Respondent”	: The Vendor participating in the Expression of Interest (EOI) process.
“Bidder”	: The Respondent screened-in during evaluation process of Expression of Interest (EOI) and participating in Request for Proposal (RFP) process.
“Service Provider”	: The successful Bidder chosen by the Service Receiver, responsible & for executing the works under the Contract.
“Request for Proposal”	: Document issued to shortlisted Respondents, detailing out the entire scope of work, responsibilities of Service Provider and Service Receiver, resource requirements, list of deliverables and activities to be carried out, timelines, costing formats, commercial terms and conditions including payment terms.
“Contract”	: The formal agreement signed by Service Receiver and Service Provider for execution of work
“Project”	: Task taken up by the Service Receiver for which PLM solution is to be implemented
“Project Life Cycle”	: Period of Project starting from conceptualization phase till completion of Development phase. Includes concept / configuration generation, preliminary design, concept reviews, design finalisation & reviews, drawing generation / review / finalisation / release, material procurement, process reviews, fabrication, quality control & assurance / guidelines, qualification / testing / flight acceptance, flight integration, flight demonstrations during development phase, flight data analysis, recovery / refurbishment / re-use procedures / protocols.

Expected Project Life Cycle for the current proposal is up to March 2033.

Acronyms

ASME	American Society of Mechanical Engineers
APQP	Advanced Product Quality Planning
BOM	Bill of Materials
CAD	Computer Aided Design
CAE	Computer Aided Engineering
CAM	Computer Aided Manufacturing
eBOM	Engineering BOM
ECAD	Electrical / Electronic CAD
ECN	Engineering Change Notices
EOI	Expression of Interest
ERP	Enterprise Resource Planning
FMEA	Failure Modes and Effect Analysis
FMECA	Failure Modes, Effects, and Criticality Analysis
FY	Financial Year
GST	Goods and Services Tax
GUI	Graphical User Interface
HTML	Hyper Text Markup Language
IISU	ISRO Inertial Systems Unit
IPRC	ISRO Propulsion Complex
ISRO	Indian Space Research Organization
ISTRAC	ISRO Telemetry Tracking and Command Network
ITR	Income Tax Return
LPSC	Liquid Propulsion Systems Centre
mBOM	Manufacturing BOM
MCAD	Mechanical CAD
MES	Manufacturing Execution Systems
MOQ	Minimum Order Quantity
MRP	Material Requirements Planning
MS-SQL	Microsoft Structures Query language
NDA	Non-Disclosure Agreement
NGPE	Non-Government Private Enterprise
OEM	Original Equipment Manufacturer
PAN	Permanent Account Number
PDF	Portable Document Format
PDM	Product Data Management
PLM	Project / Product Life Cycle Management
PM	Project Management
PSU	Public Sector Undertaking
QA	Quality Assurance
QC	Quality Control
R&D	Research and Development
RFP	Request for Proposal
sBOM	Service BOM
SDA	System Development Agency
SDSC	Satish Dhawan Space Centre
TEC	Technical Evaluation Committee
VSSC	Vikram Sarabhai Space Centre
WBS	Work Breakdown Structure

1. INTRODUCTION

Indian Space Research Organization [Herein after called ISRO] is the lead space agency in India, involved in design and development of Launch Vehicles & Satellites and their launch services.

The management plan for design, development, realization, and flight demonstration of Launch Vehicle and satellite Projects uses established mechanism evolved over four decades and institute suitable structure consistent with the technical complexity, inter-centre / multiple organisational / industry interfaces, budget, and time schedule. Vikram Sarabhai Space Centre [Herein after called VSSC], Thiruvananthapuram, is the lead Centre for the realization of launch vehicle and the mission execution. VSSC will execute the Project with an identified Project team and with specific responsibilities within VSSC and for other Centres of ISRO, viz., Liquid Propulsion Systems Centre (LPSC), Satish Dhawan Space Centre (SDSC-SHAR), ISRO Propulsion Complex (IPRC), Mahendragiri, ISRO Inertial Systems Unit (IISU) and ISRO Telemetry Tracking and Command Network (ISTRAC).

Developing the subsystems from the definition phase through qualification and flight units realisation undergo various iterations requiring continuous interaction among different agencies. Overall vehicle definition, data control and interface control are to be handled in real time. Concurrent engineering concepts will be applied right from the start of the project to monitor, control, and accelerate the development programme.

Concurrent Engineering contains centralized database for design collaboration, configuration control management and product data management. It enables accelerating collaborative processes for engineering and product development by allowing all System Development Agencies [SDA] to share information instantly and seamlessly. Further it enables to manage huge projects for cost effectiveness and faster realization by real-time data / information updates, monitoring manufacturing and testing activities and feedbacks.

Considering the benefits of concurrent engineering, it is planned to execute new Projects through software based Project Life Cycle Management [Herein after called PLM] platform, with concurrent engineering as an integral part of the process, throughout the Project Life Cycle.

2. SCOPE OF THE DOCUMENT

Scope of this Document is to invite an Expression of Interest [Herein after called EOI] to identify suitable Indian companies [Herein after called bidder or collectively as bidders] for identification, implementation, operation, and transfer of suitable software based PLM platform across ISRO Centres and participating agencies, in a time bound manner and as per the projected requirements. Operation of PLM is envisaged through establishment of

interconnected PLM cells at participating agencies, the definition of which is spelt out in the subsequent section.

The EOI should contain all the required details as mentioned in the document.

3. DEFINITION OF PLM CELL

PLM cell is defined as a secure workspace to be established within the Service Receivers' premises for implementation, deployment, operation, and administration of PLM platform. PLM cells shall be equipped with:

- 3.1. Adequate hardware and software capable of handling the PLM platform and identified Multi-CAD environment. Hardware and software requirements, including quantity, will be detailed out in the RFP.
- 3.2. Secured connectivity between cells, following all Service Receivers' protocols / firewall policies, which will be defined in the RFP document.
- 3.3. Skilled, certified, and trained manpower capable of customizing, operating and maintaining the PLM platform and the identified CAD software. Required manpower shall be deployed by the Service Provider at each cell, based on requirements projected by Service Receiver. Skill, experience, qualification, and number of manpower resources will be defined in the RFP document.

4. OBJECTIVES

The objective is to invite responses / interest from qualified respondents for:

- 4.1. Establishment of dedicated interconnected PLM cells at Service Receivers' premises at multiple locations, which are geographically separated.
- 4.2. Development, implementation, customization and deployment of software based PLM platform at Service Receivers' premises at multiple locations, which are geographically separated.
- 4.3. Providing secured connectivity and user interface between PLM Cells and selected participating Indian Industries, which are geographically separated and spread across India.
- 4.4. Providing comprehensive training on deployed PLM platform to designated personnel of Service Receiver, enabling them to effectively understand, operate, and support the PLM system in alignment with Project requirements and lifecycle process.
- 4.5. Maintenance of PLM platform and provide continuous helpdesk support to the Service Receiver throughout the Project Life Cycle, ensuring system availability, issue resolution, and user assistance.
- 4.6. Transfer of PLM platform to Service Receiver after Project Life Cycle.

5. BASIC REQUIREMENTS

The software based PLM solution is to be deployed across Service Receivers' premises at multiple locations, which are geographically separated and selected participating Indian Industries, in a phased manner. Service Receivers' premises include VSSC [Thumba, Thiruvananthapuram, Kerala], LPSC [Valiyamala, Thiruvananthapuram, Kerala], IPRC [Mahendragiri, Tamilnadu], SDSC [Sriharikota, Andhra Pradesh], IISU [Vattiyoorkavu, Thiruvananthapuram, Kerala].

