

भारत सरकार  
अंतरिक्ष विभाग  
अंतरिक्ष उपयोग केंद्र(इसरो)  
आंबावाडी विस्तार पी.ओ.  
अहमदाबाद - 380 015 (भारत)  
दूरभाष: +91-79-2691 3051/98  
फैक्स नं. : +91-79-2691 5835/02/48



Government of India  
Department of Space  
**SPACE APPLICATIONS CENTRE (ISRO)**  
Ambawadi Vistar P.O.  
Ahmedabad – 380 015 (INDIA)  
Telephone : +91-79 – 2691 3051/98  
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Date: 13-07-2016

**निविदा सूचना सं.: सैक / पीटी / 08 / 2016-17**  
**Tender Notice No.: SAC / PT / 08/ 2016-17**

भारत के राष्ट्रपति के लिए और उनकी ओर से वरि. प्रधान, क्रय एवं भंडार, अंतरिक्ष उपयोग केंद्र, अहमदाबाद निम्नलिखित के लिए मोहरबंद निविदाएं आमंत्रित करते हैं:

For and on behalf of the President of India, Sr. Head, Purchase & Stores, Space Applications Centre, Ahmedabad invites sealed tenders for the followings:

क्र. सं. Sr.No	निविदा नं. Tender No.	संक्षिप्त विवरण Brief Description	नियत तिथि (अपराहन 3 बजे तक) Due on (Up to 3 pm)
1	AHEP 201600009901	High-end Data Storage Server with Rack	10/08/2016
2	AHSE 201600077001	High Precision Measuring Microscope	10/08/2016
3	AHSE 201600057801	Laser Interferometer with Accessories (Two Part)	17/08/2016
4	AHSE 201600048101	Reference Flat (Two Part)	17/08/2016
5	AHEP 201600066001	Methane Flux Measurement System	17/08/2016
6	AHSE 201600060101	Infra – Red (IR) Interferometer (Two Part)	22/08/2016
7	AHSE 201600079301	Fabrication of IR Scene Simulator (Two Part)	22/08/2016
8	AHSE 201600066701	Mentor Graphics PVS & Extract Software	22/08/2016
9	AHSE 201600066901	Cadence CIS ASIC EDA Tool	24/08/2016

निविदा दस्तावेज क्रय प्रभाग, सैक से प्राप्त किए जा सकते हैं तथा ये इसरो की वेबसाइट [www.isro.gov.in](http://www.isro.gov.in) और सैक की वेबसाइट [www.sac.gov.in](http://www.sac.gov.in) पर भी उपलब्ध हैं। इच्छुक निविदाकार इसे वेबसाइट से डाउनलोड कर सकते हैं तथा अपने प्रस्ताव ₹.545.00 प्रत्येक (रेखांकित डिमांड ड्राफ्ट के रूप में) के निविदा शुल्क के साथ प्रस्तुत करें। अपना प्रस्ताव प्रस्तुत करते समय लिफाफे के ऊपरी भाग पर निविदा सं. तथा नियत तिथि लिखें।

यदि दस्तावेज डाक द्वारा मंगाए जा रहे हैं तो निम्न बातों को नोट करें:

1. निविदा दस्तावेज मंगाने के लिए भेजे जा रहे निवेदन पत्र पर निविदा सूचना संख्या तथा निविदा संख्या दोनों लिखी जाएं तथा निविदा शुल्क ₹ 545.00 प्रत्येक (किसी भी राष्ट्रीयकृत बैंक द्वारा जारी रेखांकित डिमांड ड्राफ्ट के रूप में) के साथ मात्र क्रय एवं भंडार अधिकारी, अंतरिक्ष उपयोग केंद्र, अहमदाबाद- 380 015 को भेजा जाए।
2. जिस लिफाफे में इस प्रकार का निवेदन भेजा जा रहा हो उसके ऊपरी भाग पर "निविदा दस्तावेजों के लिए अनुरोध" लिखा जाए। प्रत्येक निविदा दस्तावेज के लिए अलग निवेदन पत्र एवं अलग डिमाण्ड ड्राफ्ट भेजा जाए।
3. निविदा शुल्क (अप्रतिदेय) का भुगतान रेखांकित डिमाण्ड ड्राफ्ट (मात्र एमआईसीआर डीडी) के रूप में किया जाए जो अहमदाबाद में देय हो तथा वह मात्र लेखा अधिकारी, सैक अहमदाबाद-380 015 के नाम पर लिया जाए।
4. डिमाण्ड ड्राफ्ट के पीछे विक्रेता का नाम एवं निविदा संख्या दर्ज होनी चाहिए।
5. नियत तिथि बढ़ाए जाने के निवेदन पर कोई विचार नहीं किया जाएगा।
6. डाक द्वारा निविदा दस्तावेज की बिक्री नियत तिथि से 10 दिन पूर्व बंद कर दी जाएगी।
7. यदि विक्रेता व्यक्तिगत रूप से आकर निविदा दस्तावेज प्राप्त करना चाहते हैं, तो वे नियत तिथि से एक दिन पूर्व तक क्रय प्रभाग (बिल्डिंग नं. 30-ए, कमरा नं. 57) में किसी भी कार्य दिवस पर 1400 से 1600 बजे के बीच संपर्क करें।
8. मोहरबंद प्रस्ताव प्राप्ति की समय सीमा प्रत्येक निविदा के सामने निर्दिष्ट नियत तिथि को 1500 बजे तक रहेगी।
9. अंतिम समय सीमा से पूर्व प्राप्त बोलियाँ उपस्थिति निविदाकारों/उनके द्वारा प्राधिकृत प्रतिनिधियों की उपस्थिति में उसी दिन 1530 बजे खोली जाएंगी।
10. ऊपर निर्दिष्ट तिथि को यदि छुट्टी घोषित की जाती है तो सैक का अगला कार्य दिवस निविदाओं की प्राप्ति एवं खोलने के लिए नियत तिथि माना जाएगा।

11. विलंब/देरी से प्राप्त प्रस्ताव स्वीकृत नहीं किए जाएंगे।
12. जिन पार्टियों ने समय से बोली जमा कराई है तथा निविदा खोलने में भाग लेना चाहते हैं, वे अपने प्राधिकृत प्रतिनिधि का नाम उस विशिष्ट निविदा में उल्लिखित निर्धारित तिथि से एक दिन पूर्व सूचित कर दें। विलंब से/अंतिम क्षणों में प्राप्त प्रवेश हेतु अनुरोध पर विचार नहीं किया जाएगा।
13. निम्नलिखित वर्ग के निविदादाता को निविदा के साथ ईएमडी में छूट के लिए उचित दस्तावेजी साक्ष्य प्रस्तुत करने पर ईएमडी के भुगतान से छूट दी जाती है (यदि लागू हो):
  - सैक में अधिकृत विक्रेता के रूप में पहले से पंजीकृत/पेनालीकृत विक्रेता।
  - भारतीय प्रतिनिधि को शामिल न करते हुए सीधे प्रस्ताव प्रस्तुत करने वाले विदेशी विक्रेता
  - केंद्रीय पीएसयू/ईपी तथा स्वायत्त निकाय
  - सूक्ष्म एवं लघु उद्यम
  - खादी एवं ग्रामोद्योग आयोग
  - राष्ट्रीय लघु उद्योग निगम
  - भारत सरकार के आदेशानुसार ईएमडी के भुगतान से विशेष रूप से छूट प्राप्त कोई अन्य स्थापना
14. निविदा मूल्यांकन प्रक्रिया के दौरान अपनी निविदा को वापस लेने वाले विक्रेताओं की ईएमडी जब्त कर ली जाएगी। विफल विक्रेताओं की ईएमडी निविदा अवार्ड करने के बाद, निविदा अवार्ड करने के 30 दिनों के अंदर ब्याज के बिना ईएमडी लौटा दी जाएगी।

Tender documents can be bought from the Purchase Division, SAC and are also available on ISRO website [www.isro.gov.in](http://www.isro.gov.in) and SAC website [www.sac.gov.in](http://www.sac.gov.in). Interested tenderers may download the same from the website and submit their offer along with tender fee of ₹ 545.00 each (In the form of Crossed Demand Draft). While submitting your offer superscribe Tender No., and due date on the envelope.

