Indian Institute of Science (IISc), Bengaluru

560012

(www.iisc.ac.in)

NOTICE INVITING DOMESTIC TENDER

Under the two-cover bid format

for

Supply and Installation of

STRUCTURAL ACTUATORS AND CONTROL SYSTEM

at

Department of Aerospace Engineering,

Indian Institute of Science

Bengaluru 560012

Tender No: AE/ENQ/TNDR/DRM/25-26/01

Date: 13/05/2025

Email: imemslab.aero@iisc.ac.in

This is a Request for Quote (RFQ) for domestic (India-based) Bidders for the supply and installation of **STRUCTURAL ACTUATORS AND CONTROL SYSTEMS** at the Department of Aerospace Engineering, IISc-Bengaluru.

Section 1 - Bid Schedule

1	**Tender No**	***AE/ENQ/TNDR/DRM/25-26/01***
2	**Tender Date**	**13/05/2025**
3	**Item Description**	Supply and Installation of STRUCTURAL ACTUATORS AND CONTROL SYSTEMS at the Department of Aerospace Engineering, IISc, Bengaluru
4	**Tender Type**	Domestic Tender: Two-bid system (i) Technical Bid (Part A) (ii) Commercial Bid (Part B)
5	**Place of tender submission**	The Chairman's Office, Department of Aerospace Engineering, Indian Institute of Science, Bangalore 560012
6	**Last Date & Time for submission of tender**	**04/06/2025** **05:00 PM**
7	**For further clarification**	Prof. D. Roy Mahapatra Department of Aerospace Engineering, Indian Institute of Science, Bangalore – 560012 Email: imemslab.aero@iisc.ac.in Phone: +91-80-2293 3131

Section 2 – Eligibility Criteria

Prequalification criteria:

1. The Bidder's firm should have existed for at least five years. Bidders should enclose the Company Registration Certificate.
2. Bidder should have ISO 9001:2008 accreditation or ISO 9001:2015.
3. Structural actuators, powerpack, and control system, hereafter referred to as system, should be manufactured/fabricated/assembled in India, for ease of service, spares, and support.
4. **Past Performance:** The Bidder must provide proof for supplying a minimum of 5 units to Centrally Funded Technical Institutes (IISc, IITs, NITs, etc.) of the same or higher capacity in the last 5 years (enclose PO copies, commissioning and system performance reports). Also provide name, address, telephone number, e-mail ID, contact person, etc., of the organization where the supply is made.
5. The Bidder should have a well-equipped system repair center, and qualified technical service personnel for the instrument(s) for more than five years in India, preferably in Southern India. The service personnel should be regularly trained by the system manufacturer/OEM.
6. The quote should come only from an Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor. In this regard, an appropriate letter should be provided on the company letterhead with the manufacturing facility's detailed address, country, contact person's email ID, etc.
7. The Bidder should belong to either Class-1 or Class-2 suppliers, distinguished by their "local content" as defined by recent edits to GFR. They should mention clearly which class they belong to in the cover letter.
    a. Class-1 supplier: Goods and services should have local content equal to or more than 50%.
    b. Class-2 supplier: Goods and services should have local content equal to or more than 20 % and less than 50%.
8. Bidders offering imported products will fall under the category of non-local suppliers. They cannot claim themselves as Class-1 local suppliers/Class-2 local suppliers by claiming services such as transportation, insurance, installation, commissioning, training, and other sales service support like AMC/CMC, etc., as local value addition.
9. Purchase preference, as defined by the recent edits to GFR (within the "margin of purchase preference"), will be given to the Class-1 supplier.

10. MSMEs can seek an exemption from some qualification criteria. IISc follows GFR2017 for such details.
11. The quotations should be on a FOR-IISc Bengaluru basis in INR only.
12. The bidder should sign and submit the declaration for Acceptance of Terms and Conditions as per Annexure 4.
13. The Bidder must not be blacklisted/banned/suspended or have a record of any service-related dispute with any organization in India or elsewhere. A declaration to this effect has to be given as per Annexure 3.
14. Any information furnished by the bidder found to be incorrect, immediately or later, would render the bidder liable to be debarred from tendering/taking up work in IISc, Bengaluru.

