



TENDER DOCUMENT

Tender No: IISc/Purchase/CPS/2024-25-4

Dated 1st October 2024

For

“Supply of Customized Quadruped Walking Robot Systems”

Centre for Cyber Physical Systems

Division of Interdisciplinary Sciences

Indian Institute of Science Bengaluru - 560012

GSTIN: 29AAATI1501J2ZV

Website: <https://iisc.ac.in/all-tenders>

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1. Tender Notification

Tender No. IISC/PURCHASE/CPS/2024-25-4

Scope of Work	Supply of Customized Quadruped Walking Robot Systems
Tender Date	1 st October 2024
Quantity	7
Tender Type	Two-bid system A) Technical Bid (Part A) B) Commercial Bid (Part B)
Name of the Client	Centre for Cyber Physical Systems, Indian Institute of Science, Bengaluru
Address of the Client	Chairperson's Office Centre for Cyber Physical Systems Ground Floor, TCS SMART X Hub <i>Landmark: behind CeNSE and near D gate</i> Indian Institute of Science Bengaluru – 560 012
Earnest Money to be deposited with the tender	Rs. 5,00,000
Last date and Time for submission of tender	31 st Oct 2024 4:00 PM
Opening of Tender (Technical Bid)	1 st Nov 2024 10:00 AM
Technical demonstration of qualified bidders	15 th Nov 2024 at TCS SMART X Hub
Date and Time of opening of Tender (Financial Bid)	Will be decided and intimated later
Point of contact for any clarification	office.cps@iisc.ac.in

2. Notice Inviting Tender

The Centre for Cyber Physical Systems, Indian Institute of Science invites tenders from eligible Bidders, for **Supply of Customized Quadruped Walking Robot Systems**

Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the Government of India or any State Government of Union of India. (Authorized signatory should provide an undertaking). Tenders from joint ventures are not acceptable.

- 2.1 All Bidders shall provide the required information accurately and enough as per details in Section 4: Eligibility Criteria
- 2.2 The Tenderer shall submit the valid certificate copies of the documents as mentioned in the Section 3 (Eligibility criteria) in technical bid, **failing which the tenderer will be rejected**. If necessary, bidder shall produce all the original documents for verification.
- 2.3 Blacklisted vendors in State / Central Govt. Departments / Autonomous bodies / Institutions are not eligible to quote, if found such tenders will be rejected.
- 2.4 The material shall be approved by the Purchase Committee, IISc before execution of the work.
- 2.5 Further details of the work can be obtained from the purchase committee.
- 2.6 The rates quoted should reflect all taxes. The bid evaluation will be done inclusive of all Taxes / Cess. / Royalty etc. The statutory levies as per Govt. guidelines will be deducted. The IISc reserves the right to accept / reject any or all the tenders without assigning any reasons.
- 2.7 The work shall be commenced within 30 days from the date of purchase order. The purchase committee will make frequent and unannounced visits to the tenderer's location and inspect the quality of work as and when needed. Any lapse in quality during this process may lead to cancelation of the order and necessary actions will be taken to get the work executed through alternate agency at the risk and cost of the former Tenderer.
- 2.8 Conditional tenders will not be accepted and is liable for rejection.
- 2.9 Bidders who meet the above specified minimum qualifying criteria, shall be eligible.
- 2.10 Even though the Bidders meet the above criteria, they are subject to be disqualified if they have:
 - Made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
 - Record of poor performance such as abandoning the works, poor quality, inordinate delays in completion, litigation history, or financial failures etc.

2.11 Amendment of Tender documents

Before the deadline for submission of tenders, the IISc may modify the tender documents by issuing corrigendum / addendum.

Such corrigendum/ addendum thus issued shall be part of the tender documents and shall be published online.

Prospective bidders shall be given reasonable time in which to take corrigendum/ addendum into account in preparing.

2.12 Documents comprising the Tender

The Technical Bid submitted by the Bidder shall contain the documents in a sealed envelope as follows:

- a) Earnest Money Deposit paid in the specified form.
- b) Any other documents / materials required to be completed and submitted by Bidders in accordance with these instructions. More details are in Section 5 (Checklist). The required documents shall be filled in without exception.

