

**Department of Electrical Engineering
Indian Institute of Technology
Hauz Khas, New Delhi-110 016**

NOTICE INVITING QUOTATIONS

Dated : 29th Sept 2015

Tender No:

Subject : Purchase of Motion Capture System for UAVs

Invitation for Tender Offers

Indian Institute of Technology Delhi invites sealed tender offers in two bid format (Technical bid and Commercial bid) from eligible and experienced OEM (Original Equipment Manufacturer) OR OEM Authorized Dealer for supply of "Motion Capture System for UAVs" as per terms & conditions specified in the tender document.

The quotation should reach, Dr. Shubhendu Bhasin, II-214, Control Lab, Dept. of Electrical Engineering, IIT Delhi, Hauz Khas, New Delhi – 110016 India latest by 5:00 P.M. on 07 Oct 2015.

TECHNICAL SPECIFICATION:

Sl. No.	Technical Specifications
1.	<p>CAMERAS</p> <ul style="list-style-type: none">• Number: 8• Type: Infrared• Resolution : 1.3 MP (1280 × 1024) (minimum)• Frame Rate: 120fps (minimum)• Horizontal field of vision (FOV): 50° – 60°• Interface : USB 2.0• Latency : 10 ms (maximum) <p>MOUNTING HARDWARE</p> <ul style="list-style-type: none">• 8 no. of 3-way Head (Super Clamp, Camera Head, Camera Stud) <p>MARKERS</p> <ul style="list-style-type: none">• 4 No. of Reflective Markers : 7/16" Diameter• 4 No. of Marker Bases : 1" Diameter• 20 No. of Marker with X-Base 14mm

	<p>ACCESSORIES</p> <ul style="list-style-type: none"> • USB / SYNC Hubs • Connectors • Cables • Calibration tools (Calibration Square) <p>Motion Tracking Software</p>
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Terms & Conditions

Sl.No.	Specification
1.	Due date: The tender has to be submitted before the due date. The offers received after the due date and time will not be considered.
2.	Preparation of Bids: The offer/bid should be submitted in two bid systems (i.e.) Technical bid and financial bid. The technical bid should consist of all technical details along with commercial terms and conditions. Financial bid should indicate item wise price for the items mentioned in the technical bid. The Technical bid and the financial bid should be put in separate covers and sealed. Both the sealed covers should be put into a bigger cover and sealed. The tender number and details should be superscripted on the left side of the outer cover. The Quotations should be valid for 120 days from the due date. The Quotations duly sealed and super scribed on the envelope with the reference No. and due date, should be addressed to Dr. Shubhendu Bhasin, II-214, Control Lab, Dept. of Electrical Engineering, IIT Delhi, Hauz Khas, New Delhi – 110016 India so as to reach on or before the due date.
3.	Delivery of the tender: The tender shall be sent to the above mentioned addressee either by post or by courier so as to reach our office before the due date specified in our Schedule. The offer/bid can also be dropped in the tender box on or before the due date specified in the schedule.
4.	Opening of the tender: The offer/bid will be opened by a committee duly constituted for this purpose. The technical bid will be opened first and it will be examined by a technical committee which will decide the suitability as per our specification and requirement. The financial offer/bid will be opened only for the offer/bid which technically meets all our requirements as per the specification. The bidders if interested may participate on the tender opening Date and Time. The bidder should produce authorization letter from their company to participate in the tender opening. Only one representative will be allowed to participate in the tender opening.
5.	Acceptance/ Rejection of bids: The Committee reserves the right to reject any or all offers without assigning any reason.
6.	Pre-qualification criteria: (i) Bidders should be the manufacturer / authorized dealer. Letter of Authorization from original equipment manufacturer (OEM) on the same and specific to the tender should be enclosed. (ii) An undertaking from the OEM is required stating that they would facilitate the bidder on a regular basis with technology/product updates and extend support for the warranty as well. (iii) OEM should be internationally reputed Branded Company. (iv) Non-compliance of tender terms, non-submission of required documents, lack of clarity of the specifications, contradiction between bidder specification and supporting documents etc. may lead to rejection of the bid. (v) In the tender, either the Indian agent on behalf of the Principal/OEM or

