
Request for Expression of Interest
for
End-To-end Design, Development, Realisation, Qualification,
testing and delivery of
HumanRated
Thermal & Humidity Control System (THCS) with Ventilation
System
for BAS



Liquid Propulsion Systems Centre
Indian Space Research Organisation
Thiruvananthapuram-695547

Glossary

- 1. Qualified aerospace industries/industrial partner with demonstrated capabilities:** The Bidder/consortium/partner shall have experience of more than 5 (five) years (up to the date of Response submission) in Aerospace/defence domain.
- 2. Consortium:** A collaborative formal alliance of organizations (two or more).
- 3. Lead member of the Consortium:** An Indian entity designated by partner members to lead the project & submit proposal/bid.
- 4. Design qualification test:** These are the tests required to demonstrate the design/safety margins at operating conditions.
- 5. Flight acceptance test:** The required formal tests (or procedures) conducted on the flight hardware to ascertain that the materials, manufacturing processes, and workmanship meet specifications and that the hardware is acceptable for intended flight usage.
- 6. Proto hardware:** Proto hardware is generally full scale and similar to the flight hardware to prove that the design meets all essential requirements as defined by the specification. By the time development program is completed, proto hardware should be equivalent or nearly equivalent to the flight hardware in all aspects.
- 7. Qualification hardware:** Production articles that go through a series of qualification tests satisfactorily.
- 8. Flight hardware:** Hardware which undergoes Flight Acceptance Tests satisfactorily.
- 9. Human Rating:** Human Rating of a control component or system is to maximize the probability of crew survival by ensuring safe launch/operation, landing &/or abort (if required) by implementing human rating criteria defined by LPSC.
- 10. One Set of hardware:** One Set of hardware consist of a working Thermal & Humidity control system along with Ventilation system in tandem complete in all respect, meeting all the functional & structural performance parameters, subject to the clearance by LPSC, ISRO.

1. Preamble

Liquid Propulsion Systems Centre (LPSC) is venturing in to development of Environmental Control & Life Support System (ECLSS) for Bharathiya Antariksh Station (BAS) which will be the next step after successful Gaganyaan mission for continuous human presence in Low Earth Orbit.

The BAS module is designed to cater to a crew size of 2 for a short duration of 15 days. Environmental Control & Life Support System (ECLSS) is one of the most critical sub-system in BAS. It is essential to maintain a habitable earth like environment inside the BAS module during all phases of the flight. ECLSS is a 'system of systems' consisting of a number of subsystems performing independent and overlapping functions. The major subsystem of ECLSS under the scope of this EoI are.

- Thermal & Humidity Control System (THCS) along with ventilation system.

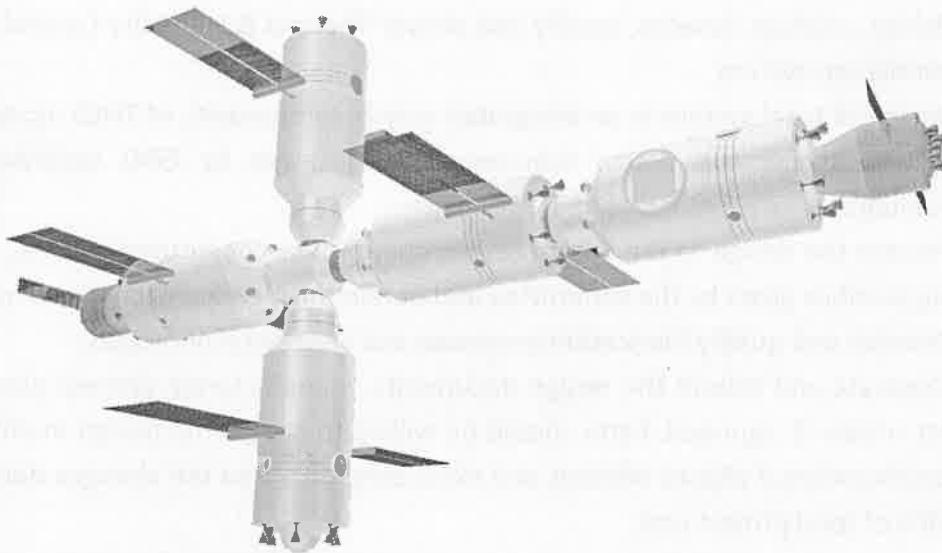


Figure 1 BAS Overall Configuration

2. Objective

The Liquid Propulsion Systems Centre under ISRO, Department of Space invites Expression of Interest (EoI) from qualified aerospace industries/industrial partner with capabilities for design, analysis, development, realisation, testing, qualification and delivery of 7 sets of following sub-system for BAS mission.