The bidder shall submit the hard copies of in two bid system. The tender documents shall reach the designated office within the deadline. The checklist has the details.

The hardcopies should be sent to the following address:

Chairperson's Office
Centre for Cyber Physical Systems
Ground Floor, TCS SMART X Hub
Landmark: Behind CeNSE and near D Gate
Indian Institute of Science,
Bengaluru, India - 560012

The bid must contain the technical bid and financial bid in two separate folders.

The technical bid should not contain any price information. Non-conformance will result in disqualification.

2.13 Tender validity

Tenders shall remain valid for a period not less than **180 days** after the deadline date for tender submission. A tender valid for a shorter period shall be rejected by the IISc as non-responsive.

In exceptional circumstances, prior to expiry of the original time limit, IISc may request that the Bidders may extend the period of validity for a specified additional period. The request and the Bidders' responses shall be made in writing or by email (office.cps@iisc.ac.in). A Bidder may refuse the request without forfeiting his/her earnest money deposit. A Bidder agreeing to the request will not be required or permitted to modify the tender but will be required to extend the validity of earnest money deposit for a period of the extension, and in compliance with Clause 2.18 and 2.22 in all respects.

Notwithstanding anything specified in this tender document, IISc Bengaluru, in its sole discretion unconditionally and without having to assign any reason, reserves the rights:

- a. To accept OR reject lowest tender or any other tender or all the tenders.
- b. To accept any tender in full or in part.
- c. To reject the tender, offer not confirming the tender terms.

2.14 Earnest money deposit:

The Bidder shall furnish, as part of the tender, earnest money deposit (EMD). The Bidder has to pay the Earnest Money Deposit (EMD) in the form of Demand draft drawn on "The Registrar, IISc" payable at "Bengaluru".

The original DDs has to be submitted along with the hard copies of all the documents in a sealed cover as a pre-qualification bid (Technical bid).

The EMD amount will have to be submitted by the bidder taking into account the following conditions:

- a) The entire amount must be paid in a single transaction.
- b) The earnest money deposit of unsuccessful Bidders will be returned after awarding the contract to the successful bidder.

The earnest money deposit may be forfeited if the Bidder withdraws the tender after tender opening during the period of tender validity.

2.15 Provisions for Micro, Small and Medium Enterprises (MSME):

The MSME registered bidder should provide the registration certificate along with the technical bid documents. The MSME registration to specify manufacturing / service of the tender item (s).

Policy is meant for procurement of only goods produced by MSMEs. The bidder must mention clearly if they are the manufacturer or a trader.

Participating Micro and Small Enterprises quoting price within price band of L1+15%, will qualify to supply a portion of requirement by bringing down price to L1 price in a situation where L1 price is from someone other than a Micro and Small Enterprises.

2.16 Format and signing of Tender

Successful Bidder shall sign all the pages of the tender document as a token of acceptance of all the terms and conditions of the contract.

2.17 Deadline for submission of the Tenders

The Bidder shall submit a set of hard copies of all the documents in a sealed cover to IISc.

IISc may extend the deadline for submission of tenders by issuing an amendment, in which case all rights and obligations of the IISc and the Bidders previously subject to the original deadline will then be subject to the new deadline.

2.18 Late Tenders

Late bids are not accepted. IISc will not be liable (or) responsible for any delay in delivery of the documents.

2.19 Modification and Withdrawal of Tenders

The Bidder may modify or withdraw his tender before the notified last date and time of tender submission. No Tender may be modified after the deadline for submission of Tenders.

Withdrawal or modification of a Tender between the deadline for submission of Tenders and the expiration of the original period of Tender validity specified above may result in the forfeiture of the earnest money deposit.

2.20 Tender Opening:

The IISc will open all the technical bids received on the said date mentioned in Section 1. The IISc will evaluate and determine whether each tender meets the minimum qualification eligibility criteria both financially and technically. Qualified vendors will be invited for a demonstration, details of which are given in Section 4.