The software-based PLM solution is envisioned as a comprehensive digital framework to manage the entire lifecycle of project data – from initial creation through development and validation up to the end of the development phase / transfer to Service Receiver. It shall enable structured data creation, capture, update, backup, archival, access, retrieval, and control, ensuring full configuration management and workflow orchestration across Workcentres. The system will support scheduling and real-time monitoring of tasks mapped to the Work Breakdown Structure, along with tracking of milestones and resource utilization. It will integrate quality plans, test reports, non-conformance records, and post test / flight data, ensuring traceability and feedback into the design loop. A digital twin framework will allow dynamic mapping of data to virtual models, enabling event-based alerts and predictive insights. Additionally, the solution will offer seamless integration with enterprise tools such as ERP, MES, CAD / CAE systems, and support intelligent search, secure access control, and compliance-ready archival strategies, forming the backbone of an efficient, collaborative, and traceable Project environment.

6. SCOPE OF WORK

6.1. SCOPE OF SERVICE RECEIVER

All the activities shall be carried out at PLM cells within the Service Receiver's campus. Accordingly, Service Receiver shall be responsible for the following activities towards establishment of PLM platform:

- 6.1.1. Defining PLM requirements and functionalities required.
- 6.1.2. Arranging Pre-EOI meeting and provide all clarifications related to the EOI.
- 6.1.3. Review of EOI, shortlist the Respondents, and identify Bidders for issue of RFP.
- 6.1.4. Issue of RFP document to qualified Respondents [Bidders].
- 6.1.5. Defining number of PLM cells to be established and resources [Hardware, Software, and Manpower] to be deployed in the PLM Cell [As part of RFP document].
- 6.1.6. Arranging Pre-bid meeting for RFP.

- 6.1.7. Selection of Service Provider based on evaluation of RFP.
- 6.1.8. Provide suitable working space for establishment of PLM cells.
- 6.1.9. Electrical Power for operation of hardware items within the PLM cells.
- 6.1.10. Minimum adequate network connectivity for transfer of data to Service Receiver. The data management / network policy will be defined by Service Receiver in the RFP document.
- 6.1.11. Provide Entry passes for the deployed Workforce, as part of PLM cells.
- 6.1.12. Provide all required inputs for carrying out the activities listed out in Section 5.2, review and provide feedback / corrections / updates etc.
- 6.1.13. Arrange for periodic reviews on status of functioning of PLM cell and utilization of resources deployed.

6.2. SCOPE OF SERVICE PROVIDER

The selected Service Provider shall:

- 6.2.1. Understand and identify the requirements based on discussions with the Service Receiver and shall select a suitable customizable PLM platform for implementation across desired nodal points.
- 6.2.2. Bring out a detailed project plan, execution strategy and methodology with timelines for implementation and operationalization of PLM platform, based on discussions and mutual agreement with Service Receiver.
- 6.2.3. Establish PLM Cells at geographically separated locations, identified by the Service Receiver.
- 6.2.4. Finalise the licensing modalities of PLM modules, as per Project requirements. Service Provider should clearly bring out the licensing policy based on user requirements which will be detailed out in the RFP document.
- 6.2.5. Customize and implement suitable PLM solution, as per functionalities listed out in Annexure 2.
- 6.2.6. Generate suitable interfaces for secure data sharing across participating Industries / Workcentres, through secured external connectivity.
- 6.2.7. Provide centralized administration between PLM cells.
- 6.2.8. Provide, install, and maintain suitable CAD and CAE software for supporting the design cycle, as per Service Receiver's requirements. CAD and CAE software requirements will be listed out in the RFP document.

- 6.2.9. Provide suitable resources for establishment, operation and maintenance of PLM cells throughout the Project Life Cycle. The resources shall be deployed at identified PLM cells across Service Receiver's campus, which are geographically separated. Workspace for PLM cells will be identified by the Service Receiver. The resources shall include:
- a. Suitable Computer Systems [Servers (Main / Satellite / Vaults), Workstations, Desktop Computers / Client connections (PC) etc.] including peripheral devices for establishing PLM cells. Hardware and Software requirements will be out in the RFP document.
 - b. Dedicated and secured connectivity across PLM cells, identified client machines within Service Receivers' campus, and industry interfaces with high level data encryption and security protocols, as demanded by Service Receiver.
 - c. Skilled, experienced, and trained manpower for operation and maintenance of PLM cells and associated software modules. Deployed manpower shall work at different locations where PLM cells are established and shall provide on-site and off-shore support to participating agencies / Workcentres, located across the country [India]. The deployment shall include:
 - i. Manpower with proficiency in establishing, handling, operating, maintaining, and providing training for the deployed PLM platform.
 - ii. Qualified, certified, trained, and experienced manpower capable of handling the identified CAD and CAE platforms.
 - iii. Qualified, certified, trained, and experienced manpower capable of generating 2D drawings and dimensioning as per ASME Y 14.5 Standard.
 - iv. Personnel having experience and proficiency in using Office platforms like Microsoft Office and Open Office for documentation and data handling activities.
 - v. Helpdesk personnel within the PLM cell capable of troubleshooting and rectifying issues on real-time / near real-time basis.
 - vi. Minimum essential manpower per PLM cell will be brought out in the RFP document.
 - d. Providing training on PLM platform for identified personnel of Service Receiver.

- e. Provide dedicated helpdesk support for the PLM platform to address user queries, resolve technical issues , and ensure uninterrupted system usage throughout the Project lifecycle.
- f. Timely updates for all deployed software modules, including licensing.
- g. Timely patching of vulnerabilities of PLM software and other deployed software items.
- h. Maintenance of hardware and associated peripherals [Servers, Workstations, PCs, Printers, Networking systems, connectivity etc.].

6.2.10. Migrate the existing legacy data to PLM platform.

7. BIDDING PROCESS

- 7.1. This is a two-stage Bidding Process. First stage consists of inviting responses / interest through an EOI. Technically qualified Respondents would be identified from the EOI responses.
- 7.2. In the second stage RFP would be issued to successful Respondents [Bidders]. RFP would be a Two Part Limited Tender document detailing the entire scope of work, responsibilities of Service Provider and Service Receiver, resource requirements, list of deliverables and activities to be carried out, timelines, costing formats, commercial terms and conditions including payment terms. A Pre-bid meeting will be organized with all Bidders to facilitate proper understanding of the requirements, as mentioned in RFP. The Bidders shall submit the bid in 2 parts:
 - a. Techno-commercial (non-priced) bid
 - b. Price bid.

Upon evaluation of Techno-commercial bid and post-bid techno-commercial meeting(s) / clarifications, if required, Service Receiver will shortlist the successful Bidders and place them on equal footing. Service Receiver will open the price bids of the shortlisted Bidders, hold post-bid price negotiation meeting, if required, and award the Contract based on lowest offer.

8. SUBMISSION OF THE EOIs

- 8.1. Respondents shall submit EOI as per the format given in Annexure 3, along with the Respondent's Profile [Annexure 4], and Compliance Matrix [Given in Annexure 5], through the Head of the Company to Senior Purchase & Stores Officer, Purchase Unit V, MME Purchase, RFF Area, Thumba P.O., Thiruvananthapuram – 695022, Kerala.

- 8.2. The last date for receiving the EOI is 16.06.2025; 16:00 Hrs. Proposal submitted beyond the last date will not be accepted. Submission of EOI by email will not be accepted.