	<p>Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.</p> <p>(vi) If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.</p>
7.	<p>Force Majeure: The Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.</p> <ul style="list-style-type: none"> ● For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes. ● If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
8.	<p>Risk Purchase Clause: In event of failure of supply of the item/equipment within the stipulated delivery schedule, the purchaser has all the right to purchase the item/equipment from the other source on the total risk of the supplier under risk purchase clause.</p>
9.	<p>Packing Instructions: Each package will be marked on three sides with proper paint/indelible ink, the following:</p> <ol style="list-style-type: none"> i. Item Nomenclature ii. Order/Contract No. iii. Country of Origin of Goods iv. Supplier's Name and Address v. Consignee details vi. Packing list reference number
10.	<p>Delivery and Documents:</p> <p>Delivery of the goods should be made within a maximum of 6 weeks from the date of placement of purchase order and the opening of LC. Within 24 hours of shipment, the supplier shall notify the purchaser and the insurance company by cable/telex/fax/e mail the full details of the shipment including contract number, railway receipt number/ AAP etc. and date, description of goods, quantity, name of the consignee, invoice etc. The supplier shall mail the following documents to the purchaser with a copy to the insurance company:</p> <ol style="list-style-type: none"> 1. 4 Copies of the Supplier invoice showing contract number, goods' description, quantity 2. unit price, total amount; 3. Acknowledgment of receipt of goods from the consignee(s) by the transporter; 4. Insurance Certificate if applicable; 5. Manufacturer's/Supplier's warranty certificate; 6. Inspection Certificate issued by the nominated inspection agency, if any 7. Supplier's factory inspection report; and 8. Certificate of Origin (if possible by the beneficiary); 9. Two copies of the packing list identifying the contents of each package. 10. The above documents should be received by the Purchaser before arrival of the Goods (except where the Goods have been delivered directly to the Consignee with all documents) and, if not received, the Supplier will be responsible for any consequent expenses.
11.	<p>Delayed delivery: If the delivery is not made within the due date for any reason, the</p>

	Committee will have the right to impose penalty 1% per week and the maximum deduction is 10% of the contract value / price.																																								
12.	<p>Prices: The price should be quoted in net per unit (after breakup) and must include all packing and delivery charges. The offer/bid should be exclusive of taxes and duties, which will be paid by the purchaser as applicable. However the percentage of taxes & duties shall be clearly indicated.</p> <p>The price should be quoted without custom duty and excise duty, since IIT Delhi is exempted from payment of Excise Duty and is eligible for concessional rate of custom duty. Necessary certificate will be issued on demand.</p> <p>In case of import supply the price should be quoted on FOB Basis only. Under special circumstances (eg. perishable chemicals), when the item is imported on CIF, please indicate CIF charges separately upto IIT Delhi indicating the mode of shipment. IIT Delhi will make necessary arrangements for the clearance of imported goods at the Airport/Seaport. Hence the price should not include the above charges.</p> <p>15. a) For indigenous items rates should be as per following format –</p> <table border="1"> <thead> <tr> <th>SI. No.</th> <th>Descriptions of Item & Specification</th> <th>Qty. in Units</th> <th>Units Price in Rs.</th> <th>Excise Duty %</th> <th>CST/VAT %</th> <th>Octroi %</th> <th>Total Price in Rs.</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> <p>15. b) For Import items rates should be as per following format-</p> <table border="1"> <thead> <tr> <th>SI. No.</th> <th>Currency</th> <th>Description of Item & Specification</th> <th>Qty. in Units</th> <th>Unit Price (a)</th> <th>Agency Commission (b)</th> <th>Discount (c)</th> <th>Ex-works Price (d) = (a+b-c)</th> <th>Packing +Handing+ Doc+ Inland Freight (e)</th> <th>FOB Price (f=d+e)</th> <th>Insurance+ Freight (g)</th> <th>CIF Price (h) = (f+g)</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	SI. No.	Descriptions of Item & Specification	Qty. in Units	Units Price in Rs.	Excise Duty %	CST/VAT %	Octroi %	Total Price in Rs.									SI. No.	Currency	Description of Item & Specification	Qty. in Units	Unit Price (a)	Agency Commission (b)	Discount (c)	Ex-works Price (d) = (a+b-c)	Packing +Handing+ Doc+ Inland Freight (e)	FOB Price (f=d+e)	Insurance+ Freight (g)	CIF Price (h) = (f+g)												
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13.	<p>Notices: For the purpose of all notices, the following shall be the address of the Purchaser and Supplier.</p> <p>Purchaser: Dr. Shubhendu Bhasin, Department of Electrical Engineering, Indian Institute of Technology Hauz Khas, New Delhi - 110016.</p> <p>Supplier: (To be filled in by the supplier)</p> <p>_____</p> <p>_____</p> <p>_____</p>																																								
14.	<p>Progress of Supply: Wherever applicable, supplier shall regularly intimate progress of supply, in writing, to the Purchaser as under:</p> <ol style="list-style-type: none"> 1. Quantity offered for inspection and date; 2. Quantity accepted/rejected by inspecting agency and date; 3. Quantity dispatched/delivered to consignees and date; 4. Quantity where incidental services have been satisfactorily completed with date; 5. Quantity where rectification/repair/replacement effected/completed on receipt of any communication from consignee/Purchaser with date; 																																								