The commercial bid of qualified bidders (both technically and financially) will be opened on the said date mentioned in Section 1. IISc will evaluate and choose the lowest bidder.

2.21 Process to be confidential

Information relating to the examination, clarification, evaluation, and comparison of Tenders and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced.

2.22 Clarification of Tenders

To assist in the examination and evaluation, IISc may, at his discretion, ask any Bidder for clarification of his Tender. The request for clarification and the response shall be in writing or by e-mail along with the section number, page number and subject of clarification, but no change in the price or substance of the Tender shall be sought, offered, or permitted.

Any effort by the Bidder to influence the IISc in the Tender evaluation, or contract award decisions may result in the rejection of the Bidders' Tender.

2.23 Examination of Tenders and determination of responsiveness

Prior to the detailed evaluation of Tenders, IISc will determine whether each Tender (a) meets the eligibility criteria (b) is accompanied by the required earnest money deposit and;(c) is substantially responsive to the requirements of the Tender documents.

A substantially responsive Tender is one which conforms to all the terms, conditions, and specifications of the Tender documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality, or performance of the works; (b) which limits in any substantial way, inconsistent with the Tender documents, the IISc's rights or the Bidder's obligations under the Contract; or (c) whose rectification would affect unfairly the competitive position of other Bidders presenting substantially responsive Tenders.

If a Tender is not substantially responsive, it will be rejected by the IISc., and may not subsequently be made responsive by correction or withdrawal of the nonconforming deviation or reservation.

2.24 Correction of errors

No corrections to the submitted bid is permitted by the portal. Tenders determined to be substantially responsive will be checked by IISc.

2.25 Evaluation and comparison of Tenders

Opening of the Financial bid will be preceded by the evaluation of the Pre-qualification Offer (Technical bid), followed by a technical demonstration in IISc. The technical bid evaluation not only includes evaluation of the capability, capacity and credibility of the Bidder, but also the responsiveness to any technical questions asked. See Section 4, Appendix I and II for more details. Evaluation of the Prequalification Offer will be done by the Evaluation Committee constituted for the purpose. After evaluation is completed, the technically qualified Bidders will be notified and will be intimated for technical demonstration. The demonstration criteria will be according to Appendix II. Only those bidders who qualify the demonstration criteria will be considered for opening of the financial bid.

The IISc will evaluate and compare the Tenders and form a comparative statement.

In evaluating the Tenders, the IISc. will determine for each Tender the evaluated Tender Price by adjusting the Tender Price as follows:

- a) Making any correction for errors and
- b) Making appropriate adjustments to reflect discounts or other price modifications offered

The IISc reserves the right to accept or reject any variation, deviation, or alternative offer. Variations, deviations, and alternative offers and other factors which are in excess of the requirements of the Tender documents or otherwise result in unsolicited benefits for the IISc shall not be considered in Tender evaluation.

2.26 Negotiations

The Bidder, though technically qualified and whose financial offer is the lowest, fails to convince the Evaluation Committee of the capability, capacity, credibility, his/her offer may be reviewed, and the Bidder intimated accordingly.

2.27 Award criteria

IISc will award the order to the Bidder whose Tender has been determined to be technically qualified, substantially responsive to the Tender documents and who has offered the lowest evaluated Tender Price. The technical evaluation has a two stage process - first is via the documents provided in the technical bid, and second is with the evaluation of the demonstrations, the technically qualified bidders will be considered for opening of the financial bids provided that such Bidder has been determined to be eligible in accordance with the provisions of this tender document (along with technical demonstrations) and subsequent technical clarifications offered by the responsive bidders.

2.28 Right to accept any Tender and to reject any or all Tenders

IISc reserves the right to accept or reject any Tender, and to cancel the Tender process and reject all Tenders, at any time prior to the award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the IISc's action. In the event of tender cancellation, the earnest money deposited will be returned.