9. REVIEW OF THE EOIs

The EOIs submitted by the Respondents will be subjected to detailed reviews by a Technical Evaluation Committee [Herein after called TEC] constituted by Service Receiver. In order to identify the suitability of the EOIs and the Respondents, the proposals may be further scrutinized with the involvement of Respondent. Respondent may be required to interact with Service Receiver, as and when required, and answer all the clarifications sought from the Service Receiver towards shortlisting the eligible EOIs.

10. ELIGIBILITY CRITERIA FOR EVALUATION OF EOI

- 10.1. The Respondent shall be a registered Indian company, owned by Resident Indian citizens and with a majority of the Board of Directors being Resident Indian citizens. The copies of certificate of Incorporation detailing the company details and GST registration certificate shall be provided as proof for the same. However, Co-Contractors, if any, can be an Indian or a Foreign company.
- 10.2. The Respondent shall have been operational for a period of not less than 5 years (up to the date of EOI submission).
- 10.3. Respondent shall submit the EOI with all required details duly filled. Incomplete / insufficient data shall be considered as a disqualification. In addition, if the technical details provided were found incorrect at a later stage, the Respondent will get disqualified.
- 10.4. The EOI shall contain complete information on the Respondent's profile, company details, human resource, infrastructure, assets, financial standing, line of business and credentials.
- 10.5. Respondents desirous of submitting EOI proposals shall be accredited with ISO / equivalent QMS standards for the last 3 years for the company's existing operations / business process.
- 10.6. Prior experience of last 2 years in successful implementation, customization, and sustained operation of a Project Life Cycle Management (PLM) platform in Government organizations, Scientific and Technical establishments, Public Sector Undertakings (PSUs), Non-Governmental Professional Enterprises (NGPEs), or similar entities is mandatory. Documentary evidence in support of the same shall be mandatorily enclosed with the Expression of Interest. The credentials must also include detailed case studies demonstrating successful implementation and

operationalization of PLM platforms in organizations of similar scale and complexity. It is mandatory that the experience includes implementation and operation of PLM systems in organizations or establishments working in PLM mode across multiple geographic locations. The scope of experience should span various domains such as Product Data Management, Project Management, Manufacturing Execution Systems (MES), Enterprise Resource Planning (ERP), and related areas.

- 10.7. For Respondents who have executed ISRO contracts / other Government contracts previously, necessary documentary evidences shall be attached with the EOI. In the event of response from companies already executing ISRO contracts, past performance will be considered.
- 10.8. Respondent shall possess human resources with adequate knowledge, skill and experience in Project Life-cycle Management, its implementation, and operations.
- 10.9. Respondents shall have in-house developed PLM software and associated R&D facilities or shall be an OEM authorized dealer of PLM Software. Details, documentary evidences on in-house developed software / OEM authorization, as applicable, shall be provided in the EOI. Given the extensive customization involved in implementation, the OEM shall be responsible for all technical and functional commitments made as part of the proposal. Continuous involvement and support of the OEM shall be ensured throughout the entire Project lifecycle to meet the customization, integration, and post-deployment requirements.
- 10.10. If any mandatory resources [As per Clause 6.2.9] are not currently available with the Respondent, mode of procurement shall be indicated in the EOI, which will be duly considered. However, this shall not affect the development schedule which will be finalised during RFP phase.
- 10.11. The Respondent should be financially stable to undertake the proposed project and shall provide supporting documents. Respondent should have a minimum average turnover of Rs 30 Crore for the past three Financial Years [FY 2022-23, FY 2023-24, and FY 2024-25]. Average turnover of the Respondent for the last 3 financial years, ending 31st March of corresponding year shall be furnished.
- 10.12. The Respondent must not have incurred a loss in any of the last three consecutive financial years [FY 2022-23, FY 2023-24, and FY 2024-25], ending on 31st March of corresponding year. Audited and certified copies from Chartered Accountant for the Profit and Loss Account, Balance Sheet, Annual Financial Turnover, and Income Tax Returns to be furnished.
- 10.13. The Respondent shall not have been blacklisted by any Central / State Government Department / Public Sector Undertakings / Central Government funded Organizations

/ State Government funded Organizations / World Bank, or other World Bank organizations nor should it be under any illegal expression by Government of India.

11. SELECTION PROCESS

- 11.1. Service Receiver shall carry out shortlisting of the eligible EOIs from the Respondents based on technical merits, technical expertise of the Respondents, feasibility perspective, previous experience, financial stability, and verification of testimonials submitted.
- 11.2. Information pertaining to the above should invariably be submitted by the Respondents for evaluation.
- 11.3. Respondents shortlisted based on EOI may have to provide a comprehensive presentation to Service Receiver at the desired location, covering their business profile, compliance to terms and conditions, and proposed execution strategy. Communication in this regard will be sent by Service Receiver. During the meeting, Respondents shall demonstrate the product capability based on inputs provided by Service Receiver. All the functionalities as listed out in Annexure 2 shall be covered during demonstration phase. Required facilities for demonstration of the product will be provided by Service Receiver, based on requirements projected by Bidders. Technical competence of shortlisted Respondents will be evaluated by TEC of Service Receiver which will identify bidders based on the inputs submitted by the Respondents and the presentation provided to Service Receiver.
- 11.4. Service Receiver will take up references and reserves the right to pay due heed to the Respondent's performance elsewhere and any past experience.
- 11.5. Screening of offers shall be carried out as per weightage criteria desired by Service Receiver and based on verification of testimonials submitted.
- 11.6. Successful Respondents [Bidders] from the EOI shall be allowed to participate in further tendering procedures through Request For Proposal [RFP].
- 11.7. Upon the completion of EOI evaluation, RFP [Two Part bid] will be issued to the successful Respondents [Bidders] by Service Receiver, exhaustively detailing out the complete requirements. After completing the RFP evaluation, Service Receiver will enter into a Contract with the successful technically qualified Bidder [Service Provider].
- 11.8. Service Receiver reserves the right to fine tune or curtail the scope of work during any stage of the bidding process.

- 11.9. The decision of Service Receiver shall be final and binding, based on inputs furnished by Respondents backed up with documentary evidence, assessment based on site visits [if required] and discussions with Service Receiver.

12. GENERAL TERMS AND CONDITIONS

- 12.1. Outsourcing / Sub-contracting of the activity, undertaken through this Contract, to a third party can be allowed only with the prior approval of Service Receiver. In such cases, the prime Service Provider shall select Co-Contractor(s) / Sub contractor(s) with necessary technical capability / capabilities for executing the activities under the sub-contracted scope. However, the prime Service Provider shall be responsible and directly accountable to the Service Receiver for complete fulfillment of the Contract, including third party contracts.
- 12.2. The system implemented and operationalized by the Service Provider in collaboration with the Service Receiver as response to this process [EOI / RFP], shall not be allowed to be used for marketing / business purposes without prior permission from Service Receiver. Service Receiver reserves the right to accord or not to accord permission on such cases, considering the overall national interests.
- 12.3. The successful Respondents [Bidders] shall be required to enter into a Non-Disclosure Agreement [NDA] with Service Receiver, for maintaining confidentiality of data provided in RFP document. The NDA shall be executed on a ₹ 100 stamp paper and should be as per format given in Annexure 6.
- 12.4. Service Receiver reserves the right to induct the system developed through this EOI, to all its programmes depending upon the requirements.
- 12.5. Once the contract is entered into, Service Provider shall implement, customize, make operational, and maintain the PLM cells throughout the Project Life Cycle, which is expected to be up to March 2033, with a provision to extend based on mutual agreement. This shall be legally agreed upon by the Service Provider. In case of premature contract termination from Service Provider side, the Service Provider shall reach an agreement on terms and conditions of termination and losses incurred to Service Receiver shall be settled thereof.
- 12.6. After signing the Contract, the Service Provider has to submit detailed Project Plan, which includes overall completion period and key milestones vis-à-vis schedules, within 2 months for review / appraisal by Service Receiver. In any case, the implementation shall be completed within 3 months and customization shall be completed within 6 months from placement of order.