	<p>6. Date of completion of entire Contract including incidental services, if any; and</p> <p>7. Date of receipt of entire payments under the Contract (In case of stage-wise inspection, details required may also be specified).</p>
15.	<p>Inspection and Tests: Inspection and tests prior to shipment of Goods and at final acceptance are as follows:</p> <ul style="list-style-type: none"> • After the goods are manufactured and assembled, inspection and testing of the goods shall be carried out at the supplier's plant by the supplier, prior to shipment to check whether the goods are in conformity with the technical specifications attached to the purchase order. Manufacturer's test certificate with data sheet shall be issued to this effect and submitted along with the delivery documents. The purchaser shall be present at the supplier's premises during such inspection and testing if need is felt. The location where the inspection is required to be conducted should be clearly indicated. The supplier shall inform the purchaser about the site preparation, if any, needed for installation of the goods at the purchaser's site at the time of submission of order acceptance. • The acceptance test will be conducted by the Purchaser, their consultant or other such person nominated by the Purchaser at its option after the equipment is installed at purchaser's site in the presence of supplier's representatives. The acceptance will involve trouble free operation and ascertaining conformity with the ordered specifications and quality. There shall not be any additional charges for carrying out acceptance test. No malfunction, partial or complete failure of any part of the equipment is expected to occur. The Supplier shall maintain necessary log in respect of the result of the test to establish to the entire satisfaction of the Purchaser, the successful completion of the test specified. • In the event of the ordered item failing to pass the acceptance test, a period not exceeding one weeks will be given to rectify the defects and clear the acceptance test, failing which the Purchaser reserve the right to get the equipment replaced by the Supplier at no extra cost to the Purchaser. • Successful conduct and conclusion of the acceptance test for the installed goods and equipment shall also be the responsibility and at the cost of the Supplier.
16.	<p>Resolution of Disputes: The dispute resolution mechanism to be applied pursuant shall be as follows:</p> <ul style="list-style-type: none"> • In case of Dispute or difference arising between the Purchaser and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Director, Indian Institute of Technology (IIT) Delhi and if he is unable or unwilling to act, to the sole arbitration of some other person appointed by him willing to act as such Arbitrator. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order. • In the case of a dispute between the purchaser and a Foreign Supplier, the dispute shall be settled by arbitration in accordance with provision of sub-clause (a) above. But if this is not acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules. • The venue of the arbitration shall be the place from where the order is issued. • Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within New Delhi.
17.	<p>Applicable Law: The place of jurisdiction would be New Delhi (Delhi) INDIA.</p>
18.	<p>Supplier Integrity The Supplier is responsible for and obliged to conduct all contracted activities in accordance</p>