Cancellation of Tender:

1. Bids with inconsistencies to this Section 3 Terms and Conditions and Section 4 Technical Specifications will be rejected.
2. Notwithstanding anything specified in this tender document, the IISc purchase committee, in its sole discretion, unconditionally and without having to assign any reason, reserves the right:
    a. To accept OR reject the lowest tender, any other tender, or all the tenders.
    b. To accept any tender in whole or in part.
    c. To reject the tender, the offer does not confirm the tender terms.

Section 3 – Terms and Conditions

Documents Required for Submission of Tender:

1. All documentation in the tender should be in English.
2. Tenders should be submitted in two envelopes (a two-bid system).
    a. **Technical Bid (Part-A)** – A technical bid must be prepared, consisting of Annexure 1-5. Additionally, in Annexure 5, additional remarks from the OEM may be provided to highlight technical features justifying qualification in terms of specifications, provide any additional details, and compare the solution with competitors.
    b. **Commercial Bid (Part-B)** – Indicating item-wise price for the items mentioned in the technical bid, as per the format of quotation provided in the tender, and other commercial terms and conditions.
3. The technical and commercial bids should be placed in separate envelopes and sealed, superscribing the tender description, tender no, and the due date on both envelopes. Both these sealed envelopes are to be placed in a single bigger envelope, which should also be sealed and duly superscripted with the Tender No, Tender Description & Due Date.
4. The single bigger sealed envelope should reach the Office of the Chairman, Department of Aerospace Engineering, Indian Institute of Science, Bengaluru – 560012, India, on or before the due date mentioned in the tender notice. If the due date is a holiday, the tender will be accepted on the next working day. If any of the envelopes are not sealed, the bid will be rejected.
5. All queries are to be addressed to the contact details as mentioned in Section 1 – Bid schedule, item no. 7 of this tender notice.
6. GST/other taxes, levies, etc., should be indicated separately. The Bidder should mention the GST Registration no and PAN in the tender document.
7. If the price is not quoted in the Commercial Bid as per the format provided in the tender document, the bid may be rejected. Incomplete bids will be summarily rejected.
8. The purchase committee reserves the right to accept or reject any bid, annul the bidding process, and reject all bids at any time before the award of the contract without thereby incurring any liability to the affected bidder or bidders, or any obligation to inform the affected bidder or bidders about the same.
9. Leaflets and Descriptive Literature: Full descriptive particulars and drawings of the equipment offered must accompany the tender. Information regarding the country of

manufacture or origin of materials used in the manufacture of the articles should be furnished.

Validity of the Offer:

The offer shall be valid for 60 days from the commercial bid's opening date.

Evaluation of Offer:

1. The technical bid (Part A) will be opened first and evaluated.
2. Bidders meeting the required eligibility criteria in Section 2 of this document shall only be considered for the Commercial Bid (Part B) opening. Further, agencies not furnishing the documentary evidence as required will not be considered.
3. Prequalification of the bidders shall not imply final acceptance of the Commercial Bid. The bid may be rejected at any point during the technical evaluation or the commercial evaluation. The decision regarding acceptance and/or rejection of any offer in part or full shall be the sole discretion of IISc Bengaluru, and the decision in this regard shall be binding on the bidders.
4. The contract award will be subject to acceptance of the terms and conditions stated in this tender.
5. Any offer that deviates from the vital conditions (as illustrated below) of the tender is liable to be rejected:
   a. Non-submission of complete offers.
   b. Receipt of bids after the due date and time or by email/fax (unless specified otherwise).
   c. Receipt of bids in open conditions.
6. In case any Bidder is silent on any clauses mentioned in these tender documents, IISc Bengaluru shall construe that the Bidder has accepted the clauses as of the tender, and no further claim will be entertained.
7. All amendments, time extensions, clarifications, etc., within the tender's submission period will be communicated electronically. No extension of the bid due date/time shall be considered due to a delay in receipt of any document(s) by mail.
8. No revision of the terms and conditions quoted in the offer will be entertained after the last date and time fixed for receipt of tenders.
9. The lowest bid will be calculated based on the total price of all items tendered for the basic equipment, accessories selected for installation, operation, preprocessing, and post-processing, optional items, recommended spares, warranty, and annual maintenance

contract. The purchase committee seeks the most cost-effective solution for obtaining a new product. A Bidder is encouraged to propose all avenues, including but not limited to buy back of the existing product, turnkey upgrade of an existing product, or purchase of new parts for the product.