Sl. No.	Deliverable	Scope	
		Vendor	LPSC
1.	Thermal & Humidity Control System along with ventilation system working in close loop	Yes	No
2.	Systems Engineering	Yes (Partial)	Yes (Partial)
3.	Measurement sensors	Yes	No

4.	Controller & EDAQ	Yes	No
5.	Software	Yes	Source code to be supplied to LPSC
6.	Electrical harness	Yes	Need not to be handed over to LPSC
7.	Connectors	Yes	No

3. Brief Scope of work:

The scope of work includes design, development, realisation, testing, qualification and delivery of 7 sets of Thermal & Humidity Control System along with ventilation system working in close loop. The party shall,

1. Design, analyse, develop, qualify and deliver Thermal & Humidity Control System (THCS) & ventilation system
2. Design of total system in an integrated way & components of THCS along with ventilation system as per the design requirement/loads given by ISRO satisfying Human rating standards.
3. Present the design to the design review committees constituted by LPSC, ISRO, implement suggestions given by the committee and obtain the clearance for the same.
4. Develop and qualify fabrication processes and related technologies.
5. Generate and submit the design documents, manufacturing process plan, inspection plan for review & approval. Party should be willing to accept the design modification during all developmental phases without any extra cost, provided the changes don't cost more than 10% of total project cost.
6. Procure raw materials as per LPSC approved specification & acceptance testing. No FIM will be provided by LPSC
7. Procure standard parts as per LPSC approved specification & acceptance testing
8. Realise components as per approved design, manufacturing process plan and inspection plan.
9. Design and realisation of appropriate toolings (jigs & fixtures) and test setups for realisation and testing of components/sub-systems/systems.
10. Carryout Design qualification test and Flight acceptance test for the realised hardware
11. Deliver 1 set of successful prototype hardware, 2 set of qualification hardware (after successful qualification testing by the party) and, 4 sets of flight hardware. All the hardwares shall undergo required qualification/acceptance tests as approved by LPSC.
12. All facilities required for design, realisation and testing of the hardware shall be available with the Party or shall establish the required supply chain with qualified sub-contractors executing similar nature of works. No funding will be provided by LPSC for aforementioned facility establishment.
13. The party shall take necessary action for packing, transporting and delivering the hardware to LPSC identified destinations (Valiamala/Bangalore).

4. Brief Description of the Overall Bidding Process

- The proposal is to select an Indian industry partner/consortium for this programme through a two-stage process viz.
 - (i) Assessment of eligibility criteria based on response to this EoI and short listing of eligible vendors/Party for RFP stage.
 - (ii) Submission of Request for Proposal (RFP) to the qualified vendors/Parties (as per Sl. No. 5 & 6) in EoI stage. Following the completion of the RFP process, a Single Indian industry as a Sole Bidder or the lead member of Consortium would then be selected to execute the envisaged scope of work.
- The scope of the RFP would be to select “bidder” among the short-listed bidders based on their competitive financial bid.

4.1. Assessment of EoI:

- Interested parties who meet the minimum eligibility criteria as per Section 5 & 6 can submit their response to the EoI. The timelines for EoI is given in section 8.
- LPSC will organize a pre EoI meeting with the interested bidders to facilitate proper understanding of the requirements and scope of work within 2 weeks of release of EoI. Since the scope of work requires development of critical components, subsystems etc, bidders must participate in the meeting and seek clarifications if any from LPSC.
- Bidders shall sign a Non-Disclosure Agreement (NDA) document in Rs. 200/- Non-Judicial Stamp Paper, as per the attached format.
- Based on the EoI response, an expert team from ISRO shall do the capability assessment of responding parties as per the evaluation criteria mentioned in sections 5 & 6 including facility visits if required.
- The bidders would be shortlisted based on the criteria mentioned in minimum eligibility criteria matrix (Section-5) and marks obtained in technical compliance matrix (Section-6). Necessary documentary evidence shall be submitted by the bidders to substantiate the claims given in technical compliance matrix. The shortlisting will be carried out by a Technical Evaluation Committee (TEC) constituted by the Department. TEC reserves the right to request for any additional information and also reserves the right to reject EoI response by any vendor which is not meeting the requirements.
- Parties may be required to present their previous work experience, capabilities for executing similar work including manpower details, facilities, plan for executing the proposed project under this EoI before Technical evaluation committee (TEC).

4.2. Request for Proposal (RFP) Process:

- LPSC may issue the Request for Proposal (RFP) to the commercially & technically qualified bidders shortlisted as per Section 4.1. LPSC reserves the right to cancel the EoI at any stage or not to proceed with RFP without assigning any reasons.
- RFP would be a limited tender document (two part) that would outline:
 - Scope of work with detailed requirements, design inputs and specifications required for carrying out the design of of each sub-system
 - Hardware requirement & schedule details
 - Testing & qualification plan
 - Redundancy & human rating requirements
 - Commercial terms & conditions
- LPSC will organize a pre-bid meeting at RFP stage with the shortlisted bidders to facilitate proper understanding of the requirements. Bidders have to mandatorily attend the pre-bid meeting.
- Bid shall be submitted in the 2 parts viz. (i) Techno commercial (non-priced) bid and (ii) Price bid. Upon evaluation of Techno-commercial bid submitted by bidders and post-bid techno-commercial meeting (if necessary), LPSC will shortlist the 'Suitable Bidders' and place them on equal footing. LPSC will open the price bids of the Suitable Bidders, for further evaluation. Kindly note that price information "SHALL NOT BE REVEALED" in Techno-commercial bid which will lead to disqualification.
- The contract will be signed by LPSC with the technically qualified L1 bidder for undertaking the End-To-end Design, Development, Realisation, Qualification, testing and delivery of Human Rated Thermal & Humidity Control System (THCS) & Ventilation System for BAS-01.