2.29 Notification of award

The Bidder whose Tender has been accepted will be notified of the award by the IISc, prior to expiration of the Tender validity period by e-mail or confirmed by letter. The payment will be made in three installments based on a three-milestone schedule, as explained in Appendix I.

2.30 Corrupt or Fraudulent practices

The IISc requires that the Bidders observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, IISc.

- a) will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.
- b) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a IISc contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a IISc contract.

2.31 Payment Terms

There are milestones specified and the payment will be made upon delivery, testing and validation for each equipment. Milestones are described in Appendix I. It may be noted that payment from IISc may take up to 1 month after provision of appropriate invoice (such as for supply of material).

3 Eligibility Criteria

Technical Criteria:

- 3.1 Tender should come only from Indian **Original Equipment Manufacturer (OEM)**.
- 3.2 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 by submitting the declaration form and in the covering letter (Annexure VI). a) Class-1 supplier: Goods and services should have local content of equal to or more than 50%. b) Class-2 supplier: Goods and services should have local content of equal to or more than 20 % and less than 50%.
- 3.3 The bidder should provide at least 1 technical engineer and 1 more technical support staff present locally to perform periodic maintenance, corrections under warranty period, and fix any other issues that may arise following the testing and commissioning of the robots. A declaration to this effect with name and contact information of the engineer and support staff must be provided in a separate document on company letterhead.
- 3.4 The quotations should be on FOR-IISc Bangalore basis in INR only.
- 3.5 MSME can seek exemption to some qualification criteria. IISc follows GFR2017 for such details.
- 3.6 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 the services such as transportation, insurance, installation, commissioning, training, and other sales service support like AMC/CMC, etc., as local value addition.
- 3.7 Purchase preference as defined by the recent edits to GFR (within the “margin of purchase preference”) will be given to the Class-1 supplier.

Financial Criteria:

- 3.8 The bidder should have registered for a minimum period of six months. Proof of registration must be provided.
- 3.9 The bidder should have not incurred any loss in more than two years. The average net worth of the bidder as of **2023-24** should be not less than 20% of the estimated cost of this tender. Necessary certificate by the Chartered Accountant shall be submitted.
- 3.10 The bidder should have not been blacklisted by any State / Central Govt. Departments / Autonomous bodies / Institutions. A self-declaration of the same should be provided on the company letterhead.
- 3.11 The bidder should provide a self-declaration on their company letter-head stating that they understand the payment terms and agree with the payment terms as well as the penalty clauses. Please use Section 5 (checklist) to provide the necessary documents.

Litigation and Arbitral Issues:

- 3.12 Net pending litigations should not be more than 50% of bidder’s net worth.
- 3.13 No consistent history of court/arbitral award decisions against the bidder for the last five years. A self-declaration of the same should be provided on company letterhead.
- 3.14 From the date of the Purchase Order generation, the company should deliver, assemble, and install all materials according to schedule mentioned in Appendix I.

For any queries regarding the tender, the specifications or any other items, please contact

Chairperson's Office
Centre of Cyber Physical Systems
Ground Floor, TCS SMART X Hub
Indian Institute of Science
Bengaluru, India - 560012

office.cps@iisc.ac.in

4 Technical Specifications

SCOPE OF WORK

The specification covers the general requirement for the Supply of Customized Quadruped Walking Robot Systems (four-legged walking robots). The primary goal of acquiring these robots in CPS is to train and deploy learning based locomotion controllers for research purposes. The details of the specifications and qualifying criteria are given in Appendices I and II.

DELIVERY SCHEDULE

Delivery of 7 quadruped robot systems spread across three milestones.

1. **Two robots for Milestone I . Delivery is on or before February 28th 2025.**
2. **Two robots for Milestone II. Delivery is on or before August 31st 2025.**
3. **Three robots for Milestone III. Delivery is on or before February 28th 2026.**

Specifications for each milestone is provided in Appendix I. The technical demonstration of the technically qualified vendors will be scheduled, and the date is mentioned in Section 1.

Payment schedules are upon delivery for each milestone.

INSTALLATION

The total solution consisting of supply as per the PO (purchase order), should be completed as per the delivery schedule, after receiving PO from IISc.