	with the Contract using state of the art methods and economic principles and exercising all means available to achieve the performance specified in the contract.
19.	Insurance: For delivery of goods at the purchaser's premises, the insurance shall be obtained by the Supplier in an amount equal to 110% of the value of the goods from "warehouse to warehouse" (final destinations) on "All Risks" basis including War Risks and Strikes. The insurance shall be valid for a period of not less than 3 months after installation and commissioning. <i>In case of orders placed on FOB/FCA basis, the purchaser shall arrange Insurance. If orders placed on CIF/CIP basis, the insurance should be up to IIT Delhi.</i>
20.	Incidental services: The incidental services also include: <ul style="list-style-type: none"> ● Furnishing of 01 set of detailed operations & maintenance manual. ● Arranging the shifting/moving of the item to their location of final installation within IITD premises at the cost of Supplier through their Indian representatives.
21.	Warranty: Indicate the standard warranty period of the product. Extended warranty may be quoted separately.
22.	Delivery Schedule: The tenderer should indicate clearly the time required for delivery of the item. In case there is any deviation in the delivery schedule, liquidated damages clause will be enforced or penalty for the delayed supply period will be levied.
23.	Governing Language The contract shall be written in English language. English language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract, which are exchanged by the parties, shall be written in the same language.
24.	Applicable Law The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction.
25.	Notices <ul style="list-style-type: none"> ● Any notice given by one party to the other pursuant to this contract/order shall be sent to the other party in writing or by cable, telex, FAX or e mail and confirmed in writing to the other party's address. ● A notice shall be effective when delivered or on the notice's effective date, whichever is later.
26.	Taxes and Duties Suppliers shall be entirely responsible for all taxes, duties, license fees, octroi, road permits, etc., incurred until delivery of the contracted Goods to the Purchaser. However, VAT in respect of the transaction between the Purchaser and the Supplier shall be payable extra, if so stipulated in the order. IIT Delhi is exempted from paying custom duty under notification No.51/96 (partially or full) and necessary "Custom Duty Exemption Certificate" can be issued after providing following information and Custom Duty Exemption Certificate will be issued to the shipment in the name of the Institute, no certificate will be issued to third party: a) Shipping details i.e. Master Airway Bill No. and House Airway No. (if exists) b) Forwarder details i.e. Name, Contact No., etc. IIT Delhi is exempted from paying Excise Duty and necessary Excise Duty Exemption Certificate will be provided for which following information are required. a. Quotation with details of Basic Price, Rate, Tax & Amount on which ED is applicable b. Supply Order Copy c. Proforma-Invoice Copy.

27.	Agency Commission: Agency commission if any will be paid to the Indian agent in Rupees on receipt of the equipment and after satisfactory installation. Agency Commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in Tender even in case of Nil commission. The tenderer should indicate the percentage of agency commission to be paid to the Indian agent.
28.	Freight & Forwarder: Our authorized freight forwarder is M/s. Prakash Freight Movers Ltd., C-130, First Floor, Naraina Industrial Area, Phase-I, New Delhi-110028, Ph. 42228222, for shipment of the stores ordered for. Any change in the freight forwarder will be intimated in advance.
29.	Payment: Payment terms should be clearly mentioned in the 'Technical Specifications'.
30.	User list: Brochure detailing technical specifications and performance, list of industrial and educational establishments where the items enquired have been supplied must be provided.
31.	<p>Manuals and Drawings</p> <ul style="list-style-type: none"> ● Before the goods and equipment are taken over by the Purchaser, the Supplier shall supply operation and maintenance manuals. These shall be in such details as will enable the Purchaser to operate, maintain, adjust and repair all parts of the works as stated in the specifications. ● The Manuals shall be in the ruling language (English) in such form and numbers as stated in the contract. ● Unless and otherwise agreed, the goods equipment shall not be considered to be completed for the purposes of taking over until such manuals and drawing have been supplied to the Purchaser.
32.	<p>Spare Parts</p> <p>The Supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:</p> <ol style="list-style-type: none"> i. Such spare parts as the Purchaser may elect to purchase from the Supplier, providing that this election shall not relieve the Supplier of any warranty obligations under the Contract; and ii. In the event of termination of production of the spare parts: iii. Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and iv. Following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested. <p>Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the Goods, such as gaskets, plugs, washers, belts etc. Other spare parts and components shall be supplied as promptly as possible but in any case within six months of placement of order.</p>
33.	Defective Equipment: If any of the equipment supplied by the Tenderer is found to be substandard, refurbished, un-merchantable or not in accordance with the description/specification or otherwise faulty, the committee will have the right to reject the equipment or its part. The prices of such equipment shall be refunded by the Tenderer with 18% interest if such payments for such equipment have already been made. All damaged or unapproved goods shall be returned at suppliers cost and risk and the incidental expenses incurred thereon shall be recovered from the supplier. Defective part in equipment, if found before installation and/or during warranty period, shall be replaced within 45 days on receipt of the intimation from this office at the cost and risk of supplier including all other charges. In case supplier fails to replace above item as per above terms & conditions, IIT Delhi may consider "Banning" the supplier.
34.	<p>Termination for Default</p> <p>The Purchaser may, without prejudice to any other remedy for breach of contract, by written</p>