13. LANGUAGE

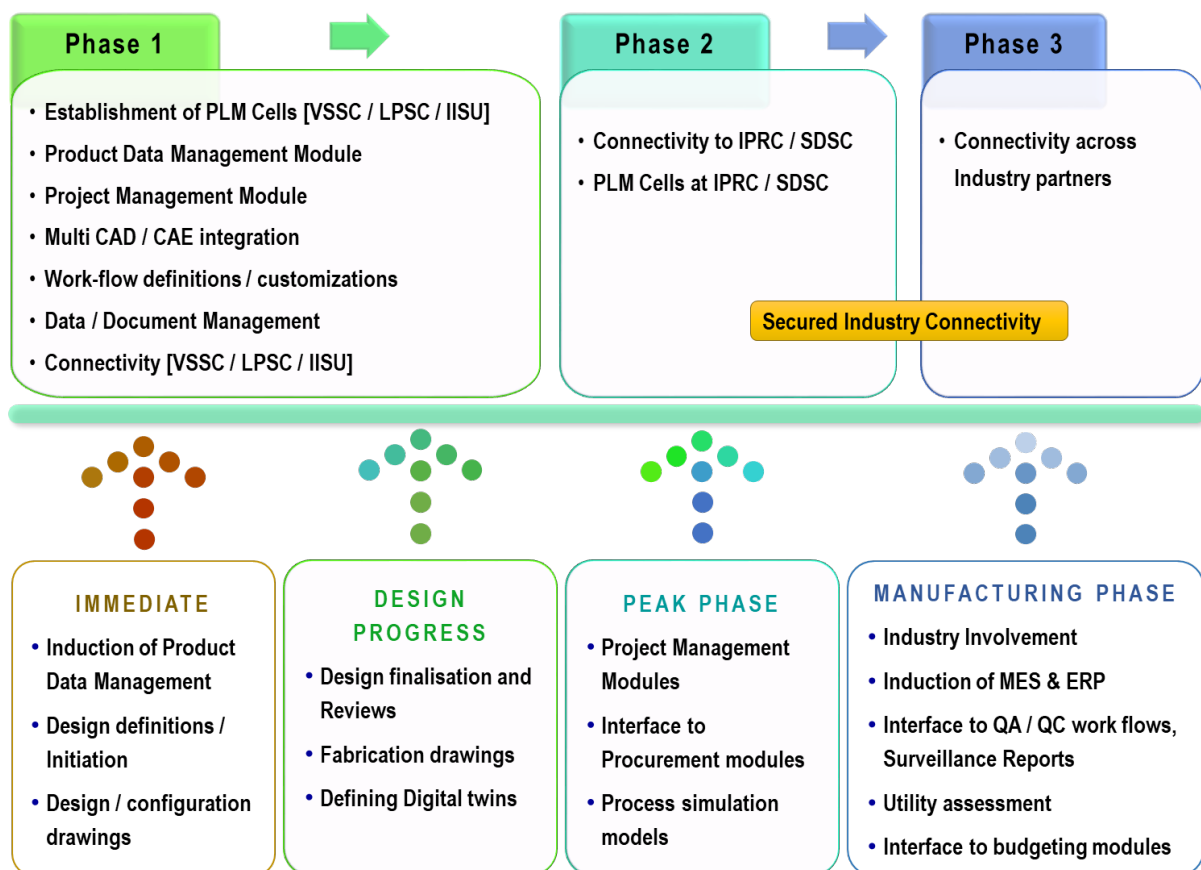
The Proposal submitted by the Respondents shall be in English language only. If any supporting documents submitted are in any language other than English, translation of the same in English language is to be duly attested by the corresponding Respondent. For purposes of interpretation of the documents, the English translation shall govern. All correspondence and documents relating to the Proposal exchanged by the Respondent and Service Receiver shall also be written in the English language.

14. SEQUENCE OF EVENTS AND TENTATIVE SCHEDULE

#	Activity	Tentative Schedule
1	Release of Invite Document for EOI	16.05.2025
2	Pre-EOI meeting	29.05.2025; 10:30 Hrs.
3	Submission of EOI	16.06.2025; 16:00 Hrs
4	Opening date of EOI	17.06.2025; 14:00 Hrs. [T0]
5	Review of EOI offers	T0 + 10 days
6	Presentations by Shortlisted Respondents	T0 + 20 days
7	Finalisation of Bidders	T0 + 30 days

15. IMPLEMENTATION AND HARDWARE DEPLOYMENT PLAN

As detailed out in Section 6.2, dedicated PLM cells with all required resources have to be established at Service Receivers' premises with secured connectivity between them. Browser based secured data exchange between participating Workcentres / Industries is also planned. A programme of this magnitude is best implemented by executing in clearly defined phases. In each phase, a select set of objectives will be attempted. Based on successful demonstration of those objectives, the next phase will be taken up. Accordingly, the implementation is planned in three phases as detailed out in the figure below:



The first phase will focus on establishment of PLM cells at three of the Service Receiver's premises viz. VSSC, LPSC, and IISU, which are located at Thiruvananthapuram. Required modules will be implemented through the identified software solution. In the second phase, PLM cells will be established across other identified premises of Service Receiver viz. IPRC and SDSC which are located at Mahendragiri, Tamilnadu and Sriharikota, Andhra Pradesh. The third phase envisages connectivity with Industries / Workcentres. Hardware requirements and deployment plan shall be defined as part of RFP.

Annexure 2

FUNCTIONALITIES REQUIRED FOR PLM SOFTWARE

The PLM platform should be implemented on Client-Server Architecture mode, enabling access through client software, as well as web browser. It should enable the Service Receiver and all associated stakeholders to access data over secured network. Graphical User Interface [GUI] should be user-friendly and should be accessible without any prior installation. The solution should be implemented using a PLM framework. Service Receiver's requirements and functionalities mandated are as given below:

1. Core Functionalities

The platform should allow teams to synchronize design data, share design models in workflow-driven processes and to collaborate within internal and external networks.

- PLM platform shall be delivered in a configurable environment that enables the solution to be rapidly deployed and put to production mode, with ability to suitably customize according to Service Receiver needs.
- Platform shall have an open architecture that supports integration with third party applications. Platform should have the capability to communicate and seamlessly integrate with enterprise tools.
- Platform should enable collaboration among multiple stakeholders in a common design process and should facilitate working in a collaborative and concurrent environment.
- Platform should have the capability to render integrated visualization of data in lightweight format, without using the authoring software.

2. Management of Product Directory and Bill of Materials

- Auto generation of Product Tree / Product Directory / Bill of Materials from the 3D CAD model.
- Should have the capability to interface with the latest CAD Software utilities [3D and 2D].
- Comprehensive hierarchical product tree.
- Ability to define product tree at component, sub-assembly, assembly, and Product level.
- Capture interface definitions and dependencies between components, sub-assembly, assembly, and Product.