If the documents are requisitioned by post, the following points shall be noted:

1. Request letter shall be sent for requisitioning tender documents indicating tender notice number and tender number together with tender fee ₹ 545.00 each (In the form of Crossed Demand Draft issued by any Nationalized Bank) to the Purchase and Stores Officer, Space Applications Centre, Ahmedabad - 380 015 only.
2. The Envelope containing such request shall be super-scribed with "Request for Tender Documents". Separate request letter and separate Demand Draft shall be sent for each tender document.
3. The tender fees (non-refundable) shall be paid in the form of CROSSED DEMAND DRAFT (MICR DD ONLY) payable at AHMEDABAD in favour of The ACCOUNTS OFFICER, SAC, Ahmedabad - 380 015 only.
4. Vendor name and tender number shall be indicated on the reverse side of the Demand Draft.
5. No request for extension of the due date will be considered.

6. The sale of the tender documents through POST shall be closed 10 days prior to due date.
7. In case vendors desire to collect the tender document in person, they may contact Purchase Division (Bldg. No. 30-A, Room No. 57) on any working day between 1400 to 1600 hrs up to one day before the due date.
8. Deadline for the receipt of the sealed offers shall be up to 1500 hrs on the due date mentioned against individual tender.
9. Bids received before the deadline shall be opened in the presence of attending tenderers/their authorized representatives on the same day at 1530 hrs.
10. In the event any date indicated above is declared as holiday, the next working day at SAC shall be considered as the due date for receiving & opening of tenders.
11. Late/Delayed offers will not be accepted.
12. Parties, who have submitted bids in time and want to participate in tender opening, may inform their authorized representative's name one day in advance of the due date indicated against the particular tender. Delayed requests / requests for entry at eleventh hour will not be entertained.
13. The following categories of bidders shall be exempt from paying EMD subject to submission of appropriate documentary evidence with the bid in support thereof (if applicable):
  - Vendors already registered/empanelled with SAC as authorized vendors.
  - Overseas bidders submitting offers directly without involving an Indian Representative.
  - Central PSUs/PSEs and autonomous bodies
  - Micro and Small Enterprises
  - Khadi and Village Industries Commission
  - National Small Industries Corporation
  - Any other establishments specifically exempted from paying EMD by an order of the Government of India.
14. The EMD of bidders who withdraw their bid during the tender evaluation process shall be forfeited. EMD of unsuccessful bidders shall be refunded without interest after the tender has been awarded, within 30 days of the award of the tender.

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निविदा सूचना सं.: सैक/पीटी /08/2016-17  
Tender Notice No.: SAC/PT/08/2016-17

क्र. सं. Sr.No	निविदा नं. Tender No.	संक्षिप्त विवरण Brief Description	नियत तिथि (अपराह्न 3 बजे तक) Due on (Up to 3 pm)
1	AHEP 201600009901	High-end Data Storage Server with Rack (Single Part)	10/08/2016

GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE  
AHMEDABAD 380 015, INDIA  
PURCHASE & STORES

Ph No: 079-2691 3067  
Fax 079-2691 5848/02/35

Date :18/07/2016

INVITATION TO TENDER

M/s

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Our Ref No : AHEP 2016-000099-01

Tender Due: 15:00 Hrs ISTon 10/08/2016

Opening : 15:30 Hrs ISTon 10/08/2016

Dear Sirs,

Please submit your sealed quotation , in the Tender Form enclosed here along with the descriptive catalogues / pamphlets /literature ,superscribed with Our Ref.No. and Due Date for the supply of the following items as per the terms & conditions mentioned in Annexure( Form No: attached )

S.No.	Description of Items with Specifications	Unit	Quantity
1	High-end DATA STORAGE SERVER ALONG WITH 42U RACK WITH POWER CABLES (with 100 TB or more storage capacity) (DETAILED SPECIFICATIONS ATTACHED SEPERATELY)	each	1

DELIVERY AT: SAC STORE

MODE OF DESPATCH BY AIR FRE

DUTY EXEMPTIONS

SPECIAL INSTRUCTIONS NIL

SPECIFIC TERMS attached

**INSTRUCTIONS TO TENDERERS:**

Note 1) : We are exempted from Custom/Excise duty

2) Indicate percentage of agency commission payable to your Indian agent, if any.

3) All bank charges outside India will be to your account only.

4) Please submit your quotations in sealed cover only. Quotations by Fax/E-mail is not valid. Please submit point to point compliance to our specifications and commercial compliance statement.

5) OEM/Authorized Indian agent shall quote along with authorization certificate.

EMD : Bidders shall submit an amount of Rs. 105000.00 alongwith their offer, if you are not registered vendors in our panel/Central/PSUs/PSEs & Autonomous Bodies /MSE/Khadi & Village Industries Commission/NSIC.

The MED shall be submitted in the form of DD/Banker's Cheque/Bank Guarantee/ Fixed Deposit Receipt(FDR) made in the name of Accounts Officer, Space Applications Centre & payable at par at Ahmedabad.

Bids received without EMD shall be treated as invalid and shall not be considered.

JAYASHREE N. S.  
PUR & STORES OFFICER (ADHOC)  
For and on behalf of the President of India  
The Purchaser