10. A system comprising servo-hydraulic-type actuators is desirable. If a vendor submits a list of any other system made by any other company, it will not be considered.
11. The bidder may furnish additional information to establish the capabilities needed to complete the envisaged work successfully. It is, however, advised not to furnish superfluous information.
12. In any circumstance, if the institution wants to verify the previous supply details, such as purchase-related documents, the vendor should be in a position to arrange for it without hesitation.
13. With prior intimation and necessary approval, the bidder may visit the installation site before tender submission.
14. If required, the Bidder should give a technical presentation by their expert to the tender committee to clarify their queries, if any, during the technical evaluation.
15. A factory tour at any point in time during the technical evaluation should be arranged by the supplier upon prior notice of one week.

Pre-requisites:

The bidder shall provide the prerequisite installation requirements of the equipment along with the technical bid.

Spares:

Bidders must provide a detailed list of spares and a user manual with a detailed Bill of Materials for all Parts. It should include the Spares Column with the Manufacturer part Number, Qty, and availability of stock for 10 Years.

Warranty:

The complete system must be under warranty for a minimum period of 1 year (year-wise breakup value should be shown in the commercial bid). An additional two years of extended warranty must be quoted as an optional item. The Bidder should include the cost of any spares needed during the warranty period, including electronics, subcomponents, and software. If the instrument is defective, it has to be replaced or rectified at the bidder's cost within 30 days from

receipt of written communications from IISc, Bengaluru. If there is any delay in replacement or rectification, the warranty period should be extended.

Annual Maintenance Contract (AMC):

An Annual Maintenance Contract (AMC) for a minimum of 3 years following the warranty period shall be offered as an essential optional item. Calibration must comply with ISO 17025, 75001, and 9513, ASTM E4, and ASTM E83, as applicable. Annual calibration, maintenance support, and availability of spares shall be ensured for at least 10 years. A detailed year-wise cost breakdown must be provided. AMC costs will not be considered in determining the bidder's classification under domestic content (Class 1 or Class 2), as per the eligibility criteria in Section 2.

Delivery, Installation, Acceptance, Training, and Demonstration:

1. **Delivery:** The lead time to delivery of the system at IISc, Bengaluru, should not be more than 10-14 weeks from the date of receipt of the purchase order. The bidder shall provide a detailed activity/delivery chart for the supply of the system with the bid.
2. **Installation and Acceptance:** The bidder shall provide the lead time from the date of delivery to the completion of installation and testing toward acceptance of the system, within 2 weeks. No partial shipment of the system is allowed.

   Acceptance Criteria: The following test reports are required to be submitted for acceptance of the system after installation. The acceptance criteria are as specified in the technical specifications or better specifications if specified by the bidder:

   (i) Factory certificate of Calibration
   (ii) Vibrational test from an accredited laboratory
   (iii) On-site calibration and demonstration of test parameters as per specifications
3. **Installation and Training:** After successful installation and inspection activities as listed below, the date of taking over the entire system by the IISc, Bengaluru, shall be taken as the start of the warranty period.
   a. The bidder should offer for pre-dispatch inspection free of charge at their premises for 3 members for at least 3 days, and onsite training to 5 members for at least 5 days after installation in our premises.
   b. For Installation and demonstration of the actuators and control system, a rigid fixture will be provided with provision for end-point mounting where the actuator brackets can be fastened.
   c. The bidder shall conduct system testing and validation as per specifications, and

provide technical training and demonstrations for facility personnel at no additional cost.

d. The bidder must submit an installation procedure and demonstrate load-stroke performance across frequencies. System stability, accuracy, thermal, and acoustic performance shall be validated through a minimum of 8 hours of continuous operation.