4.3. Overall Realisation plan

The project realisation is split in to the following 3 phases which comprise of a developmental phase, realization & testing phase and Production phase.

4.3.1. Developmental Phase (T0) - Preliminary Design Review Phase

- Development phase includes integrated system design, analysis, finalizing component/subsystem specifications etc. LPSC will provide all requirements for initiating the design.
- All design activities, review and approval of design by LPSC, generation and approval of fabrication drawings, procurement of all raw materials & standard parts by party, development of manufacturing process plan and inspection plan for the components shall be successfully completed.
- Realisation of proto hardware for proof of concept (party scope) & system level testing (LPSC scope) shall be completed within 12 months from the date of acceptance of Purchase order by the party.

Proto hardware: Proto hardware is generally full scale and similar to the flight hardware to prove that the design meets all essential requirements as defined by the specification.

- The Proto hardware maybe arrived through design iterations carried out by the Party and successfully completing the list of test specified by LPSC. All Design iterations & hardware realization shall be under party's own cost & responsibility.
- Successfully realised proto hardware shall be handed over to LPSC for carrying out integrated system level testing which will be under the scope of LPSC
- Any design changes/modifications required to be carried out based on system level testing results shall be implemented from subsequent hardware onwards.
- Test result shall be reviewed and clearance shall be obtained from LPSC/ISRO for the realization of next set of hardware.

4.3.2. Realisation & Testing Phase (T1 = T0 + 12 months) - Critical Design Review Phase

- Realisation of the 2 sets of qualification hardware after the clearance by LPSC, carrying out all qualification test as per ISRO requirements successfully and delivery of the same within 4 months from the date of completion of developmental phase (T1+4 months).
- If the qualification test is not successful it is party's responsibility to modify the design, realize a new set of qualification hardware & successfully complete the qualification test.
- Realised hardware and test results shall be reviewed and clearance shall be obtained from LPSC/ISRO for the realization of next set of hardware.

4.3.3. Production Phase (T2 = T1 + 4 months) – Flight hardware

- Realisation, successful flight acceptance testing and delivery (in phased manner) of 4 sets of flight hardware within 4 months from the date of completion of realization & testing phase.

Delivery of first flight hardware : within 2 month from completion of T2
Delivery of second flight hardware : within 3 month from completion of T2
Delivery of third and fourth flight hardware : within 4 month from completion of T2

4.4. Commercial terms

- **Liquidated Damages:** The delivery schedule is deemed to be the essence of this contract. Party should complete the supply within the delivery schedule as given in section 4.3. If it fails to do so Liquidated Damages (LD) will be levied at the rate of 0.5% of the order value per week for the undelivered portion of the system subject to a maximum of 5% of the order value from your bill. However, in case of inordinate delay i.e., delays of more than one-fourth (25%) of the total completion period, LD shall be applicable subject to a maximum of 10% of the total contract value. Developmental phase (section 4.3.1) will be exempted from LD.
- **Security Deposit:** The contractor shall submit a Security Deposit (SD) in the form of Bank Guarantee/FDR/DD for a sum equal to 3% of the total project value within 15 days of the receipt of PO which will be retained till the completion of contractual obligation without interest or will be adjusted from the contract amount payable.
- **Warranty:** The items shall be warranted for satisfactory performance for a period of 12 months (without any health check or calibration and for entire shelf life after system level integration) from the date of final acceptance of the system. The contractor shall submit a Performance Bank Guarantee (PBG) for a sum equal to 3% of the total project value along with warranty certificate with validity of warranty period + 60 days.