**Specifications of 42U Rack with PDUs and Power Cables**

Sr No	Parameter	Configuration
A	<b>Server Rack</b>	<b>42U Standard Server Rack as per below Specification</b>
1	<b>Size</b>	Height 42U usable, Minimum Width 600 mm, Depth overall Minimum: 1070mm & Mounting Depth : 191mm-934mm, Height overall: 1991mm & Height Usable: 42U
2	<b>Standards</b>	As per EIA 310D
3	<b>Load Carrying Capacity</b>	The 42U Rack shall support a dynamic load (rolling on the casters) of at least 1,022 kg. and static load (weight supported by the casters and leveling feet) of at least 1,363 kg total installed equipment weight.
4	<b>Material</b>	All weight bearing components shall be constructed from steel with a thickness no less than 0.9mm (20 gauge). All sheet metal parts shall be painted using a powder coat paint process. Plastic materials shall comply with Underwriters Laboratory Specification 94 with HB rating (UL94 V-1) or better. All interior components of racks shall not have electroplated zinc coating to minimize zinc whiskers near active equipment. The units (42U) shall ship with a perforated front door, perforated split rear doors, four (4) half-height side panels, toolless roof, two (4) vertical frame posts, four (4) adjustable vertical mounting rails, minimum of two (2) and maximum of four (4) vertical PDU mount cable organizers, four (4) leveling feet and four (4) casters, baying and grounding hardware pre-installed by the manufacturer.
5	<b>Doors &amp; Side panel</b>	Both the front and rear doors shall be designed with lift-off hinges allowing for quick and easy detachment without the use of tools. The front and rear doors shall open a minimum of 120 degrees to allow easy access to the interior. The front door of the unit shall be reversible so that it can be mounted on either side. Split rear doors are provided for increased service clearance. The front door of the unit shall be capable of being installed on the rear of the unit, and the rear doors shall be capable of being installed on the front of the unit. The unit shall include half-height side panels that are removed without tools using easy finger latches for fast access to cabling and equipment. The side panels on the unit shall double as privacy panels when the units are bayed together. Side panels are flush with the frame so the overall width of the unit does not change with the side panels installed. Baying brackets must provide two set of mounting holes for standard enclosure spacing of 24" or 600mm.
6	<b>Equipment Access &amp; Installation</b>	The unit shall provide 42U of equipment vertical mounting space. The vertical mounting rails shall be easily adjustable to allow different mounting depths. Each vertical mounting rail shall be marked on both sides with lines showing the top and bottom of each U and the number U space next to the middle hole. Each U consists of three square holes and is 1.75 inches (44.45 mm) high. The unit shall include M6 caged nuts, bolts and cup washers, and caged nut tool for the mounting of equipment inside the unit.
7	<b>Ventilation</b>	The unit shall have ventilated front and rear doors to provide adequate airflow required by the major server manufacturers. Perforation pattern for Front door is 85% & for rear doors is 95 % atleast. The unit shall provide the means to mount optional cooling accessories for <b>high-density</b> . The manufacturer shall offer an optional toolless blanking panel kit to prevent the recirculation of hot exhaust air. The manufacturer shall ensure all gaps are blocked to prevent recirculation of hot air.
8	<b>Cable Access</b>	Top cable management openings provided in the enclosure roof: Two 75mm (2.96") x 644mm (1.64"), One 240mm (9.45") x 92mm (3.61"), and Five 171mm (6.75") x 54mm (2.14") Rectangular Openings. Bottom cable management opening provided in the enclosure base: 567mm (22.31") x 831mm (32.71"). Cable opening edges must be protected with plastic grommets or radiused edges. Side cable management opening provided in the enclosure base; a minimum of two (2) and maximum of four (4) vertical PDU mount cable organizers.

9	<b>Security</b>	The unit shall include front door lock, rear door lock and side panel lock that are keyed the same; two keys included. Replacement key lock cylinders from the handle manufacturer should be available to provide a minimum of 220 unique key combinations on front and rear doors. The manufacturer shall support optional products and accessories that allow the enclosure environment to be monitored for temperature, humidity, and electronic pass key door access. The unit shall have mounting provisions for optional door alarm switch to monitor access to the	
10	<b>Delivery &amp; Installation</b>	The unit shall be shipped fully assembled as one orderable SKU. The manufacturer shall offer an inside-delivery shipping option which includes reasonable delivery to the inside of a customer's building and removal and disposal of shipping material and packaging. The 42U unit shall roll through a standard 2 meter or seven (7) foot office doorway.	
11	<b>Grounding Requirements</b>	All enclosure components such as doors, side panels, roofs, etc. should be bonded directly to the frame. Grounding points should be provided on frame to externally bond each unit to building ground.	
12	<b>Stabilization</b>	The manufacturer shall have optional bolt down brackets, consisting of four (4) brackets and mounting hardware that attach to the enclosure frame on the front and rear (on the interior or exterior), and which must be anchored to the sub-floor for compliance with the local Uniform Building Code (UBC). The manufacturer should supply structural calculations by a professionally registered engineering firm showing compliance with the local UBC for floor anchoring. The unit shall have four (4) adjustable leveling feet to help provide a stable base in the event of an uneven floor	
13	<b>Rack Power Distribution unit</b>	Provide 2 Qty of 7.3KVA Single phase (230V), zero U PDU, with IEC 320 C13 x 20 sockets and C19 x 4 sockets and 3 Meter input cord with IEC 309 industrial socket.	
14	<b>Rack PDU Compliance</b>	Rack should have Regulatory Approvals - UL 60950-1 , EIA-310-E	
15	<b>Warranty</b>	The manufacturer shall warrant the unit to be free from defects in materials and workmanship for a minimum period of three years from the date of purchase. The manufacturer's obligation under this warranty shall be to repair or replace the unit, at its own sole option.	
16	<b>Power cords</b>	36 nos. of Power cords C13 to C14 1.8m length	
17	<b>Equipment shelve</b>	1U Fixed Shelf with minimum 113kg capacity and adjustable mounting depth	
18	<b>KVM Console</b>	8 port USB KVM over IP Switch with 1 remote user and 17" 1U Rack mount console with 8 qty of KVM Cables .	
19	<b>Equipment Mounting Hardware kit</b>	64 sets of M6 cage nuts, nylon washers and slot/phillips screws	
20	<b>Installation and Integration</b>	The supplier should installation and Integrate entire solution at our Site and include any cables, accessories required in solution.	



**COMPLIANCE STATEMENT REQUIRED TO BE FILLED AND ENCLOSED ALONG WITH  
THE TECHNICAL AND COMMERCIAL BID BY THE VENDOR.**

Sr. No.	Commercial terms	Compliance/Remarks/Comments by Vendor
1.	Delivery terms -Ex-works/FOB/ FCA etc.	
1.1	Purchaser is having an air consolidation contract and their freight forwarder will arrange to collect the consignment from your premises/will take the responsibility for onward transmission from the point of delivery as per INCOTERMS 2010. This is applicable for import cases.	
2.	Packing charges inclusive/exclusive.	
3.	Delivery period – in weeks/months	
4.	Payment terms : Our standard term is - Sight Draft (import) /within 30 days from the date of acceptance (indigenous).	
5.	Country of origin – to be declared in the invoice.	
6.	Name and address of the Indian Agent.	
7.	Percentage of agency commission included in the quoted price – payable in Indian Rupees only directly to the Indian Agent.	
8.	Validity of the offer- minimum of 120 days from the date of opening.	
9.	If you are an Indian Agent, please enclose the authorization letter of your Principal and confirm that whether you have enrolled with DGS&D as per rules.	
10.	In a tender, either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.	
11.	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.	
12.	Cost of spares included in the price bid not included.	
13.	Will you be able to provide consumables/spares for 10 years?	
14.	Taxes and duties :	
14.1	Taxes in India to the account of Purchaser. Outside India to Seller's/Contractor's account. Please indicate your Tax Registration Number.	
14.2	Wherever installation involved, Income Tax @ 2% will be deducted from the bill and a certificate issued.	
14.3	Installation in India will attract Service Tax @ 12.36%. If required, orders for supply and installation can be issued separately.	
14.4	Work order will attract work contract tax as per rules. Please confirm whether you have included WCT in your offer.	
14.5	Customs Duty Exemption Certificate (CDEC) will	