Payment Terms:

100% payment (except AMC) will be made on delivery, satisfactory installation, and completion of qualification, subject to TDS as per regulations. AMC cost (in case of orders placed after the warranty period expires) will be paid half-yearly at the end of six months, subject to satisfactory service. Price basis should be FOR-IISc Bengaluru basis only. According to GFR, advance payment to domestic bidders cannot be made unless an amount of bank guarantees equal to the same is furnished.

Statutory Variation:

Any statutory increase in the taxes and duties after the bidder's offer, if it takes place within the original contractual delivery date, will be borne by IISc, Bengaluru, subject to the claim supported by documentary evidence. However, if any decrease occurs, the advantage will have to be passed on to IISc, Bengaluru.

Disputes and Jurisdiction:

Any legal disputes arising from any breach of contract about this tender shall be settled in the court of competent jurisdiction in Bengaluru, India.

Purchase Order:

1. The order will be placed with the bidder whose bid is accepted by IISc based on the terms & conditions mentioned in the tender document.
2. The quantity of the items in the tender is only indicative. IISc, Bengaluru reserves the right to increase /decrease the quantity of the items depending on the requirement.

If the product and service quality is unsatisfactory, IISc, Bengaluru, reserves the right to cancel or amend the contract.

Section 4 – Technical Specifications

Structural Actuators and Control Systems

Part 1: Actuators & Accessories (quantity - 2 Nos.)

- Load Capacity: Suitable load capacity (25 kN or higher) servo-hydraulic actuator for fatigue loading rated double acting, double-ended equal area type, monolithic piston drive type design.
- Hydraulic Pressure: Should be possible to be operated with a rated pressure of 210 bar - the catalog bearing the make and model number of the actuator should be attached along with the technical bid.
- Servo Capacity: Suitable flow rated (minimum 24 LPM) direct drive servo valves for contamination insensitivity operation, (preferred make Rexroth Bosch/Parker/Moog) to conducting dynamic loading or vibration tests with frequencies ranging from 0 Hz to 70 Hz with a resolution of 0.001 Hz. (Catalog bearing the make and model number of the direct drive servo valves, along with the frequency response curve, should be attached along with the technical bid.)
- Stroke: ± 75 mm (total 150 mm) displacement with built-in digital stroke measurement with a resolution of 0.001 mm or better and having an accuracy of ± 0.5% or better (preferred sensor make Temposonics). The sensor should be the standard one used in a similar previous supply, and a reference (make and model number) needs to be provided as part of the technical bid.
- Fluid Line and Interfaces: It should include all required adaptors for interconnections and have the provision to support mounting of pressure gauge, valves, and connection to the pressure and return line of the accumulator.
- End Joints for Actuators: 25kN Swivel Joint with Swivel rod end, and base assembly of up to 25kN dynamic force rating. Backlash adjustable design with swivel angle of +100 deg and -30deg. Rotating or Tilt angle +/-12 degrees. Required high-strength fasteners to be supplied. Eyebolts on the actuator head are to be provided for easy lifting of actuators during mounting and dismounting.
- Mounting Bracket: Actuators should be provided with all required mounting brackets or end attachments in order to fasten to the strong frame structure and be able to withstand high load (factor of safety for static and dynamic loads required are 1.25 and 1.1, respectively), as side load with hydraulic cushions at both ends.

Part 2: Load cells (quantity - 2 Nos.)

Key technical specifications:

- ±25 kN dynamic capacity load cell.
- Static Overload capacity: 300% of read capacity.
- Precision-machined shear web design for protection against side load and having high stiffness.
- 350 Ohm precision transducer class strain gauges.
- Non-linearity: ±0.3% of full scale
- Accuracy: ISO7500-1 Class 0.5
- Resolution: 0.02% of Full-Scale Reading.
- Threaded Adaptors

Part 3: Hydraulics and Accessories (quantity - 1 No.)