5. Minimum Eligibility Criteria

Minimum Eligibility Criteria for EoI Respondents			
S No.	Description	Compliance by	Compliance (Desirable/Mandatory)
1.	The Primary Bidder shall have been operational for more than 5 (five) years up to the date of Response submission. A Certificate of incorporation in this regard shall be provided.	Sole Bidder or Lead Member of the Consortium	Mandatory
2.	The Bidder/consortium shall have experience of more than 5 (five) years (up to the date of Response submission) in Aerospace/defence domain. Required documentary evidences (Successfully executed PO copies/self certified affidavit) shall be provided by the bidder for the	Sole Bidder or Lead member of the Consortium	Mandatory

	department scrutiny.		
3.	The Bidder shall have a valid Copy of the PAN certificate and a valid GST registration certificate.	Sole Bidder / Lead Member of the Consortium	Mandatory
4.	<p>The Bidder shall have a sound financial track record as prescribed herein below:</p> <p>i. Minimum annual average Turnover of INR 50 Crores per year for the past 3 (three) financial years (i.e., the financial year 2024-25, 2023-24, and 2022-23)</p> <p>ii. Positive net worth for two years in the past 3 (three) financial years (i.e., financial year 2024-25, 2023-24, and 2022-23). i.e. as per audited statements of accounts, the bidder should not have incurred financial loss during above said period. A Certificate in this regard shall be issued by a practicing Chartered Accountant/Cost Accountant.</p>	Sole Bidder/Lead Member of the Consortium	<p>i. Mandatory</p> <p>ii. Mandatory</p>
5.	<p>The Bidder shall be an Indian Entity under Indian Management and Control.</p> <ul style="list-style-type: none"> Legal Entity: The Bidder shall be: (i) a company incorporated under the Companies Act, 2013 or (ii) a partnership firm established under the Limited Liability Partnership Act, 2008, (iii) a trust under the Indian Trusts Act, 1882, (iv) an association of persons or body of individuals incorporated under relevant statutes in India. Foreign Investment: Any foreign investment into the bidding entity shall be as guided by the Foreign Exchange Management (Non-Debt Instrument) 	Sole Bidder/Lead Member of the Consortium	Mandatory

	<p>Rules 2019 and subject to the Bidder remaining an Indian Entity under Indian Management and Control.</p> <ul style="list-style-type: none"> A Certificate in this regard shall be issued by a practicing Chartered Accountant/Cost Accountant. 		
6.	<p>The Bidder shall not have been blacklisted/under suspension 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 should not be under any illegal expression by the Government of India at the time of submission of response to EOI/bidding.</p>	<p>Sole Bidder/All Consortium members</p>	<p>Mandatory</p>
7.	<p>There shall be no outstanding bankruptcy, judgment or pending legal action that could impair the operations of the Bidder as a going concern. Also, the Bidder / Consortium Members must be solvent. A Certificate in this regard shall be issued by a practicing Chartered Accountant/Cost Accountant.</p>	<p>Sole Bidder/All Consortium members</p>	<p>Mandatory</p>
8.	<p>In the case of a Consortium, the Prime Bidder must submit a Joint Bidding Agreement signed by all the members of the participating organizations stating the name of the industry/member. The document shall also contain the envisaged responsibilities to be undertaken by each member of the consortium to the best of the knowledge available from the EOI. Bidder shall ensure that Consortium shall</p>	<p>Lead member of the Consortium</p>	<p>Mandatory</p>

	retain the same Members, unless otherwise permitted by LPSC and shall remain in existence during the term of contract.		
9.	As per the Rule 144(xi) of General Financial Rule 2017, any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy service and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the competent authority ie., Department for Promotion of Industry and Internal Trade (DPIIT). Hence, Vendors or Agents of a Vendor (Indian or others) from a country sharing border with India shall submit copy of valid registration made with Department for Promotion of Industry and Internal Trade (DPIIT), Government of India along with the tender mandatorily, without which the offer will be treated as invalid.	All Consortium members	Mandatory
10.	The Bidder shall have valid AS 9100 Rev D & ISO 9001:2015 certification	All Consortium members	Desirable
11.	A Bidder shall not submit multiple bids through other Affiliates.	Sole Bidder/Members of Consortium	Mandatory
12.	Compliance of all the sections/clauses of this EoI	Sole Bidder/All Consortium members	Mandatory

6. Technical compliance marix:

SL No	Description	Compliance by	Marks (max.)	Remarks/Supporting documents
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1	<p>Prior experience of the party in design of other ISRO projects/aerospace systems & hardware</p> <p>Project executed worth:</p> <p>i) 10 – 20 cr: 10 marks ii) Above 20 cr: 20 marks</p> <p>(Copy of Purchase Order/work completion certificate/ certificate from user agency /any other valid document is to be submitted)</p> <p>Note: To qualify for this category minimum project worth 10 cr should have been undertaken by the Sole Bidder /Lead member in the past</p>	Sole Bidder / Lead member of the Consortium	20	Refer form V
2	<p>Prior experience of the party in design of Thermal & Humidity control system & Ventilation system for aerospace requirement as per human rating standards</p> <p>Project executed worth:</p> <p>i) 25 – 50 cr: 12.5 marks ii) Above 50 cr: 25 marks</p> <p>(Copy of Purchase Order/work completion certificate/ certificate from user agency /any other valid document is to be submitted)</p> <p>Note: To qualify for this category minimum project worth 25 cr should have been undertaken by the Sole bidder/ any member in the past</p>	Sole Bidder /All members of the Consortium	25	Refer form VI
3	<p>Availability of inhouse design and analysis facility with required hardware, software and skilled man power for executing the scope of work.</p> <p>Design team should have a minimum pool of 5 engineers (B. Tech/B.E) with minimum 3 years of experience in the similar field and should possess adequate</p>	Any single member of the Consortium or sole bidder	25	Refer form VII