- Update Product Tree / Product Directory / Bill of Materials based on revision / approval cycles.
- Archive previous revision and its interdependencies.
- Auto generation of unique part number
 - Provide Part number generation logic definition.
 - Provide Part and document attributes.
 - Incorporating part number and serial number.
 - Implement project specific numbering.
- Generation of part directory and attribute tables.
- Linking attribute table to a document.
 - Linkages to related documents, minutes, presentations, schedules, and hardware
- Capability for data validation to ensure consistency and correctness of data and to avoid duplications.
- Capability to generate Engineering BOM [EBOM], Manufacturing BOM [MBOM] and Service BOM [SBOM]
 - Providing hardware number to SBOM items as per hardware numbering scheme.
- BOM viewing and tracking
 - Ability to graphically view the product alongside BOM and link graphical structures to BOM.
 - Ability to markup, navigate, measure in the graphical view / window and save the view configuration.
 - Utilities like BOM editing, BOM compare, BOM reporting, and BOM rollup.
 - Ability to export the BOM structure to excel and edit the contents as per Product rules.
 - Ability to filter and visualize based on filtered attributes.
- Ability to review audit history associated with the part, including actions on a part during lifecycle.

3. Management of Multi-CAD data

Platform should have the ability to manage CAD data [Both Mechanical and Electrical] from multiple domains in a single database.

- Ability to manage CAD data using Master Model concept.
- Capability to handle 3D CAD data including components, assemblies, drawings, PCB data, Gerber files etc.
- Ability to manage PCB and schematic data along with their lightweight visualization formats.
- MCAD – ECAD collaboration
- Capability to manage circuit schematics, drawings, PDF formats etc.
- Establish relation between CAD files and associated attributes like documents.
- Ability to seamlessly integrate with the latest version of:
 - NX
 - SolidWorks [Mechanical and Electrical]
 - CATIA
 - Inventor
 - AutoCAD [Mechanical and Electrical]
 - Solid Edge
 - Zuken
 - Capital, Cadence Allegro and OrCAD or similar software
 - Analysis, simulation, FE modeling & meshing packages: ANSYS, ABAQUS, FLUENT, NISA, NASTRAN, CFD++, UG FORMATS, HYPERMESH, MATLAB, etc.
 - Neutral formats: IGES, STEP, PARASOLID, STL, JT, ACIS, QIF, X3D etc.
 - Application protocols: AP 2-series
- Capability to interface with Multi-Disciplinary Optimisation Tools like modeFrontier, ANSYS optiSlang, Isight, HEEDS, HyperStudy etc.
- The integration should enable:
 - Access of PLM within authoring software and vice versa.
 - Full data management capabilities with PLM environment.

- Access via the user interface of authoring software for functionalities such as vaulting, data search, check-in / check-out, revision management, and attribute synchronization.
- Translation capabilities to generate lightweight visualization files.
- Checkout process with local caching of files.
- Provision for automated / manual check-in upon file revision / update.
- Capability for tolerance and interference analysis and checks.

4. Document Management

- Ability to handle MS Office, Open Office, and PDF formats.
- Integration and control of Office applications including MS Outlook within the PLM framework.
- Ability to manage application data [Check-in / check-out, version & revision control, access control etc.].
- Integration with Service Receiver's specific mail server including capability to send real-time and custom notifications.
- Ability to create and manage standard and custom document templates.
- Capability for Document stamping.
- Access of documents through standard interface.
- Document import / export options.
- Facilitate document editing using standard desktop environments.

5. Component and document standards

- Facilitate reuse of existing parts, documents, products, processes, attributes, and the knowledge captured in their designs by selective classification / custom standardization within PLM framework.
- Ability to create custom libraries and classification hierarchies. Facilitate cataloguing of standard parts, documents, products, and processes.
- Ability to filter catalogued data based on specific attributes.
- Data validation capabilities to ensure non duplication.

6. Visualization

- Viewing of data in the native mode without the native application [Lightweight format].

- Ability to markup or redline 2D data like image files, drawings, and documents.
- Ability to markup or redline 3D visualization data for electrical and mechanical components.
- Ability to send custom messages to originators on markup detailing.
- Ability to perform dimensional measurement in 3D viewer.
- Ability to manage product structure like resequencing BOM, drag and drop components, change location etc. in viewer.
- Ability to review, and analyze the clearances between components, sub-assemblies in an assembly.
- Ability to perform sectioning along planes, axis, and curves in viewer.
- Ability to perform comparison between different versions of 3D data, without using native CAD.
- Ability to manipulate 3D view and its orientation along axis and planes.
- Ability to generate 3D exploded views.
- Capability to perform 3D animation and playback.
- Ability to view and manage STEP files.

7. Management and control of work flow within and across work groups

- Enable ability to define workflows and allocate resources for stages in the workflow.
- Configurable workflows based on custom requirements.
- Preconfigured workflows for immediate implementation.
- Customization of workflows for different tasks and for review & release of models, drawings, documents associated to the project
 - i. Automated work flow scheme.
 - ii. Automated approval process to suit the hierarchy.
- Setting up sample processes / work flows as defined by Service Receiver.
- GUI based workflow creation with drag and drop features.
- Standard / custom notifications [Pop-ups and E-mails] on workflow assignments.

8. Search and Retrieval

- Ability to quickly find, view, and print information.

- User should be able to define queries without knowledge of database languages, using GUI.
- Enable homogenous and heterogeneous data type searches.
- Offer search environment with filtering options.
- Allow users to save and recall searches.
- Ability to search any text in database and files with readable texts.
- Ability to find usage of the part / components in various BOM / assemblies.
- Ability to find references of the objects in the database, from bottom to top level.
- Facilitate keyword based search options.
- Ability to display search results in HTML formats, adaptable for exporting. Search results with CAD parts must display a 3D representation of the part. Users should be able to navigate on this representation.

9. Check-in / Check-Out

- Ability to check information in and out of the database to prevent simultaneous access and modification to information.
- Automated check-in / check-out of when the data is being used by integrated application like CAD.
- Manual check-in / check-out provisions to prevent access and modification of information over a prolonged period.

10. Configuration Management, Control and Change Management

- Ability to suit with the proposed Configuration Management Plan of Service Receiver.
- Auto generation of unique document and drawing number, based on defined logic.
- Provide Board / Committee creation and modification.
- Automate review / approval process based on defined workflows.
- Aid in managing Configuration Management items like 3D models, drawings, and specification documents.
- Bulk import of all the drawings and documents that have already been created and submitted by different SDAs.
- Bulk import of scanned drawings with related data should be possible.
- Setting up of automated and customizable drawing number generation as per requirements.

- Provide Checklist creation and modifications.
- Interactions within Configuration Control Board based on workflows.
- Document management by identification, categorization, routing work flow definition etc.
- Enable creation of document category and document type.
- Security on document category and types as defined by Project.
- Document search [including content and keyword search], access, visualization, and print facility.
- Pending / released document indicators.
- Freezing of released documents / drawings.
- Provide a system for change request, change control for drawings and documents.
- Setting up of standard templates and formats for change proposal.
- Setting up of standard print formats.
- Automated revision and change history management.
- Ability to manage multiple issues and revisions of data.
- Customization of reports.
- Restricted change / update authorizations.
- Comparisons for highlighting changes across revisions.
- Maintenance of change history.
- Provisions for online commenting.
- Quick access to design, engineering, product structure/ configuration.
- Visualization and markup facilities for engineering drawings.
- Maintenance and tracking of changes.