	<p>notice of default sent to the Supplier, terminate the Contract in whole or part:</p> <ul style="list-style-type: none"> v. If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the order, or within any extension thereof granted by the Purchaser; or vi. If the Supplier fails to perform any other obligation(s) under the Contract. vii. If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the Contract. <ul style="list-style-type: none"> ● For the purpose of this Clause: <ul style="list-style-type: none"> i. “Corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution. ii. “Fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition;” ● In the event the Purchaser terminates the Contract in whole or in part, the Purchaser may procure, upon such terms and in such manner, as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Purchaser for any excess costs for such similar Goods or Services. However, the Supplier shall continue the performance of the Contract to the extent not terminated.
35.	<p>Warranty/Guarantee: The warranty period should be clearly mentioned. The maintenance charges (AMC) under different schemes after the expiry of the warranty should also be mentioned. The tender must be quoted with three (03) years on-site comprehensive warranty/guarantee which will commence from the date of the satisfactory installation/commissioning of the equipment against the defect of any manufacturing, workmanship and poor quality of the components. After the warranty period is over, Annual Maintenance Contract (AMC)/Comprehensive Maintenance Contract (CMC) up to next two years should be started. The AMC/CMC charges will be included in computing the total cost of the equipment.</p>
36.	<p>Conditional tenders will not be accepted.</p>
37.	<p>Compliance certificate: This certificate must be provided indicating conformity to the technical specifications.</p>
38.	<p>Acknowledgement: It is hereby acknowledged that we have gone through all the conditions mentioned above and we agree to abide by them.</p>

Sub. : Compliance Report against supply of “Motion capture system for UAVs”

Sl. No.	Details	Yes / No
1.	<p>CAMERAS</p> <ul style="list-style-type: none">• Number: 8• Type: Infrared• Resolution : 1.3 MP (1280 × 1024) (minimum)• Frame Rate: 120fps (minimum)• Horizontal field of vision (FOV): 50° – 60°• Interface : USB 2.0• Latency : 10 ms (maximum) <p>MOUNTING HARDWARE</p> <ul style="list-style-type: none">• 8 no. of 3-way Head (Super Clamp, Camera Head, Camera Stud) <p>MARKERS</p> <ul style="list-style-type: none">• 4 No. of Reflective Markers : 7/16" Diameter• 4 No. of Marker Bases : 1" Diameter• 20 No. of Marker with X-Base 14mm <p>ACCESSORIES</p> <ul style="list-style-type: none">• USB / SYNC Hubs• Connectors• Cables• Calibration tools (Calibration Square) <p>Motion Tracking Software</p>	

(Signature of authorized person)

Name : _____

Seal of the company

Date _____

DECLARATION

1. I, _____ hereby certify, that all the information and data furnished by me with regard to this tender specification are true and complete to the best of my knowledge. I have gone through the specification, conditions and stipulations in details and agree to comply with the requirements and intent of specification.
2. I, further certify, that I am the duly authorized representative of the under mentioned tenderer.
3. I, further certify that my company meets all the conditions of eligibility criteria laid down to take part in the tender.
4. I, further specifically certify, that my company has not been Black Listed/De Listed or put to any Holiday by any Institutional Agency/ Govt. Department/ Public Sector Undertaking in the last three years.

Name of Tendering Company/ Firm/ Agency (Attach certificates of registration)	
Name of proprietor/Director of Company/Firm/Agency	
Full Address of Office with Telephone No. and FAX	
E-Mail	
PAN No. (Attach attested copy)	
Service Tax & Sales Tax Registration No. (Attach attested copy)	
Contact Person Name	
Mobile Number	

(Signature of authorized person)

Name : _____

Seal of the company

Date _____