14.6	be issued by Purchaser. Hence no CD is to be included in your offer wherever applicable. Please indicate rate of the Sales Tax/VAT applicable.	
14.7	Octroi Duty/Entry Tax exempted. Exemption certificate will be issued, if required.	
14.8	Purchaser is eligible for full Excise Duty exemption. Excise Duty exemption certificate will be issued.	
15.	No Insurance is required at Purchaser's cost.	
16.	For two part bids two separate sealed envelopes are to be sent duly superscribed as follows : 1. TECHNICAL & COMMERCIAL BID 2. PRICE BID Please refer instructions.	
17.	Wherever EMD/tender fee is payable – provide the same in the form of crossed Demand Draft in favour of The Accounts Officer, SAC, Ahmedabad along with the bid but in a separate cover or along with technical bid. On the back side of the D.D, please write your company's name.	
18.	Language to be used in all correspondence – English	
19.	Measurements – Metric system to be followed	
20.	Whether prequalification of your facility procedure completed (if applicable).	
21.	Warranty period – We need minimum 3 years from the date of acceptance. In case the product has a standard warranty of 1 year, confirm that additional 2 years warranty cost is indicated in the price bid/prices. However the warranty requirement if projected in RFP shall prevail.	
22.1	Defective/rejected items if any, are to be replaced free of cost.	
23.	Confirm whether you will be able to provide samples if called for, free of cost.	
24	Approximate weight (net and gross) of the consignment.	
25.	Instruction/operational manual to be supplied free of cost.	
26.	Supply and installation is subject to Purchaser's acceptance.	
27.	LC extension charges to your account, in case of delay from your side.	
28.	Items from latest production batch only are to be supplied.	
29.	Wherever Export Licence required, payment will be made after getting export licence and after confirmation by the supplier, with a copy of Export Licence.	
30.	Bank Guarantees (from Nationalized/ Scheduled Bank/ Bank approved by Purchaser.	

30.1	Advance payment for the equal value valid till the completion of contract/acceptance, is to be provide by you.	
30.2	Towards issue of "Free Issue Material" by Purchaser for the value of the material issued, is to be provided.	
30.2.1	The Bill of material for the material used for the Fabrication work and available balance to be prepared by you and countersigned by the User Department is to be sent along with the final bill for arranging the balance/payment.	
30.3	Towards Performance of the Contract and Product for 10% value valid till the expiry of warranty period.	
31.	Security Deposit is to be submitted to SAC by the successful bidder (wherever applicable )on awarding the contract	
32.	Training – free of cost – to be imparted at Purchaser's site.	
33.	Bank charges wherever applicable shall be paid by Purchaser/Contractor to their respective Bankers.	
34.	Arbitration proceedings – Within India as per provisions of Arbitration and Conciliation Act 1996.	
35.	Liquidated Damages - @ 0.5% per week for the delayed portion – maximum 10% of the contract value.	
36.	Force Majeure conditions applicable?	
37.	Acceptance of Fall clause. "The rates as per the charges of the Contract should not in any event exceed the lowest rates, the supplier charge to any other party or organization. If at any time during the period of contract, the supplier reduce the charges to any other party, then they shall forth-with notify such reduction to Head, Purchase & Stores, SAC and reduce the contract rates subsequently, from the date of coming into force of such reduction".	
38.	You are requested to indicate the registration number; you have for Sales Tax/Service Tax as the case may be with concerned Government authorities. Also you are requested to provide company registration details wherever applicable along with copy of the company registration certificate. The offers received without the above information will be summarily rejected.	



GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE  
PURCHASE DIVISION

**INSTRUCTIONS TO TENDERERS AND TERMS & CONDITIONS OF TENDER**

1. The Tenderers should submit quotations in sealed envelope, superscribing the Tender No. and due date of opening and complete in all respects with technical specifications, including pamphlets and catalogues. Separate instructions, if any in this regard should be strictly complied with.
2. A Proforma Invoice may also be given which should contain the following information:
  - a) The FOB/FCA value, for import by Sea freight / Air freight up to Ahmedabad and for air parcel post up to Ahmedabad should be separately indicated.
  - b) Agency Commission: The amount of commission included in the price and payable to the Indian Agent of the Contractor shall be paid directly to the Indian Agent by the Purchaser in equivalent Indian Rupees on the basis of an Invoice from him applying T.T. buying rate of exchange ruling on the date of placement of the Purchase Order and which shall not be subject to any further exchange variations. This payment will be released to the Indian Agent after receipt and acceptance the goods in India.
  - c) The Contractor shall invoice only for the net amount payable to him, after deducting the amount of Agency Commission included in the invoice which will be paid to the Indian Agent directly by the Purchaser. However, the Contractor's invoice should separately reflect the amount of commission payable to his Indian Agent.
  - d) The earliest delivery period and country of origin of the Stores.
  - e) Banker's name, address, telephone/fax Nos. & e-Mail ID of the Contractor.
  - f) The approximate net and gross weight and dimensions of packages / cases.
  - g) Recommended spares for satisfactory operation for a minimum period of one year beyond warranty.
  - h) Details of any technical service, if required for erection, assembly, commissioning and demonstration.
3. The FOB/FCA prices quoted should be inclusive of all taxes, levies, duties arising in the tenderer's country.
4. The offer should be valid for a minimum period of 90 days or longer if called for from the due date of opening of the tender.
5. Samples, if called for, should be sent free of all charges.
6. Late and delayed tenders will not be considered. Quotations by fax must be followed by detailed offers.
7. Offers made by Indian Agents on behalf of their Principals, should be supported by the proforma invoice of their Principals.
  - a) In a tender either the Indian Agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.
  - b) 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.
8. We are exempted from Customs/Excise Duties.
9. The details of Import Licence will be furnished in the Purchase Order.
10. The authority of person signing the tender, if called for, shall be produced.
11. Instructions / Operation Manual containing all assembly details including wiring diagrams should be sent wherever necessary in duplicate. All documents / correspondence should be in English language only.
12. The Purchaser reserves the right to accept or reject the lowest or any offer in whole or part without assigning any reason.
13. It is expressly agreed that the acceptance of the Stores Contracted for is subject to final approval in writing by the Purchaser.
14.
  - a) Part shipment is not allowed unless specifically agreed to by us.
  - b) As far as possible stores should be despatched by Indian Flag Vessels / Air India through an Agency nominated by us.
15. Inspection / Test Certificate should be provided for the goods after testing it thoroughly at the Contractor's works. If any Inspection by Lloyds or any other testing agency is considered necessary, it shall be arranged by Contractor.
16. Where erection or assembly or commissioning is a part of the Contract, it should be done immediately on notification. The Contractor shall be responsible for any loss/damage sustained due to delay in fulfilling this responsibility.
17. For items having shelf life, those with maximum shelf life should be supplied if order is placed.
18. No request for extension for due date for submission of tenders will be entertained.
19. Unsigned quotations will be rejected.
20. In case, the vendors are falling under the category of MSME, registered under NSIC and would like to avail exemptions, their quotations should be accompanied with necessary registration certificate with declaration to consider their offer. Quotation received without such declaration and valid registration certificate will not be considered for exemptions under Public Procurement Policy.