11. Impact Analysis

- Ability to perform impact analysis based on cause and effect.
- Highlight affected components across multiple levels. Auto update levels based on impact reduction.
- Graphical analysis / view of impact analysis across multiple levels, in terms of cause effect diagrams / Fish-bone diagrams.

12. Project Management

Act as a single integrated program management application where both planning and execution are made visible to the entire project team during the project lifecycle.

- Ability to initiate Projects and Programmes.
- Ability to define Project milestones and goals.
- Manage and assign Project resources to tasks / deliverables.
- Ability to custom define task duration.
- Linking and managing deliverables like 3D / 2D data, input parameters and attributes. Facilitate traceability of data.
- Enable / defining all tasks, related documents, and their processes.
- Ability to breakdown complex projects into manageable sub-projects.
- Task scheduling, schedule alerts, and schedule updates.
- Identification of critical activities, resource allocation, leveling, crashing etc.
- Work Breakdown Structure, task assignment, and tracking of activities
- Ability to define interdependencies, tardiness, constraints, lead-lag, etc.
- Ability to define and manage Project risks and capability to link the same with specific activity.
- Ability to define interdependencies between multiple Projects.
- Online availability of Project Management data (Project plans, schedules, work allocations, project reports).
- Ability to provide multiformat views of PM data in the form of Gantt Charts, Network diagrams, Mile-stone charts, WBS tables etc.
- View task completion status, resource allocation details etc. in graphical view.
- Ability to link Engineering processes with project plans.
- Programme level access permissions for controlled access.
- Ability to define Teams, Committees, and Boards for Project reviews.
- Provide a system for capturing, notification and tracking of Meeting details and Minutes of Meeting.
- Routing of action Points, alerts, closure status, and escalations.
- Online availability of action points.

- Provision for data import / export to suitable formats.
- Provision for data exchange with digital work flow systems of Service Receiver.
- Provide integration to Project Tools such as Microsoft Project.
- Communication/ Messaging / Prompts
 - i. Inter-departmental and intra-departmental communication and messaging facility
 - ii. Notifications / Pop-ups / Reminders to focal points
 - iii. Internal mail on release of a schedule
 - iv. Approval/ change notifications
 - v. Creation of user groups and selective sending of messages
 - vi. Acknowledgement messages
 - vii. Prompts alerts on schedule slippages
 - viii. Reports on task assignments, list of documents/ drawings
 - ix. Status of documents/ drawings
 - x. Change records and print records
- Productivity Tools
 - i. Provision for data comparison
 - ii. Data search tools
 - iii. Specification and color coding of components (Design model, developmental model, test model, flight model)
 - iv. Reference indicators
 - v. Task completion details

13. Integration to ERP / MRP / MES Modules

- Integrated ERP / MRP / MES modules or provision to integrate with standard ERP / MRP / MES modules like SAP, Oracle Fusion Cloud, Oracle MRP, Opcenter, Delmia etc.
- Material master creation and transfer to ERP
 - Capture material code, part number, description, and attribute linkage.
 - Definition of material type [Raw / Semi-finished / Finished / Phantom].
 - Base unit of measure, quantity, volume, hazardous classification.
 - Material lifecycle [Design / Release, Obsolete] and expiry data.
 - Definition of alternate / substitute parts.

- Define effectivity of BOMs.
- Ensure a unified item master between PLM and ERP to avoid duplication and data inconsistencies.
- Capability to push approved documents from PDM module to ERP module with automated synchronization of version and access controls.
- Change Management Integration: ECNs (Engineering Change Notices) initiated in PLM should propagate to ERP with clear impact analysis.
- Procurement planning
 - PLM should feed design and material info to ERP for accurate cost modeling and procurement planning.
 - Should aid in make or buy decision.
 - Lead Time and availability data feedback loop.
 - Ability to interface with Service Receivers Procurement software for Real-time update on procurement process.
- Manufacturing Execution
 - Avoid manual data duplication between engineering and manufacturing.
 - Enable digital continuity from design to execution.
 - Ensure real-time feed back from shop floor to engineering.
 - Support closed-loop quality and traceability.
 - Enable Production planning.
 - Deriving MBOM from EBOM.
 - Automated triggers to send released BOMs, item data, and approved documents to ERP.
 - Resource / Workcentre mapping.
 - Enable seamless integration between CAD and CAM.
 - Enable CAD based 3D visual work instructions.
 - Integration of process plans, quality control plans, assembly sequences, toolings & jigs.
 - Linkages to SBOM, non-conformances, and deviations.
 - Enable comparison between 3D data and realized part; Invoke alerts on deviations.
 - Capture process execution history with timestamps and operator data.

- Inventory Management
 - Visibility into on-hand stock, reserved, and obsolete materials.
 - Material availability for ready-use and re-use.
 - Avoiding inventory duplication.
 - Expose ERP/MRP inventory levels in PLM for design-for-availability decisions.
 - Enable demand forecast data exchange.
- Quality Management
 - Enable pushing of FMEA / FMECA, test reports, inspection plans etc. from PLM to ERP.
 - Feedback loop from ERP on non-conformance data, deviations, salvage report, quality issues, etc. from ERP to PLM.
 - Ensure compliance with APQP standards, including support for traceability, process validation, and quality planning requirements.
- Supplier Relationship and Supply Chain Management
 - Capture details on approved vendor / manufacturer list.
 - Enable part mapping to vendors based on capabilities.
 - List details on procurement lead time, MOQ, cost, etc.
 - Tracking and managing the supply chain.
- Costing
 - Enable cost-rollups of BOM in PLM using estimated values.
 - Push BOM to ERP for actual costing.
 - Cost comparison across design revisions.

14. Security and Access Control

Facilitate configurable access control model as per the Organization's requirement.

- Access control like Read, Write, Delete, Change, Check-in, Check-out, Transfer, Export, Import, etc. as per rights allotted based on status of work flow.
- Object and role based security for accessing confidential and restricted data.
- Automated access control based on Workflows. Provisions for manual override based on access rights.

15. Licensing Policy

- Implementation should facilitate a flexible licensing scheme.
- Centralized server based licensing policy to be followed. Wherever necessary, license should be fetched from the central server.
- Floating licensees for all CAD packages and associated integrators and translators.
- Distributed user licenses based on access rights. Flexibility to configure the rights based on user roles.
- Auto license withdrawal based on inactivity for specific period.
- Flexibility for license reallocation based on user definitions.

16. General

1. Generic Web-Browser based client terminals for External Work-centres / Industries.
2. Provision for online and offline storage.
3. Automatic backup of all data.
4. Easy data retrieval by specification of parameters.
5. Access Security.
6. Authorization of rights (View/ Print/ Edit/ Full rights).
7. Thumbnail views of the document/ drawing.
8. Simultaneous viewing of data by any number of clients.
9. Provision for adding legends and markups.
10. Provide Module access control.
11. Provide Access to reports.
12. Encryption of files in the Server / Vaults.
13. Management of dimensional inspection report, snag sheet, Quality assessment reports, etc.
14. Provision for secure interaction with internal and external work centres.
15. Flexibility to accommodate / redefine changing organizational needs.
16. Automatic update of client terminals on update of central server.
17. User friendly with Graphical User Interfaces.
18. User defined data security.
19. Concurrent use by multiple users without significant degradation in performance.
20. Data synchronization between internal servers and main server.