- Minimum 21 LPM or above flow rate Hydraulic Power Pack for Constant Pressure (210 bar) Hydraulic Oil Supply to meet the test applications and frequencies as mentioned above should be offered. The pump should be a gear pump (preferred make Rexroth Bosch/Parker).
- Safety interlock features to trip at Over Temperature, pressure, Low Oil Level, Filter Clogging, Power Failure, Motor overload, etc., shall be incorporated. The catalog bearing the make and model number of the gear pump should be attached along with the technical bid.
- 10 micron or better return line filter (mention make and model number of the filter) to filter the oil from a hydraulic actuator. It should be compatible with MOBIL DTE 25 or 46 oil. The first filling should be done by the Bidder for free.
- A bottle neck type cooling tower with sufficient capacity should be provided to keep the oil temperature within 58 ℃ for continuous operation – attach report/performance sheets of the cooling tower.
- Pressure line, return line, and drain hoses are to be supplied along with the power pack, with the test report. The minimum criteria operating pressure is 210 bar and above, with a minimum burst pressure of 280 bar. Distribution manifold of one in two out with manual shut-off valves to be supplied.
- The Bidder should visit the site before dispatch to finalize the layout and length of the hoses. The tentative distance between Power Pack site to the test location is minimum 15 m.

Part 4: Controller and Accessories - Four Station and Four Channels Digital Servo Controller

- Digital Signal Processor (DSP) based closed-loop servo controller with multi-station control capability
- The proposed controller should be configurable from single station single channel to multi-station multichannel operating at a single instance within the hardware capacity of the controller.
- Controller Type: Digital Controller for Servo Hydraulic Application.
- 4 Number of Stations/ Maximum number of tests that can run independently and simultaneously, including full bandwidth capacity of the respective feedback sensors and circuits independently operating and fetching data, where the data or signal can be acquired in real-time using external data acquisition channels.
- 4 Number of Control channels for servo-hydraulic actuators (compatible with 2 and 3-stage servo valve configuration).
- 24-bit Control Electronics with 32-bit Data Acquisition are the minimum requirements.
- Data sampling rates of 6 kHz or better
- Data loop update frequency 6 kHz update combined with 40-bit servo calculation.
- Configurable ADC Channels 16 Nos or more for data acquisition.
    - 4 channels of load cell input
    - 4 Strain Channels (120/350 Ohm quarter, half, and full bridge strain gauges)
    - 8 High-level analog channels with +/-10V (for external analogue input to the controller)
- 8 Encoder Channels
- 4 DAC channels (Servo output or Signal output with voltage range +10V)
- 4 Analog output channels with voltage range +/-10V)
- 16 Digital Input and Digital Output Channels
- Auto calibration and digital auto-zero capability
- Easy downloadable firmware for future upgrades, without making any changes to the controller.
- Controller should be configurable to conduct seismic simulation tests and Aerospace structural and component testing Applications.
- Watchdog timer for the safety trip of hydraulics in the event of a power trip or crash
- Adaptive control feature for auto-tuning: Mean/amplitude, error/gain matrix, stiffness or servo-differential-feedback ratio correction

- All signal conditioners equipped with software programmable settings and auto-recognition, and auto calibration for strain bridges against built-in shunt settings in engineering units
- Seamless programmable mode transfer to switch between control modes
- User selectable and programmable filters (Butterworth, Chebyshev, etc.) for signal shaping
- Operation from 100-260 V 50/60 Hz single phase mains.
- Operational ambient temperature 10 to 55 deg C
- Enclosure to house controller and operating System. The enclosure is on wheels for easy relocation.
- Tablet-based control panel with provision to move the actuator. Thumb wheel for actuator fine movement. Display Load, Stroke, strain parameters, oil temperature, working pressure, and number of working hours. Powerpack on/low/high/off operations, Emergency shutdown button at a convenient position
- Electrical cables for displacement transducers, load cells, and servo valves, each minimum 10 m long, should be provided as a minimum requirement.
- Two emergency push buttons, one at the Controller and one with a 10 m long cable, should be provided.
- Compatible for capturing data for remote health monitoring. Suitable to transmit machine usage, fault log, and service history, and to be quoted as mandatory.
- Supports cross-platform web application interface (OEM Make, not third party) to transmit online readouts like stroke, force, and computed channels for remote test monitoring over the Web or LAN. featuring
    - Live online readout, Strip chart, Video streaming, and Text Chatting option.
    - Test information about specimen, batch, operator etc.
    - Option to monitor the machine on the dashboard.
    - Machine health monitoring for preventive maintenance.