5.1 TRAINING AND DOCUMENTATION

- 1) Appropriate number of training sessions for IISc technical staff for effective operation and management of the testbed, including the configuration/usage of the management software supplied shall be held.
- 2) Documentation (manuals, operating instructions, etc.) for all hardware, software, and services offered (in printed/digital format) shall be provided to the Purchaser.
- 3) A technical report on the test-bed specific hardware and (management) software configuration will be a prerequisite condition for granting acceptance from the Purchaser.

5.2 WARRANTY AND OEM SUPPORT CONTRACT

- 1) The warranty period must be a minimum of one year. The bidder shall be fully responsible for the warranty period. Every part except the battery must be covered for this period. The warranty for wear and tear need not be covered, however damaged parts must be repaired/replaced for a nominal charge. Additional warranty terms can be mentioned in the bid.

2) Preventive maintenance and repairs of the components supplied by the bidder are the responsibilities of the bidder.

3) The bidder shall attend to all the hardware and/or software problems within two working days. Bidder shall also replace the defective parts at no extra cost to the purchaser within 15 working days after reporting the issue.

4) All critical security updates must be promptly applied by the bidder personnel. The purchaser should be intimated about all non-critical security updates within a week of their release. All feature update releases for software must be made available to the Purchaser during the validity period.

5) All software tools should also be provided in weblink or in USB format and the purchaser shall be permitted to make at least 2 copies of the software tools /updates for emergency recovery.

6) Bidder shall clearly specify the conditions over which the service obligations will be void. Detailed documents regarding warranty conditions and applicability should be submitted along with a bid with a declaration of accepting the warranty conditions of the purchaser.

APPENDIX-I The bidders are required to submit their bids as per the following Bill of Quantity:

SI No	Item description	Quantity	Milestone schedule	Remarks
1	Li-Ion Battery pack with Battery Management System (BMS) 1800 Wh (or higher), 12S.	7	2 Nos. for Milestone I 2 Nos. for Milestone II 3 Nos. for Milestone III	Needs to have under-voltage and overvoltage, over current, under current and short circuit protection, and over temperature protection.
2	Li-Ion Battery charger	7	2 Nos. for Milestone I 2 Nos. for Milestone II 3 Nos. for Milestone III	
3	Wireless Joystick controller	7	2 Nos. for Milestone I 2 Nos. for Milestone II 3 Nos. for Milestone III	Must include basic functionalities to control the movements of the robot.

4	Quadruped robot with the following specifications (also see FIGURE I):		7	2 Nos. for Milestone I 2 Nos. for Milestone II 3 Nos. for Milestone III	Actuators must be compatible with CAN2.0 and CANFD. Actuators must have three different modes of control: position, speed and torque for deploying custom controllers. Actuators must have one encoder minimum. IMU sensor used must be Xsens MTI 630 or equivalent. The robot must have minimum three cameras (RGBD) per robot (front, left and right).
	Max Length x Width x Height (box dimensions in standing position)	1.2m x 0.8m x 1.0m			
	Min Length x Width x Height (box dimensions in standing position)	0.9m x 0.5m x 0.5m			
	Min height of torso center from ground	0.45 m			
	Actuators per leg (hip abduction-adduction, hip flexion-extension, knee flexion-extension)	3			
	Max weight including battery	75 kg			
	Min weight including battery	50 kg			
	Max Leg link lengths (thigh and shank, joint to joint)	0.42 m			
	Min leg link lengths (thigh and shank, joint to joint)	0.34 m			
	Max weight of each leg (including 3 actuators)	13 kg			
	Sitting and standing payload	50 kg			
	Walking payload	20 kg			
	Peak walking speed (without payload)	0.75 m/s and above			
	Slope walking (without payload)	15 deg and above			
5	Compute: Intel i7 processor or Nvidia AGX Orin or equivalent	7	2 Nos. for Milestone I 2 Nos. for Milestone II 3 Nos. for Milestone III	Compute board must have 1 ethernet port, and 2 USB ports minimum. OS Ubuntu 22+ ROS2 with API for hardware interface must be installed.	