21. Data backup and management – every 24 Hrs.

22. Disaster Management – Provision for data recovery during disaster.

17. Workcentre / Industry Collaboration [Phase 3]

- Exclusive server [External server located within Service Receivers' premises] based on data exchange policy for Workcentre / Industry collaboration.
- Implementation logic should offer physical break across internal and external servers.
- Time / requirement based data exchange between Main Server [Internal] and External Server. One way auto synchronization [External to Main server] is mandatory.
- Restricted access between external server and Main server.
- Ability to define interfaces accessible to Workcentre / Industry.
- Workcentre / Industry access to defined functionalities as demanded by internal administration.
- High level secured and encrypted data transfer.
- Well defined functionalities in standard templates for easy data exchange.
- Within the desired and demanded security framework, communication between internal and external users should be seamless.
- Workcentre should be able to access data authorised and provided by internal users within a defined period.
- Auto erasing of data in external server after cataloguing and backing up in Main server. Erase time frame will be defined by Service Receiver.
- Ability to recall erased data from Main server based on requirements and access rights [By internal user only].
- System independent browser based data download / upload / view by external users.
- Internal users should be able to restrict, define, and modify the scope of data exchange.
- Application should be managed and maintained at physical locations within ISRO campus.
- Automated Workflow / WBS updates based on deliveries from Workcentres / Industries.
- Milestone based phase gate and deliverables update from suppliers.

- Automatic update on phase gate and work breakdown structure as per allocation from internal and external users.

18. System Requirements

- Database: Based on common commercially available databases like Oracle, MS-SQL, etc.
- Server Client Architecture: Application based on Server client architecture with Server based on Windows or Linux Environment and Client based on Windows.
- Network Architecture: Ability to support both Intranet (peer to peer) and Internet communication protocols (http / https).
- File Management System: Ability to manage large files across network with File Management System protocol. Separate file management system and database management system to be envisioned / implemented.
- Indexing for faster search time: Should support advanced indexing methodologies for faster searches and object retrieval mechanism.
- Data exchange / view should support all commonly available browsers.

19. Interface

Scalable interfaces to manage different levels of usage:

- Heavy clients for users like Designers.
- Thin Client interface for light users like reviewers.

Annexure 3
FORMAT FOR SUBMISSION OF EOI

COMPANY LETTER HEAD

No.

Date:

Senior Purchase & Stores Officer
Purchase Unit V, MME Purchase,
RFF Area, Thumba P.O.,
Thiruvananthapuram – 695022
Kerala

Sir / Madam,

Sub: Submission of Expression of Interest

Ref: Your Tender Enquiry No.....

With respect to your EOI invitation notice vide above-referred Tender enquiry, we hereby submit our Expression of Interest to participate in the Bidding for “Implementation, Operation, and Transfer of Project Life Cycle Management Platform for Launch Vehicle Project”. We attach the relevant documents requested in your invitation for EOI notice.

We confirm that the information contained in this EOI or any part thereof, including its exhibits, and other documents and instruments delivered or to be delivered to Service Receiver are true, accurate, verifiable and complete. This response includes all information necessary to ensure that the statements therein do not in whole, or in part, mislead Service Receiver in its short-listing process.

We fully understand and agree to comply that on verification, if any of the information provided here is found to be misleading the short-listing process, we are liable to be dismissed from the selection process or termination of the Contract after the execution of the Contract.

We agree to the unconditional acceptance of all the terms and conditions set out in the Invitation of EOI document.

It is hereby confirmed that I / We are entitled to act on behalf of our company / corporation / firm / organization and empowered to sign this document as well as such other documents, which may be required in this connection.

Thanking you,

Yours faithfully

(Signature)

(In the capacity of) Designation:

Duly authorized to sign the EOI for and on behalf of:

Name and Address of Company:

.....
.....
.....

Seal / Stamp

Annexure 4

RESPONDENT'S PROFILE

Sl. No.	Particulars	Response from Respondent
1	Company Profile	
	Name	
	Country of Incorporation	
	Date of incorporation and / or commencement of business	
	Year of establishment of the Company	
	Specify type of the Company [Government / Public sector / Private sector]	
	Specify whether you are Indian based company or Foreign company with office in India or Foreign company	
	Address of the corporate headquarters and its branch office(s), if any, in India	
	Corporate Website URL	
	Brief description of the Company including details of its main lines of business and proposed role and responsibilities in this Project <i>[Separate sheets, not more than 2 pages, may be attached, if required]</i>	
	Addresses of operational setups in India (Highlight the areas where Service Receiver can visit for an Audit)	
2	Details of individual(s) who will serve as the point of contract / communication for the Service Receiver:	
	Name:	
	Designation:	
	Company:	
	Address:	
	Telephone Number:	
	E-Mail Address:	
	Fax Number	
3	Particulars of the Authorized Signatory of the Respondent	
	Name:	
	Designation:	
	Address:	
	Phone Number:	
	Fax Number	

Annexure 5
COMPLIANCE MATRIX

Sl. No.	Description	Compliance (Yes/No)	Required Documentary Proof	Remarks
1	Whether the document has been read completely, fully understood, and can be complied with?		Nil	
2	Whether ready to participate in Pre-EOI Meeting?		Nil	
3	Whether ready to provide written consent conveying that the scope & quantum of work and all the terms and conditions as per the document are fully understood?		Nil	
4	Whether clearly understood the scope, objectives, requirements, and bidding & review process as per section 2 to 9 of this document?		Nil	
5	Whether ready to establish dedicated interconnected PLM cells at Service Receivers' premises at multiple locations, which are geographically separated?		Nil	
6	Whether ready to provide suitable resources [As listed out in section 6.2.9] for establishment, operation and maintenance of PLM cells throughout the Project Life Cycle?		Nil	

Sl. No.	Description	Compliance (Yes/No)	Required Documentary Proof	Remarks
7	Whether ready to implement, customize, and deploy software based PLM platform at Service Receivers' premises at multiple locations, which are geographically separated?		Nil	
8	Whether ready to provide secured connectivity and user interface between PLM Cells and selected participating Indian Industries, which are geographically separated and spread across India?		Nil	
9	Whether ready to provide comprehensive training on deployed PLM platform to designated personnel of Service Receiver?		Nil	
10	Whether ready to maintain the PLM cells & PLM platform and provide continuous helpdesk support to the Service Receiver throughout the Project Life Cycle [Expected to be up to March 2033]?		Nil	
11	Whether ready to transfer of PLM platform to Service Receiver after Project Life Cycle?		Nil	
12	Whether ready to provide, install, and maintain suitable CAD and CAE software, as per Service Receiver's requirements?		Nil	

Sl. No.	Description	Compliance (Yes/No)	Required Documentary Proof	Remarks
13	Is the Respondent a registered Indian company, owned by Resident Indian citizens and with a majority of the Board of Directors being Resident Indian citizens?		Certificate of Incorporation	
14	Is the Respondent operational for a period of not less than 5 (five) years (up to the date of EOI submission)?		Certificate of Incorporation	
15	Is the Respondent accredited with ISO standard for the last 3 years for the company's existing operations / business process?		Copy of Certification	
16	Whether having prior experience of last 2 years in successful implementation, customization, and operation of PLM platform in Government organizations / Scientific and Technical establishments / PSUs / NGPE, etc.? State whether experience includes implementation and operation of PLM systems in organizations or establishments working in PLM mode across multiple geographic locations.		Copy of Certified Work Orders / Purchase Orders, along with Company Profile / Work completion certificate	
17	Whether Respondent have a valid PAN and a valid GST registration certificate?		Copy of PAN and GST registration certificate	
18	Whether the Respondent has executed ISRO contracts / other Government contracts previously?		Copy of Certified Work Orders / Purchase Orders / Work completion certificate	