Part 5: Application Software

- Software performs cyclic, static, Multi-Step, and Time History (custom) waveform testing.
- The application software should be able to simulate the following waveforms:
    - Harmonic (Sine, Ramp, and Pulse)
    - Sine Sweep (Increasing, Decreasing)
    - Sine on Sine

    - Random (Natural: Recorded, User-defined).
- Test can be done in stroke, load, and strain control modes.
- Single and multi-channel applications, Display meters for current readouts, maximum and minimum readouts, peak and valley readouts, set point, and cycle counters.
- Automatic adaptive control to be provided if the required stroke movement is not achieved
- Amplitude and mean input in terms of displacement
- Frequency input in terms of 'Hz'
- Online cycle count computation
- Resonance search
- Plot of Amplitude and phase spectrum
- Test termination conditions, including limits on the number of cycles to stop
- Online graphics including choices of plots amongst actuators, feedback, Acceleration feedback, and all log channels selected
- If the data recording option is selected, data will be logged for every specified interval in terms of cycles, 6 kHz or better logging rate
- Data reduction options are available when logging data in real-time or during export of data.
- Data recording collects time and/or peak-valley data in binary formats. Data is exported to MS Excel/text format, where report generation and graphing can be performed.
- Report Generator: Data playback, Calculations for cyclic tests: amplitude, area under curve, phase angle, stiffness, modulus, etc. Report template in Excel format.

Part 6: System Operating Software

- Windows 11 or the latest version of software, facilitating basic operation of the system
- Basic operational software to enable manual operation of the test system, including system setup and essential console operations
- Software should be capable of conducting tuning of all control channels with PID gain control adjustment
- Should be capable of acquiring data from all channels and displaying it live
- Servo Loop update and simultaneous data sampling rate of min 6 kHz
- Automatic and manual settable data acquisition rates for different test applications
- Electronic safety limit (user settable) Interlocks on all control channels to protect transducers and the system from overloading and over-travelling
- Should permit calibration of all sensors and transducers, and auto-calibration, and auto-

gain adjustments depending on the nature of the job/test

- Safety interlock like, over temp of oil, over and under pressure of oil, emergency stop, filter clog indication, power failure indication, motor overload to be monitored by the software, and should be displayed accordingly
- Should be capable of applying cyclic loads in different waveforms like ramp, harmonic, sine sweep, sine on sine, random, triangle, and seismic
- Advanced graphics to view all feedback and set points on single and multiple graphs.
- Open access call library to enable development of custom software to access all the licensed functions and features on the controller, including basic operations on load frame and pump, control waveform generation, data acquisition, servo settings, safety limit interlocks, etc.
- Auto servo tuning application for system setup in selected control mode.
- Application software for remote access to system status and test status at various levels of management.

Part 7: Host Computer

- Processor: Intel Core i5 13th gen or higher
- RAM: 16GB DDR4 non- ECC Memory or higher
- Solid State Drive: 500GB or higher
- SATA Hard drive: 1 TB or higher
- Operating System: Windows 11 Pro or the latest version in English.
- Display: 27-inch LED monitor or better
- Wired Mouse and Keyboard
- Licensed Microsoft Office
- 3kVA UPS with a minimum 30 minutes backup for the Controller and PC

Safety Features

- Facility to apply safety limits for minimum and maximum values for load and Displacement channels.
- System pressure off and test execution need to be stopped, held, and returned to the position when the safety limit is triggered.
- Other safety mechanisms and protocols as required.