	software proficiency as mentioned in form VII Note: Parties failing to meet the above mentioned criterion will not be awarded any mark for this category			
4	Availability of inhouse fabrication facility with skilled man power for realisation of the hardware as per scope of this EoI Sole bidder/consortium must possess minimum 4 out of 7 fabrication facilities mentioned in form VIII Note: Parties failing to meet the above mentioned criterion will not be awarded any mark for this category	All member of the consortium put together	10	Refer form VIII
5	Availability of inhouse Assembly & integration facility for realisation of the hardware as per scope of this EoI	All member of the consortium put together	10	Refer form IX
6	Availability of environmental test facilities required as per the scope of this EoI Note: Marks will awarded if these facilities are available inhouse with sole bidder/ All member of the consortium put together. Outsourced facilities will not be considered for evaluation.	All member of the consortium put together	10	Refer form X
	Total		100*	

Minimum cutoff marks for qualifying Technical compliance matrix will be decided by TEC.

7. Response to Eol

- 7.1.** Respondents are advised to study all the instructions, Terms and Conditions, Forms, Requirements and other information provided in the Eol documents carefully. The submission of response to Eol shall be deemed to have been done after a careful study and examination of the Eol documents with full understanding of its implications.
- 7.2.** DEPARTMENT reserves the right to request for any additional information and also reserves the right to reject the Eol response of any vendor, if in the opinion of DEPARTMENT, data is incomplete or if the vendor is found not qualified to satisfactorily execute the work.
- 7.3.** Interested bidders must present their design capabilities and required facilities & infrastructure to undertake such big project during Eol review meeting proposed to be held between T + 7 weeks to T + 8 weeks.
- 7.4.** Respondent shall bear all costs and expenses associated with preparation and submission of response to Eol document including post Eol clarification, discussion, technical and other presentations and LPSC shall in no case be responsible or liable for such costs regardless of the outcome of the Eol process. Also, the vendor shall not be entitled to claim any costs, charges and expenses incidental to or incurred by them in connection with the submission of the Eol response.
- 7.5.** The response to this Eol should be full and completed in all respects. Failure to furnish all the information required by the Eol documents or submission of proposal not substantially responsive to the Eol documents to every respect will be at the risk of the respondent and may result in rejection of the document.
- 7.6.** The response should be submitted as a proposal, as a collation of the following table of contents, in the enclosed format, clearly providing the details with documentary proof/supporting documents as Annexures. Kindly provide the contents sheet of your response as given below.
- 7.7.** The respondents shall complete the following forms in their entirety, adhering to the specified formats, and submit their Responses. Any submissions received with incomplete or partially filled forms shall be deemed unfit for consideration for this Evaluation.

Sl. No	Name of the form
1.	Covering Letter / Letter of Submission (Form-I)
2.	General details of the bidder (Form-II)
3.	General requirements (Form-III)

4.	Financial Strength (Form-IV)
5.	Experience in other ISRO/Aerospace projects (Form-V)
6.	Experience in THCS & ventilation system development (Form-VI)
7.	Availability of Design infrastructure facility (Form-VII)
8.	Availability of fabrication infrastructure facility (Form-VIII)
9.	Availability of assembly & integration infrastructure facility (Form-IX)
10.	Availability of Environmental test infrastructure facility (Form-X)
11.	Declaration of Non-Blacklisting (Form-XI)
12.	Declaration of Non-disclosure (Form-XII)

- 7.8. Canvassing in any form in connection with EoI is strictly prohibited and submissions from such agencies are liable to be rejected.
- 7.9. This EoI document is not an offer and DEPARTMENT reserves the right to withdraw the invitation to EoI at any stage without assigning any reasons what so ever.
- 7.10. Addendum/Corrigendum, if any, to this EoI, will be hosted at our website, www.lpsc.gov.in. Respondents shall regularly monitor our website for any updates.
- 7.11. Interaction meeting: An interaction meeting shall be arranged at LPSC in order to have a better understanding of the activities involved, clarify doubts, if any, and to visit site, if required. **The interested respondents are hereby requested to take part in the interaction meeting.**
- 7.12. Complete response to EoI must be received at LPSC to the address given below but not later than the date specified. Response to EoI in the prescribed format as per the terms & conditions mentioned, shall be submitted in a sealed cover super scribed with our Ref. No. and Due date for EoI. All the pages of the EoI submitted must be numbered and signed by the authorised signatory.
- 7.13. The vendors shall submit the EoI by post. Submission of EoI by email will not be accepted. LPSC shall not be responsible for non-receipt of EoI due to any type of delays and it shall be the sole responsibility of the Vendor to ensure delivery of the EoI to LPSC within the time fixed.
- 7.14. Successful respondents shall be required to enter into a Non-Disclosure Agreement with the Department for maintaining confidentiality of data provided in the RFP document. The NDA shall be executed on a Rs 200 stamp paper and should be as per format given by the Department.
- 7.15. LPSC/ISRO reserves the right to short close the order after EOI, without giving any reason.