Sl. No.	Description	Compliance (Yes/No)	Required Documentary Proof	Remarks
19	Whether Respondent has submitted complete information of the company, human resource, infrastructure, assets, financial standing, line of business and credentials?		Certified documentary evidence	
20	Whether Respondent have in-house developed PLM software and associated R&D facilities? OR Whether Respondent is an OEM authorized dealer of PLM Software?		Certified documentary evidence / Proprietary certificate / OEM authorization certificate	
21	Whether the Respondent has human resources with adequate knowledge, skill and experience in Project Life Cycle Management, implementation, and operations?		Certified documentary evidence on Human Resource availability in PLM field and years of experience	
22	Whether all functionalities as listed out in Annexure 2 can be completely fulfilled / delivered through the proposed PLM solution?		Technical specifications / Product brochure of the PLM solution.	
23	Whether ready to provide tailorable and flexible licensing scheme, as per requirements of Service Receiver?		Nil	
24	Does the Respondent have all mandatory resources indicated in this document? If not, is the mode of procurement indicated in the EOI?		Nil	

Sl. No.	Description	Compliance (Yes/No)	Required Documentary Proof	Remarks
25	Whether ready to provide a comprehensive presentation to Service Receiver at the desired location, covering their business profile, compliance to terms and conditions, and proposed execution strategy?		Nil	
26	Whether ready to demonstrate all functionalities listed out in Annexure 2, during the presentation?		Nil	
27	Whether the Respondent is having an average annual turnover of Rs 30 Crore, for the last 3 financial years, ending 31 st March of corresponding year?		1. Audited and certified copies from Chartered Accountant for the Profit and Loss Account, Balance Sheet, Annual Turnover, and ITR certificates for the Financial Years 2024-25, 2023-24, and 2022-23. 2. Attach in original a certificate on the Turnover and on positive net worth after tax from a statutory auditor for Financial Year 2024-25, 2023-24, and 2022-23.	
28	Whether the Respondent has incurred a loss in any of the last three consecutive financial years [FY 2022-23, FY 2023-24, and FY 2024-25], ending on 31 st March of corresponding year?		Audited and certified copies from Chartered Accountant for the Profit and Loss Account, Balance Sheet, and ITR certificates [For FY 2022-23, FY 2023-24, and FY 2024-25]	

Sl. No.	Description	Compliance (Yes/No)	Required Documentary Proof	Remarks
29	Whether the Respondent has been blacklisted by any Central / State Government Department / Public Sector Undertakings / Central Government funded Organizations / State Government funded Organizations / World Bank, or other World Bank organizations OR whether Respondent is under any illegal expression by Government of India?		A copy of the signed Undertaking on Non-Blacklisting executed by the Respondent	
30	Whether Respondent have outstanding bankruptcy, judgment or pending legal action that could impair the operations as a going concern?		A notarial certificate / undertaking on letter head shall be submitted by the Bidder	
31	Whether ready to enter into a Non-Disclosure Agreement with Service Receiver, for maintaining confidentiality of data provided in RFP document?		Nil	

Annexure 6

FORMAT FOR NON DISCLOSURE AGREEMENT

COMPANY LETTER HEAD

No.

Date:

I / We, being having
our office at being
interested to participate in the EOI for "Implementation, Operation, and Transfer of Project
Life Cycle Management Platform for Launch Vehicle Project" vide Tender Enquiry No.
..... dated by Govt. of India., Dept. of
Space, Vikram Sarabhai Space Centre, Thiruvananthapuram – 695 022, Kerala, do hereby
declare that:

1. Any information submitted or given by Service Receiver to me / us shall be treated by me / us in strict confidence.
2. The term 'information' comprises of technical knowledge of any nature (documents, data, materials, process details and the like) whether patented or not.
3. I / We understand and agree that the penalties detailed in the Indian Official Secrets Act, 1923 for breach of trust in maintain the confidentiality of the said technical knowledge shall be suffered not only by our Company Organization as body corporate, but also individually on its Chief Executive and me.
4. The provision of the Indian Official Secrets Act, 1923 (XIX of 1923) shall apply to me / us with reference to exchange and use of information provided by Service Receiver to me / us during the course of working for the project.
5. I / We shall not make public any knowledge or information which Service Receiver shall have disclosed or may hereafter disclose to me / us incident to the placing of any order on us.

(Signature)

Signed by (Name):

(In the capacity of) Designation:

Countersigned by: (Authorized signatory with name & address)

Place:

Duly authorized to sign this NDA for and on behalf of:

Date:

Name and Address of Company:

Company Seal / Stamp

Witness 1:

Witness 2:

[With Signature, Name, Designation, Company / Organization]

Pre-qualification criteria

1. The bidder shall provide
 - (a) A brief description of the background and organization of your firm/entity.
 - (b) The turnover of the company on the basis of the audited accounts of the previous three years.
 - (c) Copy of the last three years Income Tax returns shall be provided.
 - (d) GST No.
2. The bidders shall provide valid authorization certificate from the manufacturer that they are the authorized dealer / distributor /agent for the items in our locality.
3. Your previous experience:
Copies of Purchase Orders awarded to you by any Government/PSU's shall also be attached.
4. Only Class I and Class II Local suppliers as per Make in India Policy are eligible to participate in the bid.
5. Foreign vendors are not permitted to quote
6. The percentage of Local content should be specifically mentioned in the offer, with break-up and location details without which it will be summarily rejected.
7. Preference will be given to Class I Local Supplier and in their absence, Class II Local Suppliers will be considered.

Conditions for BIDDER FROM A COUNTRY WHICH SHARES LAND BORDER WITH INDIA

1. Any bidder from a country which shares a land border with India will be eligible to bid in this tender, only if the bidder is registered with the Competent Authority. Competent Authority for the purpose of registration shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT).
2. Any false declaration and non-compliance of the above would be a ground for immediate rejection of offer or termination of the contract and further legal action in accordance with the laws.
3. Validity of Registration: Registration should be valid at the time of submission of bids and should be valid at the time of placement of order.

Mandatory Declaration to be attached by bidders regarding restrictions on procurement from the bidder of a country which shares a land border with India.

(In the Letter Head of the Bidder) - The below matter may be submitted in your letter Head

As per the provision of Office Memorandum N0. F.N0. 6/18/2019- PPD dtd. 23.07.2020 (i.e., Rule No. 144 (xi) of GFR) and its Amendments dtd 23.02.2023, issued by Department of Expenditure, Ministry of Finance. I hereby declare and certify the following.

- (1) I have read the clause regarding restrictions on procurement from the bidder of a country which shares a land border with India.
- (2) I certify that this bidder is not from such a country or, if from such a country. I have registered with the Department for Promotion of Industry and Internal Trade. Bidder from a country which shares a land border with India for the purpose of the Order means: (2.1) An entity incorporated, established or registered in such a country; or (2.2) A subsidiary of an entity incorporated established or registered in such a country; or (2.3) An entity substantially controlled through entities incorporated established or registered in such a country; or (2.4) An entity whose beneficial owner is situated in such a country; or (2.5) An Indian (or other) agent of such an entity; or (2.6) A natural person who is a citizen of such a country; or (2.7) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.
- (3) I hereby certify that I am not an agent as defined in the order who procures and supplies finished goods from an entity from a country which shares a land border with India, regardless of the nature of legal or commercial relationship with the producer of the goods.
- (4) I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered.

Date:

(Authorised Signatory) (Seal)