Section 5- Technical Bid

The technical bid should furnish all requirements of the tender along with all annexures in this section and be submitted to:

The Chairman

Department of Aerospace Engineering,

Indian Institute of Science Bengaluru – 560012, India

With mention of 'Kind attn. Prof. D Roy Mahapatra'

Annexure-1:

Details of the Bidder

The bidder must provide the following mandatory information & attach supporting documents wherever mentioned:

S. No	Items	Details
1.	Name of the Bidder	
2.	Nature of Bidder (Attach an attested copy of the Certificate of Incorporation/ Partnership Deed)	
3.	Registration No. /Trade License (attach attested copy)	
4.	Complete contact details (address, mobile no. / telephone no. / Email ID /website address)	
5.	PAN No. (Attach copy)	
6.	GSTIN No. (Attach copy)	
7.	Bank Account Details (attach a copy of a cancelled cheque or a letter from the bank.)	
8.	Category – (a) OEM, (b) OEM authorized distributor (mention clearly), (c) Another Supplier	
9.	Authorization letter by the OEM (Yes / No)	
10.	Details of the contact person, address, mobile number, email ID, etc.	

Signature of the Bidder

Name

Designation, Seal Date:

Annexure-2:

Declaration Regarding Experience

To,

The Chairman,

Department of Aerospace Engineering,

Indian Institute of Science,

Bengaluru – 560012, India

Ref: Tender No: AE/ENQ/TNDR/DRM/25-26/01

Dated: 13/05/2025

Subject: Supply and installation of **STRUCTURAL ACTUATORS AND CONTROL SYSTEM** at Department of Aerospace Engineering, IISc Bengaluru.

Respected Chair,

I have carefully reviewed the Terms & Conditions in the above-referred tender. I hereby declare that my company/firm has _____ years of experience in supplying and installing the Structural Actuators, powerpack, and control system of 25kN capacity or above.

(Signature of the Bidder)

Printed Name

Designation, Seal Date:

Annexure-3:

Declaration regarding track record

To,

The Chairman,

Department of Aerospace Engineering,

Indian Institute of Science,

Bengaluru – 560012, India

Ref: Tender No: ***AE/ENQ/TNDR/DRM/25-26/01***

Dated: 13/05/2025

Dear Sir/Madam

I have carefully reviewed the Terms & Conditions in the above-referred tender. I hereby declare that my company/ firm is not currently debarred/blacklisted by any Government / Semi-Government organizations/institutions in India or abroad. I further certify that I am a competent officer in my company/firm to make this declaration.

Or

I declare that my firm is debarred/blacklisted as per following details:

S. No	Country in which the company is Debarred/ blacklisted/ case is Pending	Blacklisted/debarred by Government / Semi-Government/ Organizations/ Institutions	Reason	Since when and for how long

(NOTE: In case the company/firm was blacklisted previously, please provide the details regarding the period for which the company/firm was blacklisted and the reason/s for the same).

Yours faithfully

(Signature of the Bidder)

Name

Designation, Seal Date:

Annexure – 4:

Declaration for acceptance of terms and conditions

To,

The Chairman,

Department of Aerospace Engineering,

Indian Institute of Science,

Bengaluru – 560012, India

Ref: Tender No: ***AE/ENQ/TNDR/DRM/25-26/01***

Dated: ***13/05/2025***

Dear Sir/Madam

I have carefully reviewed the Terms & Conditions mentioned in the above-referred tender document. I declare that all the provisions of this tender document are acceptable to my company. I further certify that I am an authorized signatory of my company and am, therefore, competent to make this declaration.1 copy of this tender document (duly sealed and signed on all pages) is being attached to this bid.

Yours faithfully,

Seal & Signature with name & date and PAN & Aadhar card no. of the signatory.

Annexure – 5:

Details of items quoted with technical specifications:

1. **Technical Compliance Table**

S. No.	Product Name	OEM Company Name	Part/Catalogue Number	Product Description	Detailed technical specifications (Use the required number of sub-rows for each parameter)				Compliance "Yes/No"	Remarks
					Specification parameter	Unit	Desired value (as in Tender)	Proposed value		
1										
2										
3										
	Accessories (essential/ optional)									
	Spares									

2. **Product brochures and user manuals** (add all relevant documents here).