7.16. Facility visit by LPSC/ISRO officials during all phases of development & testing shall be facilitated by the sole bidder/all members of the consortium.

8. Tender milestones & timelines

Tender milestones & timelines for the whole bidding process & award of contract is as per table below

Sl. No.	Milestone	Indicative Time line
1.	Issue of Eol	T
2.	Pre-Eol meeting	T + 2 weeks
3.	Clarifications, if any by Department (assuming no major change)	T + 4 weeks
4.	Submission of response to Eol	T + 6 weeks
5.	Eol review meeting with individual bidders to assess their capabilities	T + 7 weeks to T + 8 weeks
6.	Evaluation & Short listing of qualified bidders for RFP	T + 8 weeks

FORM- I – COVER LETTER FOR APPLICATION/RESPONSE

{With Cover Letter in Company letterhead}

To,

Head
Purchase & Stores
Liquid Propulsion Systems Centre (LPSC)
Indian Space Research organization (ISRO)
Valiamala-Thiruvananthapuram-695 547
Email ID: head_ps@lpsc.gov.in
Contact: 0471-2567540

Dear Sir,

Ref: Request for end-to-end development & delivery for “BAS Thermal & Humidity Control System along with ventilation system”

Having examined the EOI documents dated _____, downloaded from the LPSC website, i.e., <https://www.lpsc.gov.in>, we, the undersigned, intend to submit response to the aforesaid document.

We attach response as required by you, which constitutes our proposal. Primary and Secondary contacts for our company are:

	Primary Contact	Secondary Contact
Name:		
Title:		
Company Name:		
Address:		
Phone:		
Mobile:		
Fax:		
E – mail:		

We confirm that the information contained in this response or any part thereof, including its exhibits, and other documents and instruments delivered or to be delivered to LPSC/ISRO 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 LPSC/ISRO 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 EOI document.

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

Dated this

(Signature)

(In the capacity of) (Name)

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

(Name and Address of Company) Seal / Stamp of Party

Witness Signature:

Witness Name:

Witness Address:

FORM-II - General Details of the Bidder

S No.	Particulars	Input of the Bidder
1	Company Profile	
	Name:	
	Country of incorporation:	
	Date of incorporation and or commencement of business:	
	Corporate Website URL	
	Addresses of manufacturing and/or operational setup in India (Highlight the address where ISRO representative will visit for audit)	1. 2. 3.
2	Brief description of the Company including details of its main lines of business and proposed role and responsibilities in this Project:	Type brief profile of the Party not more than 2 pages
3	Details of individual(s) who will serve as the point of contract/communication for the Authority:	
	Name:	
	Designation:	
	Company:	
	Address:	
	Telephone Number:	
	E-Mail Address:	
4	Particulars of the Authorized Signatory of the Bidder/Lead member of the consortium	
	Name:	
	Designation:	
	Address:	
	Phone Number:	

FORM-III - General requirements

Sl. No.	Description	Required documentary proof	Compliance by	Page No.
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Sl. No.	Description	Required documentary proof	Compliance by	Page No.
1.	The Primary bidder shall have been operational for more than 5 (five) years up to the date of Response submission.	Certificate of incorporation in this regard shall be provided.	Sole Bidder/ Lead Member of the Consortium	
2.	The Bidder shall have experience of more than 5 (five) years (up to the date of Response submission) in Aerospace/defense domain.	Successfully executed PO copies/self certified affidavit (subject to department scrutiny)	Sole Bidder/ Lead Member of the Consortium	
3.	The Bidder shall have a valid Copy of the PAN certificate and a valid GST registration certificate.	Copy of PAN, certificate and GST certificate	Sole Bidder / Lead Member of Consortium	
4.	The Bidder shall have a sound financial track record as prescribed herein below: i. Minimum annual average Turnover of INR 50 Crores per year for the past 3 (three) financial years (i.e., the financial year 2024-25, 2023-24, and 2022-23) ii. Positive net worth for two years in the past 3 (three) financial years (i.e., financial year 2024-25, 2023-24, and 2022-23). i.e. as per audited statements of accounts, the bidder should not have incurred financial loss during above said period.	A Certificate in this regard shall be issued by a practicing Chartered Accountant/Cost Accountant.	Sole Bidder / Lead Member of Consortium	
5.	The Bidder shall be an Indian Entity under Indian Management and Control.	-do-	Sole Bidder / Lead Member of Consortium	