## TERMS AND CONDITIONS

### 1. DEFINITIONS:

- (a) The term 'Purchaser' shall mean the President of India or his successors or assignees.
- (b) The term 'Contractor' shall mean, the person, firm or company with whom or with which the order for the supply of stores is placed and shall be deemed to include the Contractor's Successors, representatives, heirs, executors and administrators unless excluded by the Contract.
- (c) The term 'Purchase Order' shall mean the communication signed on behalf of the Purchaser by duly authorised officer intimating the acceptance on behalf of the Purchaser on the terms and conditions mentioned or referred to in the said communication accepting the Tender or offer of the Contractor for supply of stores, plant, machinery or equipment or part thereof.
- (d) The term 'Stores' shall mean what the Contractor agrees to supply under the Contract as specified in the Purchase Order.

### 2. PRICES:

Tenders offering firm prices will be preferred. Where a price variation clause is insisted upon by tenderer, quotations with a reasonable ceiling should be submitted. Such offers should invariably be supported by the base price taken into account at the time of tendering and also the formula for any such variations. However, such clauses will be subject to final acceptance by Purchaser.

### 3. TERMS OF PAYMENT:

3.1 Being a Department of the Government of India, the normal terms of payment are by Sight Draft. However other terms of payment like establishment of Letter of Credit may be considered by the Purchaser on such terms and conditions as may be agreed upon.

3.2 The Sight Draft / Letter of Credit will be operative on presentation of the under mentioned documents:

- a) Original Bill of Lading / Airway Bill
- b) Commercially certified invoices in triplicate, describing the stores delivered, quantity, unit rate and their total value. The invoice should indicate discounts, and Agency Commission if any separately.
- c) Packing List showing individual dimensions and weight of packages.
- d) Country of Origin Certificate in duplicate.
- e) Test Certificate.
- f) Declaration by the Seller that the contents in each case are not less than those entered in the invoices and the quality of the Stores are guaranteed as per the specifications asked for by the Purchaser.
- g) Warrantee and guarantee Certificate/s vide Clause 20 herein below

### 4. IMPORT LICENCE:

Reference to Import License No. & date and Contract number & date shall be prominently indicated in all the documents vide Para 3.2.

### 5. DEMURRAGE:

Supplier shall bear demurrage charges, if any, incurred by the Purchaser due to delayed presentation of shipping documents as prescribed in Para 3.2 to the bankers beyond a reasonable time (say within 10-12 days) from the date of bill of lading for sea consignments and within 3-4 days from the date of Air Way Bill for air consignments.

### 6. ADDRESS OF INDIAN AGENT:

.....

### 7. GUARANTEED TIME OF DELIVERY:

The time for and the date of delivery stipulated in the Purchase Order shall be deemed to be the essence of the Contract. Delivery must be completed within the date specified therein.

### 8. INSPECTION AND ACCEPTANCE TESTS:

8.1 The Purchaser's representatives shall also be entitled at all reasonable times during manufacture to inspect, examine and test on the Contractor's premises the material and workmanship of all stores to be supplied under the Contract and if part of the said stores is being manufactured on other premises, the Contractor shall obtain for the Purchaser's representative permission to inspect, examine and test as if the equipment were being manufactured on the Contractor's premises. Such inspection, examination and testing shall not release the Contractor from the obligations under this Contract.

8.2 For tests on the premises of the Contractor or of any of his sub-Contractors, the Contractor shall provide free of cost assistance, labour, material, electricity, fuel and instruments as may be required or as may be reasonably needed by the Purchaser's representative to carry out the tests efficiently.

8.3 When the stores have passed the specified test, the Purchaser's representative shall furnish a certificate to the effect in writing to the Contractor. The Contractor shall provide copies of the test/s certificates to the Purchaser as may be required.

### 9. MODE OF DESPATCH:

Generally, stores should be despatched through Indian Flagged Vessel / Air India or through any other Agency nominated by the Purchaser. A copy of the invoice and packing list should invariably be kept inside each of the packages.

### 10. PORT OF ENTRY:

FOR AIR SHIPMENTS: AHMEDABAD (Via Mumbai, if required)

FOR SEA SHIPMENTS: NHAVASHEVA/Mumbai Seaport



**11. CONSIGNEE:**

Sr. Purchase & Stores Officer,  
Central Stores,  
Space Applications Centre (SAC),  
Ahmedabad

**12. SHIPPING MARKS:**

The mark on the shipping documents such as invoice, bill of lading and on the packages should be as follow:

PURCHASE ORDER NO. ....

DATED .....

GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE

Destination: ..... &

Port of Entry: .....

**13. INSURANCE OF THE STORES:**

The necessity or otherwise of insurance will be as indicated in the Purchase Order.

**14. CONTRACTOR'S DEFAULT LIABILITY:**

14.1 The Purchaser may upon written notice of default to the Contractor terminate the Contract in whole or in part in circumstances detailed hereunder:

- a) If in the judgement of the Purchaser the Contractor fails to make delivery of Stores within the time specified in the Contract/agreement or within the period for which extension has been granted by the Purchaser to the Contractor.
- b) If in the judgment of the Purchaser the Contractor fails to comply with any of the other provisions of this Contract.

15. In the event the Purchaser terminates the Contract in whole or in part as provided in Clause 14 the Purchaser reserves the right to Purchase, upon such terms and in such a manner as he may deem appropriate, stores similar to that terminated and the Contractor shall be liable to the Purchaser for any additional costs for such similar stores and/or for liquidated damages for delay as defined in Clause 19 until such reasonable time as may be required for the final supply of stores.

15.1 If this Contract is terminated as provided in Clause 14 the Purchaser in addition to any other rights provided in this Article, may require the Contractor to transfer title and deliver to the Purchaser under any of the following clauses in the manner and as directed by the Purchaser:

- a) Any completed stores.
- b) Such partially completed stores, drawing, information and Contract rights (hereinafter called manufacturing material) as the Contractor has specifically produced or acquired for the performance of the Contract as terminated. The Purchaser shall pay to the Contractor the Contract price for completed stores delivered to and accepted by the Purchaser and for manufacturing material delivered and accepted.

15.2 In the event the Purchaser does not terminate the Contract as provided in Clause 14, the Contractor shall continue the performance of the Contract in which case he shall be liable to the Purchaser for liquidated damages for delay as set out in Clause 19 until the stores are accepted.

**16. REPLACEMENT:**

If the stores or any portion thereof is damaged or lost during transit, the Purchaser shall give notice to the Contractor setting forth particulars of such stores damaged or lost during transit. The replacement of such stores shall be effected by the Contractor within a reasonable time to avoid unnecessary delay in the intended usage of the Stores. In case the Purchaser agrees, the price towards replacement items shall be paid by the Purchaser on the basis of original price quoted in the tender or as reasonably worked out from the tender.

**17. REJECTION:**

In the event that any of the stores supplied by the Contractor is found defective in material or workmanship or otherwise not in conformity with the requirements of the Contract specifications, the Purchaser shall either reject the stores or request the Contractor, in writing, to rectify the same. The Contractor, on receipt of such notification, shall either rectify or replace the defective stores free of cost to the Purchaser. If the Contractor fails to do so, the Purchaser may at his option either:

- a) Replace or rectify such defective stores and recover the extra cost so involved from the Contractor, or
- b) Terminate the Contract for default as provided under Clause 14 above, or
- c) Acquire the defective stores at a reduced price considered equitable under the circumstances. The provision of this article shall not prejudice any other rights of Purchaser's under the Contract including recovery of liquidated damages for delay.