TABLE I: Table showing the various specifications of the quadruped walking robot. See FIGURE I for a pictorial representation of the robot.

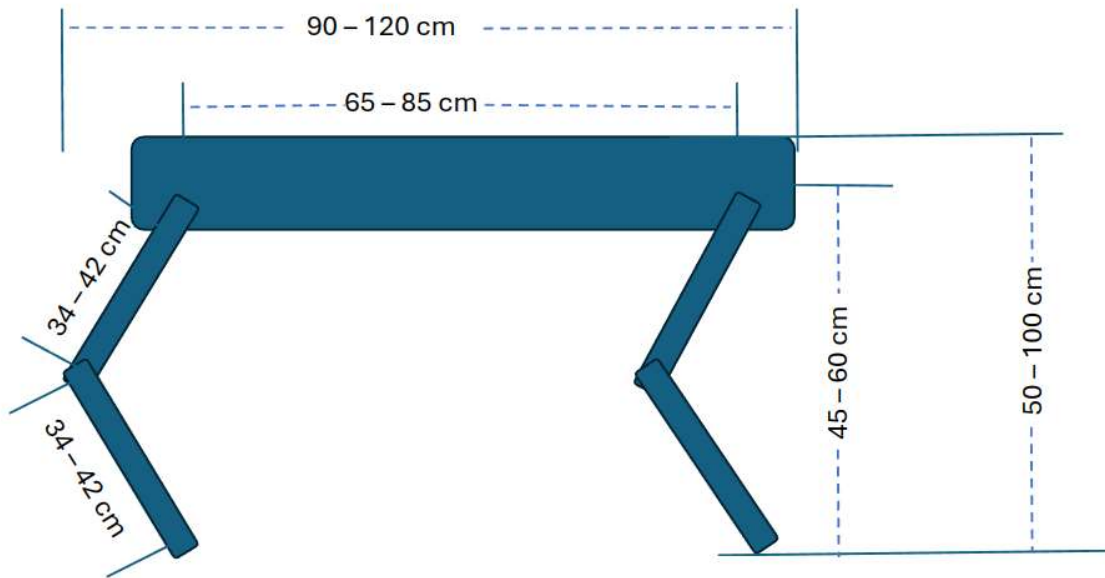


FIGURE 1: Specimen dimensions that are acceptable are shown in the figure above.

APPENDIX-II As a part of the technical evaluation, the vendors will be asked to demonstrate the robot prototype onsite. Only one robot prototype will be evaluated. Bidders meeting the specification mentioned in TABLE I and other qualifying criteria as per the checklist (Section 5, Envelope A) will be called for the demonstration. The bidders will be given enough time to bring the materials for the demonstration. The following criteria will be used for validation:

1. Weight test: The robot will be weighed and must be in the range specified by TABLE I.
2. Dimension test: The link lengths will be measured (joint-to-joint) and must be in the range mentioned in TABLE I. We will also measure other dimensions with the robot in standing position. These measurements must not violate the specifications provided in TABLE I.
3. Sit-stand test: The robot must be able to sit and stand with a joystick input. Height specifications for the stand are given in the figure above (FIGURE 1).
4. Payload test: Sit-stand test must be shown with a payload described in TABLE I.
5. Walking test: The robot will be made to walk around on flat ground with a payload described in TABLE I. The robot must show start-stop, turn and other behaviors required for walking.
6. Speed test: The walking speed demonstrated must be according to details in TABLE I. Robot must walk without interruptions for 15 minutes (without payload).
7. Slope test: The robot must walk on slopes with values given in TABLE I.
8. The vendor must also explain the methods to access the control variables: position, velocity and torque for deploying reinforcement learning (RL) based controllers. Provision to access the position, velocity and torque is a must for enabling deployment of RL.

9. Any other relevant test as per the decision of the technical committee to verify and validate the specifications given in TABLE I.

All the above parameters will be tested with battery mounted on the robot. Vendors will be allowed to re-program the control software on-site, but power source cannot be external. Vendors must bring their own accessories for validating the test.