Sl. No.	Description	Required documentary proof	Compliance by	Page No.
	<p>Legal Entity: The Bidder shall be: (i) a company incorporated under the Companies Act, 2013 or (ii) a partnership firm established under the Limited Liability Partnership Act, 2008, (iii) a trust under the Indian Trusts Act, 1882, (iv) an association of persons or body of individuals incorporated under relevant statutes in India.</p> <p>Foreign Investment: Any foreign investment into the bidding entity shall be as guided by the Foreign Exchange Management (Non-Debt Instrument) Rules 2019 and subject to the Bidder remaining an Indian Entity under Indian Management and Control.</p>			
6.	<p>The Bidder shall not have been blacklisted/under suspension 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 should not be under any illegal expression by the Government of India at the time of submission of response to EOI/bidding.</p>	<p>A signed undertaking executed by the Bidder (as provided under Form XI herein)</p>	<p>Sole Bidder / All Consortium members</p>	
7.	<p>There shall be no outstanding bankruptcy, judgment or pending legal action that could impair the operations of the</p>	<p>A Certificate in this regard shall be issued by a practicing Chartered</p>	<p>Sole Bidder / All Consortium members</p>	

Sl. No.	Description	Required documentary proof	Compliance by	Page No.
	Bidder as a going concern. Also, the Bidder / Consortium Members must be solvent.	Accountant/Cost Accountant.		
8.	In the case of a Consortium, the Bidder must submit a Joint Bidding Agreement signed by all the members of the participating organizations stating the name of the industry/member. The document shall also contain the envisaged responsibilities to be undertaken by each member of the consortium to the best of the knowledge available from the EOI. Bidder shall ensure that Consortium shall retain the same Members, unless otherwise permitted by LPSC and shall remain in existence during the term of the contract.	Joint Bidding Agreement	Lead member of the Consortium	
9.	As per the Rule 144 (xi) of General Financial Rule 2017, any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy service and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the competent authority ie., Department for Promotion of Industry and Internal Trade (DPIIT). Hence, Vendors or Agents of a Vendor (Indian or others) from a country sharing border with India shall submit	Registration made with Department for Promotion of Industry and Internal Trade (DPIIT), GoI	Sole Bidder / All Consortium members	

Sl. No.	Description	Required documentary proof	Compliance by	Page No.
	copy of valid registration made with Department for Promotion of Industry and Internal Trade (DPIIT), Government of India along with the tender mandatorily, without which the offer will be treated as invalid.			
10.	The Bidder shall have valid AS 9100 Rev D & ISO 9001:2015 certification	Relevant documentary evidences	All Consortium members	
11.	A Bidder shall not submit multiple bids through other Affiliates.	NIL	Sole Bidder / Lead Member of Consortium/ All Consortium Members	

FORM-IV - Financial Strength

Financial Information of Sole Bidder / Lead Member in case of Consortium (to be certified by Statutory Auditor ONLY)

Heads	FY 2022-23	FY 2023-24	FY 2024-25
Turnover (Rs. In Crores)			
Net Revenue from Operations (in INR Crores)			
PAT (Profit After Tax)			
% of Revenue from Aerospace/Space Segment/Unit			
Net worth			

Mandatory Supporting Documents: Auditor certified financial statements for the last three-years (i.e., financial year 2024-25, 2023-24, and 2022-23), as Annexures (please provide the profit and loss statement, balance sheet, cash flow statement and schedules).

FORM-V - Experience in Aerospace Projects (Sole Bidder / Lead member of the Consortium)

Sl. No.	Project name	Launch Vehicles/Satellites /Aerospace	Client/ Organization on Name	Date of contract/ issue of work order	Project Value	Status (Ongoing /Completed)	Page No.

Project Data Sheets for each individual project

Name of the Aerospace/Space Industry	
Scope of Work	
PO Date	
Value of the Contract (INR/Any other currency)	
Present Status of the PO*	
Type of System**	
Application***	
Is any part of the above work subcontracted to other Parties? If yes, provide the details	
Name of the sub-contractors	Description of activity outsourced to sub-contractors (in %age of PO value with each subcontractor)

* If completed, completion certificate from user agency may be furnished. Delivery date as per Purchase order & actual delivery date shall be mentioned.

** Indicate whether it is electronics/electrical/mechanical/propulsion/software or any other system

*** Mention if the system is for on-board or ground or any other use

Note – For work orders/purchase orders/completion certificates/contract agreements awarded in any currency other than INR, the applicable exchange rate for converting to INR for the purpose of determining the project value would be the exchange rate prevailing as on the date of award of the respective project.

FORM-VI - Experience in THCS & ventilation system Projects (Sole Bidder / Any member of the Consortium)

Sl. No.	Project name	THCS & ventilation system/subsystem/component	Client/ Organization on Name	Date of contract/ issue of work order	Project Value	Status (Ongoing /Completed)	Page No.