**18. EXTENSION OF TIME:**

If the completion of supply of stores is delayed due to reasons of *force majeure* such as acts of god, acts of public enemy, acts of Government, fires, floods, epidemics, quarantine restriction, strikes, freight embargoes, etc., the Contractor shall give notice within 15 days to the Purchaser in writing of his claim for an extension of time. The Purchaser on receipt of such notice after verification, if necessary, may agree to extend the Contract delivery date as may be reasonable but without prejudice to other terms and conditions of the Contract.

#### 19. DELAY IN COMPLETION / LIQUIDATED DAMAGES:

If the Contractor fails to deliver the stores within the time specified in the Contract or any extension thereof, the Purchaser shall recover from the Contractor as liquidated damages a sum of one-half of one percent (0.5%) of the Contract price of the undelivered stores for each calendar week of delay. The total liquidated damages shall not exceed ten percent (10 %) of the Contract price of the portion of stores so delayed. Stores will be deemed to have been delivered only when all their component parts are also delivered. If certain components are not delivered in time, the stores will be considered as delayed until such time as the missing parts are delivered.

#### 20. GUARANTEE & REPLACEMENT:

- a) The Contractor shall guarantee that the stores supplied shall comply fully with the specifications laid down for material, workmanship and performance.
- b) For a period of twelve months (or such period as agreed upon by the parties) after the acceptance of the stores, if any defects are discovered therein or any defects therein are found to have developed under proper use arising from faulty materials, design or workmanship, the Contractor shall remedy such defects at his own cost provided he is called upon to do so within a period of 14 months (or such period as specified in Contract) from the date of acceptance thereof by the Purchaser who shall state in writing in what respect the stores or any parts thereof are faulty.
- c) If in the opinion of the Purchaser it becomes necessary to replace or renew any defective stores, such replacements or renewals shall be made by the Contractor free of all costs to the Purchaser provided the notice informing the Contractor of the defect is given by the Purchaser in this regard within the said period of 14 months (or such period as specified in Contract) from the date of acceptance thereof.
- d) Should the Contractor fail to rectify the defects, the Purchaser shall have the right to reject or repair or replace at the cost of the Contractor the whole or any portion of the defective stores.
- e) The decision of the Purchaser, notwithstanding any prior approval or acceptance or inspection thereof on behalf of the Purchaser, as to whether or not the stores supplied by the Contractor are defective or any defects has developed within the said period of 12 months (or such agreed period) or as to whether the nature of the defects requires renewal or replacement shall be final, conclusive and binding on the Contractor.
- f) To fulfill guarantee conditions outlined in Clause 20 (a) to (e) above, the Contractor shall, at the option of the Purchaser, furnish a Bank Guarantee (as prescribed by the Purchaser - Bank Guarantee format enclosed) from a Bank approved by the Purchaser for an amount equivalent to 10% of the value of the Contract along with first shipment documents. On the performance and completion of the Contract in all respects, the Bank Guarantee will be returned to the Contractor without any interest.
- g) All the replacement stores shall also be guaranteed for a period of 12 months from the date of arrival of stores at Purchaser's site.
- h) **Even while the 12 months guarantee applies to all stores, in case where a greater period is called for by our specifications, then such a specification shall apply, and in such cases, the period of 14 months referred to in Clause 20 (b) and (c) shall be asked for guarantee period plus two months.**

#### 21 REQUIREMENT OF ADDITIONAL NUMBERS OF THE STORES/SPARE PARTS ORDERED:

The Contractor shall also undertake the supply of additional number of items covered by the order as considered necessary by the Purchaser at a later date, the actual price to be paid shall be mutually agreed to after negotiations.

#### 22. PACKING:

- a) The Contractor wherever applicable shall pack and crate all stores for sea / air shipment as applicable in a manner suitable for export to a tropical humid climate, in accordance with internationally accepted export practices and in such a manner so as to protect it from damage and deterioration in transit by road, rail or sea for space qualified stores. The Contractors shall be held responsible for all damages due to improper packing.
- b) The Contractor shall ensure that each box / unit of shipment is legible and properly marked for correct identification. The failure to comply with this requirement shall make the Contractor liable for additional expenses involved.
- c) The Contractor shall notify the Purchaser of the date of shipment from the port of embarkation as well as the expected date of arrival of such shipment at the designated port of arrival.
- d) The Contractor shall give complete shipment information concerning the weight, size, content of each packages, etc.
- e) Transshipment of equipment shall not be permitted except with the written permission of the Purchaser.
- f) Apart from the despatch documents negotiated through Bank, the following documents shall also be airmailed to the Purchaser within 7 days from the date of shipment by sea and within 3 days in case of air-consignments:
  - a) Commercial Bill of Lading / Air Way Bill / Post parcel Receipt.  
(Two non-negotiable copies)
  - b) Invoice (3 copies)
  - c) Packing List (3 copies)
  - d) Test Certificate (3 copies)
  - e) Certificate of Origin.

The Contractor shall also ensure that one copy of the packing list is enclosed in each case.

#### 23. ARBITRATION:

If at any time any question, dispute or difference whatsoever shall arise between the Purchaser and the Contractor upon or in connection with this Contract, either party may forthwith give to the other notice in writing of the existence of such

nominated by Purchaser, other by a Contractor and in the event of any difference of opinion, the arbitrators will refer the matter to the umpire. The arbitration shall be conducted in accordance with the rules and procedure for arbitration of the International Chamber of Commerce at Paris. The expenses of the arbitrators and umpire shall be paid as may be determined by them. However, the venue of such arbitration should be in India.

**24. LANGUAGE AND MEASURES:**

All documents pertaining to the Contract including specification, schedule, notice, correspondence, operating and maintenance instructions, drawings or any other writings shall be written in English language. The metric system of measurement shall be used exclusively in the Contract.

**25. INDEMNITY:**

The Contractor shall warrant and be deemed to have warranted that all Stores supplied against this Contract are free and clean of infringement of any patent, copyright or trade mark and shall at all times indemnify the Purchaser against all claims which may be made in respect of stores for infringement of any right protected by Patent, Registration of design or Trade Mark, and shall take all risk of accident or damage which may cause a failure of the supply from whatever cause arising and the entire responsibility for the sufficiency of all the means used by him for the fulfilment of the Contract.

**26. COUNTER TERMS AND CONDITIONS OF SUPPLIERS:**

Where counter terms and conditions/printed or cyclostyled conditions have been offered by the bidder, the same shall not be deemed to have been accepted by the Purchaser unless specific written acceptance thereof is obtained.

**27. SECURITY INTEREST:**

On each item to be delivered under this Contract, including an item of work in progress in respect of which payments have been made in accordance with the terms of the Contract, Purchaser shall have a security interest in such items which shall be deemed to be released only at the time when the applicable deliverable item is finally accepted and delivered to the Purchaser in accordance with the terms of the Contract. Such security interest of the Purchaser shall constitute a prior charge as against any other charge or interest created in respect of such items by any entity.

**28. BANK CHARGES:**

While the Purchaser shall bear the bank charge payable to his Bankers (State Bank of India), the Contractor shall bear the Bank charges payable to his Bankers including the cheques towards advising amendment commissions.