Specifications that are not acceptable: Any deviation from the specification mentioned above will not be accepted. In addition, the following technologies are not allowed:

- Plastic or carbon fiber parts for legs and torso are not allowed. Plastic covers are okay but the load bearing structure must be metal (or metal alloys).
- Screw mechanism at the knee or any other joint is not allowed.
- Harmonic gear boxes in the actuators are not allowed.
- Cycloidal gearboxes in the actuators are not allowed.
- Actuator (abduction, hip and knee joints) gearboxes cannot have 3 or more stages.
- Actuator gearbox ratio cannot be more than 25.
- The robots used/proposed/demonstrated cannot be imported from foreign countries. Some of the companies are listed here: Boston Dynamics, Ghost Robotics, Unitree Robotics, ANYbotics, Deep robotics, Rainbow robotics, Xiaomi, UBTech, MAB Robotics, LimX dynamics, Direct Drive Tech, Fourier Intelligence. **This is not an exhaustive list. If the robot shown for the technical demonstration is found to be imported from any of the foreign companies, then the tenderer will be disqualified at the technical stage.**

5 Checklist

The following items should be checked before the bid is submitted. Please include this document in the bid and indicate YES/NO or a check mark (on the left) for each item here.

1. SEALED ENVELOPE "A": TECHNICAL BID

- a. Technical bid (each page must be signed by the authorized signatory and seal) with the following documents:
 - i. Covering letter with this checklist with YES/NO or check mark (on the left). The covering letter must explain the details of the bid and type of supplier (Class I or Class II or non-local content).
 - ii. Annexure I: Bidder's details.
 - iii. Earnest Money Deposit (DD in the name of "The Registrar, IISc" payable at "Bengaluru" must be attached).
 - iv. Annexure II: Declaration regarding experience.
 - v. Annexure III: Declaration regarding clean track record.
 - vi. Annexure IV: Declaration for acceptance of terms and conditions with supporting documents (like address proof).
 - vii. Annexure V: Details of items quoted along with supporting documents like technical specifications, product brochure, warranty coverage etc.
 - viii. Annexure VI: Local content declaration.
 - ix. CA declaration of the net worth of the company along with supporting documents.
 - x. Any other documents that will help support the technical qualification of the bidder.
- b. Copy of this tender document (with latest modifications/corrections as specified in the website) duly signed by the authorized signatory on every page and sealed.

2. SEALED ENVELOPE "B": COMMERCIAL BID

- a. The bid must contain the necessary details like GST, address mentioned in the bid document. The document must be duly signed by the authorized signatory with seal. Please use Annexure VII for reference.

Tender must be submitted in two envelopes: Technical Bid (Envelope A) and Commercial Bid (Envelope B) super scribing on both the envelopes with Tender No. and due date and both of these in sealed covers and put in a bigger cover which should also be sealed and duly super scribed with Tender No., Tender description & Due Date. Note that Envelope A should not contain any price information. Non-conformation will lead to disqualification.

ANNEXURE I

Details of the Bidder

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

Details of the Bidder

Sl. No	Items	Details
1	Name of the bidder	
2	Nature of the bidder (Attach attested copy of certificate of incorporation/partnership deed)	
3	Registration No/ Trade License (attach attested copy)	
4	Registered Office Address	
5	Address for communication	
6	Contact person - Name and Designation	
7	Telephone No	
8	Email ID	
9	Website	
10	PAN (attach copy)	
11	GST No. (attach copy)	

Signature of the Bidder

Name
Designation

Seal Date:

ANNEXURE II

Declaration regarding experience

To,
The Chairperson,
Centre of Cyber Physical Systems,
TCS Smart X Hub,
Indian Institute of Science,
Bangalore - 560012,

Ref: XXXXX
Tender No: XXXXX
Dated:

Supply of Customized Quadruped Walking Robot Systems to CCPS, Indian Institute of Science,
Bangalore

Madam/Sir,

I've carefully gone through the Terms & Conditions contained in the above referred tender. I hereby declare that my company / firm has ----- of experience in design and development of walking robots.