Project Data Sheets for each individual project

Name of the Aerospace/Space Industry	
Scope of Work	
PO Date	
Value of the Contract (INR/Any other currency)	
Present Status of the PO*	
Type of System**	
Application***	
Is any part of the above work subcontracted to other Parties? If yes, provide the details	
Name of the sub-contractors	Description of activity outsourced to sub-contractors

* If completed, completion certificate from user agency may be furnished. Delivery date as per Purchase order & actual delivery date shall be mentioned.

** Indicate whether it is electronics/electrical/mechanical/propulsion/software or any other system

*** Mention if the system is for on-board or ground or any other use

Note – For work orders/purchase orders/completion certificates/contract agreements awarded in any currency other than INR, the applicable exchange rate for converting to INR for the purpose of determining the project value would be the exchange rate prevailing as on the date of award of the respective project.

FORM-VII - Availability of Design infrastructure

Infrastructure and facilities available with the Bidders against the given requirements shall be submitted. In case of a consortium, infrastructure and facilities possessed by all the members cumulatively shall be considered for this evaluation.

1) CAD & simulation infrastructure assessment:

Sl. No.	Facility	Available spec.	Remarks
1.	Design & analysis lab		No. of workstations, software licenses can be mentioned

Note: Photographs/Brochure of above listed facilities may be given as Annexures

2) Manpower assessment: (min. 5 qualified & experienced Engineers)

SL. No.	Streams/Discipline	No of skilled Engineers	Relevant work experience
1.	Design		
2.	Analysis (Flow & thermal + Structural)		

FORM-VIII - Availability of fabrication infrastructure

Infrastructure and facilities available with the Bidders against the given requirements shall be submitted. In case of a consortium, infrastructure and facilities possessed by all the members cumulatively shall be considered for this evaluation.

SL. No.	Streams/Discipline	Facility availability (Yes/No)	No of Engineers	No of Supervisors	No of Technicians
1.	Material cutting facility				
2.	CNC machines				
3.	Vacuum Brazing facility				
4.	Materials controlled storage area (min. 50 m ²)				
5.	TIG/MIG/Electron Beam/Laser welding				
6.	Metrology & inspection				
7.	NDE inspection facility				

Whether the Party has similar experience of providing technical/skilled manpower support (from April 01, 2020 onwards) to any Government/ Public sector Industry (Aerospace Sector). If yes, provide the following details.

Sl. No.	Name of the organization supported	Scope of work	No. of Manpower deployed	Remark

FORM-IX - Availability of assembly & integration infrastructure

Infrastructure and facilities available with the Bidders against the given requirements shall be submitted. In case of a consortium, infrastructure and facilities possessed by all the members cumulatively shall be considered for this evaluation.

Marking scheme

Sl. No.	Parameter	Max. Marks
1.	Manpower (Welders & NDE technicians)	2
2.	Material handling equipments	1
3.	Clean room having area > 200m ² , class > 100000	2
4.	Assembly area > 200m ²	5

Details of the following should be provided as annexures.

FORM-X - Availability of Environmental testing infrastructure

Infrastructure and facilities available with the Bidders against the given requirements shall be submitted. In case of a consortium, infrastructure and facilities possessed by all the members cumulatively shall be considered for this evaluation.

Marking scheme

Sl. No.	Parameter	Max. Marks
1.	Manpower	1
2.	Availability of vibration test facilities	2
3.	Availability of Thermovac test facilities	3
4.	Availability of acoustic test facility	4

Details of the following should be provided as annexures.

FORM-XI - Declaration of Non-Backlisting

(To be provided on the Company letter head)

1. We confirm that our company or firm, _____, is currently not blacklisted in any manner whatsoever by any of the State or UT and or Central Government in India on any ground including but not limited to indulgence in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice.
2. We confirm that our company or firm, _____, is currently not be under liquidation, court receivership or similar proceedings, should not be bankrupt.

(Authorized Signatory)

Signature:

Name:

Designation:

Address:

Seal:

Date

FORM-XII - Declaration of Non-disclosure

**FORMAT FOR NON-DISCLOSURE AGREEMENT
COMPANY LETTER HEAD**

DATE:

I/We, being.....having our office atbeing interested to participate in the EoI for "End-To-end Design, Development, Realisation, Qualification, testing and delivery of Human Rated Thermal & humidity control System along with ventilation system for BAS-01" vide tender enquiry No.....dated..... by Govt.of India, Dept. of Space, Liquid Propulsion Systems Centre, Thiruvananthapuram-695547, Kerala, do hereby declare that:

1. Any information submitted or given by the Department/service receiver to be/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 Organisation as body corporate, but also individually on its Chief Executive and me.
4. The provision of the Indian 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:.....(Authorised signatory with Name & Address)

Place:.....	Duly authorized to sign this NDA for and on behalf of:
Date :	Name & Address of Company:.....
	Company Seal/stamp