**29. TRAINING:**

The Contractor shall, if required by the Purchaser, provide facilities for the practical training of Purchaser's engineering / technical personnel from India and for their active association on the manufacturing processes throughout the manufacturing period of the Contract / stores. Number of such personnel to be mutually agreed upon.

**30. APPLICABLE LAW:**

The Contract shall be interpreted, construed and governed by the laws of India.

**PACKING INSTRUCTIONS**

1. In tune with the requirement of international plant protection convention of the FAO, UN the following has become mandatory with immediate effect.
2. All packing materials of any kind of plant origin used for packing shall require treatment including hear-kiln treatment at 56 degree centigrade for a minimum of 30 hours of methylbromide fumigation at 48g/cum for 32 hours of chemical impregnation as per international standards.
3. If the consignments are sent without the aforesaid certificate, all demurrages and other charges for treatment etc. will be to the account of the suppliers.
4. This aspect also should be taken care of while submitting the offers.
5. If the packaging material being used for your product does not come under the category "material of plant origin" (i.e. Leaves, grass, wood etc.) Please certify the same in your quote and ignore the above instructions. However, the same should be ascertained at the time of actual shipment if the order is awarded to you.





**STANDARD TENDER FORM**  
(Seal of the Company)

Tender No.: .....  
Due on: .....  
Ref. No.: .....  
Date: .....

**TENDER FORM**

From: .....  
.....  
.....

To: The Sr. /Purchase & Stores Officer,  
..... (Name of the Centre/Unit)  
.....

Dear Sir,

I/We hereby offer to supply the stores detailed below at the price hereunder quoted and agree to hold this offer open till..... I/we shall be bound to supply the stores hereby offered upon the issue of the Purchase Order communicating the acceptance thereof on or before the expiry of the last mentioned date. You are at liberty to accept any one or more of the items of stores tendered for or any portion of any one or more of the items of such stores. I/We, notwithstanding that the offer in this tender has not been accepted in whole, shall be bound to supply to you such items and such items and such portion or portions of one or more of the items as may be specified in the said Purchase Order communicating the acceptance:

Sl. No.	Description	Quantity	Unit	Rate Rs.	Delivery Date

**Note: All the rates should be given both in figures and words**

Place at which delivery will be made	
Date by which the ordered item/s will be supplied	

2. I/We have understood the items of the tender annexed to the invitation to tender and have thoroughly examined the specifications/drawing and/or pattern quoted or referred to herein and am/are fully aware of the nature of the stores required and my/our offer is to supply the stores strictly in accordance with the requirements subject to the terms and conditions stipulated in the enquiry and contained in the Purchase Order communicating the acceptance of this tender either in whole or in part.

Signature of Tenderer

Date: .....

भारत सरकार  
अंतरिक्ष विभाग  
अंतरिक्ष उपयोग केंद्र(इसरो)  
आंबावाडी विस्तार पी.ओ.  
अहमदाबाद - 380 015 (भारत)  
दूरभाष: +91-79-2691 3051/98  
फैक्स नं. : +91-79-2691 5835/02/48



Government of India  
Department of Space  
**SPACE APPLICATIONS CENTRE (ISRO)**  
Ambawadi Vistar P.O.  
Ahmedabad – 380 015 (INDIA)  
Telephone : +91-79 – 2691 3051/98  
Fax No. : +91-79 – 2691 5835 / 02 /48  
Email: publictender@sac.isro.gov.in

निविदा सूचना सं.: सैक/पीटी /08/2016-17  
Tender Notice No.: SAC/PT/08/2016-17

क्र. सं. Sr.No	निविदा नं. Tender No.	संक्षिप्त विवरण Brief Description	नियत तिथि (अपराह्न 3 बजे तक) Due on (Up to 3 pm)
2	AHSE 201600077001	High Precision Measuring Microscope (Single Part)	10/08/2016

GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE  
AHMEDABAD 380 015, INDIA  
PURCHASE & STORES

Ph No: 079-2691 3067  
Fax 079-2691 5848/02/35

Date : 14/07/2016

INVITATION TO TENDER

M/s 000000

Our Ref No : AHSE 2016-000770-01

Tender Due: 15:00 Hrs ISTon 10/08/2016

Opening : 15:00 Hrs ISTon 10/08/2016

Dear Sirs,

Please submit your sealed quotation , in the Tender Form enclosed here along with the descriptive catalogues / pamphlets / literature ,superscribed with Our Ref.No. and Due Date for the supply of the following items as per the terms & conditions mentioned in Annexure( Form No: As per Enclosure )

S.No.	Description of Items with Specifications	Unit	Quantity
1	SIPCON MAKE HIGH PRECISION MEASURING MISROSCOPE ; MODEL NO: SVI-3D-CNC, WITH RECOMMENDED SPARES AND ACCESORIES AND SPECIFICATIONS AS PER ATTACHED SHEET	No.	1

**DELIVERY AT:** SAC STORES

**MODE OF DESPATCH** ON SITE

**DUTY EXEMPTIONS** We are exempted from the payment of Custom & Excise Duty.

**SPECIAL INSTRUCTIONS** NIL

**SPECIFIC TERMS** As per Enclosure

**INSTRUCTIONS TO TENDERERS:**

1) Please furnish compliance to all the points of technical specifications and Commercial Compliance Statement along with your quote.

ANIL N VAIDYA  
PUR & STORES OFFICER  
For and on behalf of the President of India  
The Purchaser

## **SPECIFICATIONS OF HIGH PRECISION MEASURING MICROSCOPE**

**Qty:1 (one)**

### **ESSENTIAL FEATURES**

1. Easy and accurate measurements optimized for 3D parts-designed for easy use as well as repeatable and accurate measurement of 3D parts.
2. Compact and lightweight
3. Long working distance- long working distance at high magnifications with sufficient three dimensional clearance for Z-axis measurement
4. High-speed, highly-accurate Laser AF (optional) - addition to the standard Vision AF, an optional high-speed Laser AF with a long (greater than 60mm) working distance is prime requirement. It should provide fast focusing regardless of the surface shape of the work piece.
5. Sophisticated Auto Measure software- The software should provide various functions to easily conduct tasks ranging from setup, measurements and evaluations.
6. Additional Accessories -like micro/macro lenses, Illumination unit, standard table for mounting and installation, removable rotary table etc.

	<b>PARAMETERS</b>	<b>SPECIFICATIONS</b>
<b>1.0</b>	<b>MEASUREMENT</b>	
<b>1.1</b>	<b>Measuring range (X,Y)</b>	250mm x 150mm
<b>1.2</b>	<b>Measuring range (Z)</b>	200mm
<b>1.3</b>	<b>AUTO-FOCUSSING</b>	Desirable
<b>1.4</b>	<b>Measuring uncertainty</b>	X , Y, Z - 2 $\mu$ m ( for L=100mm) or better
<b>1.5</b>	<b>Stage repeatability</b> X Y Z	Better than 2 $\mu$ m
<b>1.6</b>	<b>Maximum load on the Glass plate</b>	$\geq$ 20kg
<b>1.7</b>	<b>Encoder resolution</b> X Y Z	0.1 $\mu$ m 0.1 $\mu$ m 0.1 $\mu$ m
<b>1.8</b>	<b>Encoder certificate</b>	All the 3 encoders must be supplied with a certificate specifying the accuracy with Sr. No of the encoder
<b>1.9</b>	<b>Operating mode</b>	Manual and CNC both

**SPECIFICATIONS OF HIGH PRECISION MEASURING MICROSCOPE**

(Contd.)