(Signature of the Bidder)
Printed
Name
Designation,
Seal Date:

ANNEXURE III

Declaration regarding track record

To,
The Chairperson,
Centre for Cyber Physical Systems,
TCS Smart X Hub,
Indian Institute of Science,
Bangalore - 560012,

Ref: XXXXX
Tender No: XXXXX
Dated:

Supply of Customized Quadruped Walking Robot Systems for CCPS, Indian Institute of Science,
Bangalore

Madam/Sir,
I've carefully gone through the Terms & Conditions contained 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'm competent officer in my company / firm to make this declaration.

Or

I declare the following list of country/countries 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 period for which the company / firm was blacklisted and the reason/s for the same).

Yours faithfully

ANNEXURE IV

Declaration for acceptance of terms and conditions

To,
The Chairperson,
Centre for Cyber Physical Systems,
TCS Smart X Hub,
Indian Institute of Science,
Bangalore - 560012, India

Ref: XXXXX
Tender No: XXXXX
Dated:

Supply of Customized Quadruped Walking Robot Systems for CCPS, Indian Institute of Science,
Bangalore

Madam/Sir,

I've carefully gone through the Terms & Conditions as 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'm an authorized signatory of my company and am, therefore, competent to make this declaration.

I declare to provide at least one technical engineer, and one more technical support staff present locally to perform periodic maintenance, corrections under warranty period, and fix any other issues that may arise following the testing and commissioning of the robots.

I declare to provide the warranty requirements and abide by the delivery schedule requested in Section 4, APPENDIX I and II. I declare to provide support for all the hardware and/or software problems on site and shall replace the defective parts at no extra cost to the purchaser at the earliest.

I acknowledge that even if I am invited for a technical demonstration on the date specified in Section 1, failure to satisfy the specifications mentioned in Section 4, APPENDIX I and APPENDIX II, in full or in part will result in disqualification. I also understand and acknowledge that, based on the demonstration of the required specifications, the decision of the technical evaluation committee will be final.

I understand that IISc Bengaluru, in its sole discretion, unconditionally and without having to assign any reason, reserves the rights:

- a. To accept OR reject lowest tender or any other tender or all the tenders.
- b. To accept any tender in full or in part.
- c. To reject the tender, offer not confirming the tender terms.

I also acknowledge that failure to deliver the goods within the specified deadlines may result in the cancellation of the order.

Yours faithfully,

(Signature of the Bidder)

Name

Designation,

Seal

ANNEXURE V

Details of items quoted:

- a. Company Name
- b. Product Name
- c. Part/ Catalogue number
- d. Product description / main features
- e. Detailed technical specifications
- f. Remarks

Instructions to bidders:

1. Bidder should provide technical specifications of the quoted products/s in detail.
2. Bidder should attach product brochures along with technical bid.
3. Bidder should clearly indicate compliance or non-compliance of the technical specifications provided in the tender document.
4. Bidder should provide details of the warranty coverage for each item.

ANNEXURE VI

*(To be submitted In the company letter head by supplier)

DECLARATION OF LOCAL CONTENT BY LOCAL SUPPLIER

Subject: Public Procurement (Preference to Make In India) for Supply of Customized Quadruped Walking Robot Systems

We hereby declare with reference to above subject and references that M/s----- (Tick whichever is applicable as below) is a

"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 location at which local value addition will be made is 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 seal)

Place:.....

Date:.....

ANNEXURE VII

Commercial Bid

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

S.No	Description	Quantity	Unit price	Sub-total
1.	Essential items noted in the technical specification			
2	Accessories for operation and installation			
3	Warranty			
4	Cost of shipment and installation			
5	Any additional items			

Other details like GST and company address must be included in the bid.

Addressed to

The Chairperson,
Centre for Cyber Physical Systems,
Ground Floor, TCS SMART X Hub
Landmark: Behind CeNSE and near D Gate,
Indian Institute of Science
Bangalore - 560012, India