Annexure 6 – Commercial Bid

The commercial bid should be furnished with all requirements of the tender, with supporting documents as mentioned:

To,

The Chairman,

Department of Aerospace Engineering,

Indian Institute of Science,

Bengaluru – 560012, India

Ref: Tender No AE/ENQ/TNDR/DRM/25-26/01 Dated: 13/05/2025

Dear Sir/Madam,

S.No	**Description**	**Catalogue No.**	**Quantity**	**Unit Price**	**Sub Total**
1.	Essential items noted in the technical specification				
1. a					
1.b					
1.c					
2.	Optional items noted in the technical specification				
2. a	… (details of essential items)				
2.b	…				
3.	Accessories for operation and installation				
4.	All consumables, spares, and software are to be supplied locally.				
5.	Warranty (3 years)				
6.	AMC 3 years beyond warranty				
7.	FOR IISc, Bengaluru				

Any additional items, such as Spares, Hardware/PCBs Likely to go obsolete after the next 3 Years

S.No	Description	Cat. Number	Quantity	Unit Price	Subtotal

Annexure 7 –

Declaration of Local Content by Local Supplier

Subject: Public Procurement (Preference to Make in India)

References:

Preference to Make in India, including counter-offering, will be as per the Public Procurement (Preference to Make in India) Order 2017, available in the following links

https://dipp.gov.in/publicprocurements
http://dipp.nic.in/sites/default/files/publicProcurement_MakeinIndia_15June2017.pdf
http://dipp.nic.in/sites/default/files/Revised-PPP-MII-Order-2017_28052018.pdf
https://dipp.gov.in/sites/default/files/PPP-MII%20Order%20dt%2029th%20May%2019_0.pdf
https://dipp.gov.in/sites/default/files/PPP%20MII%20Order%20dated%204th%20June%202020.pdf

We hereby declare with reference to the above subject and references that **M/s ----------**

(Tick whichever is applicable as below)

"Class-I local supplier" meeting the requirement of minimum local content equal to 50% (fifty percent) or more defined in the above government notification for the goods and services.

(or)

“Class-II local Supplier” meeting the requirement of local content 20% to less than 50% (fifty percent) defined in the above government notification for the goods and services

(or)

Non-Local supplier (If not belonging to Class-I & Class-II)

Please mention the details against the following:

Enquiry no: _____**dated.** _____

Type of Supplier (Class-I/Class-II)_____

Product: _____

Project:_____

Details of the location at which local value addition will be made are as follows**:** _____

We also understand that the false declarations will be in breach of the code of Integrity under rule 175(1)(i)(h) of the General financial rules for which a bidder or its successors can be debarred for up to two years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under law.

Authorized Signature M/s ----------

(Signature and stamp)

Place:_____
Date:_____

Section 6 – Checklist

(This should be enclosed with a technical bid- Part A)

The following items must be checked before the Bid is submitted:

Sealed Envelope "A": Technical Bid

Annexure 5- Technical Bid (each page signed by the authorized signatory and sealed) with the following annexures:

a) Annexure 1: Bidders' details

b) Annexure 2: Declaration regarding experience

c) Annexure 3: Declaration regarding clean track record

d) Annexure 4: Declaration for acceptance of terms and conditions

e) Annexure 5: Details of items quoted.

f) Annexure 7: Declaration of Local Content by Local Supplier.

Copy of this tender document duly signed by the authorized signatory on every page and sealed. All Annexures are to be submitted on the company letterhead by the supplier.

Sealed Envelope "B": Commercial Bid

Annexure 6: Commercial Bid

Your quotation must be submitted in two envelopes: Technical Bid (Envelope A) and Commercial Bid (Envelope B), clearly indicating the Tender description, Tender No., and the due date on both envelopes. These should be sealed and placed inside a larger envelope, which must also be sealed and appropriately marked with the Tender No., Tender description, and Due Date.