2.0	<b>OPTICS</b>	
2.1	<b>Magnification (Macro lenses)</b>	10 X, 20 X, 50 X, 100 X
2.2	<b>Magnification (Micro lenses)</b>	50 X, 100X, 200X ,500X, 1000X
2.3	<b>Measuring sensor</b>	Optical and/or video
2.4	<b>Standard reticle</b>	Pre- centered cross line graticule
2.5	<b>Eye piece Magnification</b>	10X, 15X, 20X
2.6	<b>Eye piece</b>	Monocular unit or binocular unit
2.7	<b>Observation image</b>	Erect image
2.8	<b>Working distance</b>	>65mm@ 50X (objective)
3.0	<b>ILLUMINATION TYPE</b>	Required for both surface reflected and surface transmitted
3.1	<b>Episcopic illumination</b>	Desirable
4.0	<b>ILLUMINATION CONTROL</b>	
4.1	<b>Manual control</b>	Required
4.2	<b>Programmable control</b>	Controlled through software
5.0	<b>SOFT WARE CAPABILITY (not limited to)</b>	Fully geometric and numerical display. Full CAD in/ CAD out capability
5.1	<b>Features</b>	Measuring, Recording, Analyzing, Reporting and Communicating
5.2	<b>Units</b>	mm and Inch
5.3	<b>Coordinate system</b>	Polar, Cartesian and Spherical
5.4	<b>CAD interface</b>	AutoCAD
5.5	<b>Reporting</b>	Customized Report Generator
5.6	<b>Video Edge detection</b>	Algorithm for weak edges, calculation of farthest ,nearest and average points on feature
5.7	<b>Construction Features</b>	PCD, midpoint, midlines
5.8	<b>Export / Import</b>	DXF, IGES
5.9	<b>CAD programming</b>	Auto programming with DXF files
5.10	<b>Programming</b>	Conditional Programming tools like GOTO, IF, THEN, ELSE
5.11	<b>Data Exchange</b>	Dynamic Data Exchange, Compatible with Team Viewer.
5.12	<b>Analysis Tools</b>	Tool for tracing the complete part, Pattern Finder, Overlap Deviation Analysis
5.13	<b>Measurement Tools</b>	Point, Line , Arc, Circle, Blob, Profile, Ellipse, Slot, Plane, Cylinder, Sphere, Cone,
5.14	<b>DXF overlap on the image</b>	Ability to import DXF file on the real time image to see the variation

## SPECIFICATIONS OF HIGH RESOLUTION MEASURING MICROSCOPE

(Contd.)

5.15	<b>3D overlap Deviation Analysis</b>	Ability to import 3D model of the part and then overlap the points to check the profile of surface tolerance
5.16	<b>Tolerance Features:</b>	Straightness, Roundness, Cylindricity, Flatness, True Position, Symmetry, Concentricity, Parallelism, Perpendicularity, Angularity, Profile of line and surface, Runout.
5.17	<b>Customized Report Generator</b>	With export options of Excel, PDF, BMP, TXT, Open Office etc ,
5.18	<b>Types of Reports format</b>	Minimum 7 inbuilt and Color coded pass & fail for toleranced values
6.0	<b>ACCESSORIES AND SPARES</b>	Price shall be quoted and to be specified whether system includes these items or not.
6.1	Illumination system	(Top)
6.2	Programmable Light Control	
6.3	Auto-focusing, Laser based	
6.4	Rotary stage	Compatible, for rotating object
6.5	Table	For above system
6.6	3-axis motorized system with joystick	Compatible to above system
7.0	<b>Mass [Main unit+Power unit]</b>	Approx. :150kg
8.0	<b>Power supply</b>	230 V-50Hz
9.0	<b>Warranty</b>	Minimum 3 years. If the standard warranty is less, pl. quote from OEM.
10.0	<b>Authorization certificate</b>	Authorization certificate must be attached with quote from the OEM
11.0	<b>Documentation</b>	All the manuals like user manual, service manual should be supplied.
12.0	<b>Installation and Training</b>	Vendor shall install and demonstrate the performance of an instrument along with all other operations and software at SAC.
13.0	<b>Delivery Schedule</b>	2 Months from the date of purchase order

**QTY:**

**(A) High Precision Measuring Microscope: 01 Unit**

**(B) Accessories and Spares:**

1. **Programmable Light Control: 02 No.**
2. **Rotary stage (compatible): 01 No.**
3. **Table (For above system): 01 No.**

## COMPLIANCE MATRIX TO BE FILLED BY VENDOR

	PARAMETERS	SPECIFICATIONS (ISRO)	Specifications of the offered product
<b>1.0</b>	<b>MEASUREMENT</b>		
<b>1.1</b>	<b>Measuring range (X,Y)</b>	250mm x 150mm	
<b>1.2</b>	<b>Measuring range (Z)</b>	200mm	
<b>1.3</b>	<b>AUTO-FOCUSSING</b>	Desirable	
<b>1.4</b>	<b>Measuring uncertainty</b>	X , Y, Z - 2 $\mu$ m ( for L=100mm) or better	
<b>1.5</b>	<b>Stage repeatability X Y Z</b>	Better than 2 $\mu$ m	
<b>1.6</b>	<b>Maximum load on the Glass plate</b>	$\geq$ 20kg	
<b>1.7</b>	<b>Encoder resolution X Y Z</b>	0.1 $\mu$ m 0.1 $\mu$ m 0.1 $\mu$ m	
<b>1.8</b>	<b>Encoder certificate</b>	All the 3 encoders must be supplied with a certificate specifying the accuracy with Sr. No of the encoder	
<b>1.9</b>	<b>Operating mode</b>	Manual and CNC both	
<b>2.0</b>	<b>OPTICS</b>		
<b>2.1</b>	<b>Magnification (Macro lenses)</b>	10 X, 20 X, 50 X, 100 X	
<b>2.2</b>	<b>Magnification (Micro lenses)</b>	50 X, 100X, 200X ,500X, 1000X	
<b>2.3</b>	<b>Measuring sensor</b>	Optical and/or video	
<b>2.4</b>	<b>Standard reticle</b>	Pre- centered cross line graticule	
<b>2.5</b>	<b>Eye piece Magnification</b>	10X, 15X, 20X	
<b>2.6</b>	<b>Eye piece</b>	Monocular unit or binocular unit	

## COMPLIANCE MATRIX TO BE FILLED BY VENDOR

(Contd.)

2.7	<b>Observation image</b>	Erect image	
2.8	<b>Working distance</b>	>65mm@ 50X (objective)	
<b>3.0</b>	<b>ILLUMINATION TYPE</b>	Required for both surface reflected and surface transmitted	
3.1	<b>Episcopic illumination</b>	Desirable	
<b>4.0</b>	<b>ILLUMINATION CONTROL</b>		
4.1	<b>Manual control</b>	Required	
4.2	<b>Programmable control</b>	Controlled through software	
<b>5.0</b>	<b>SOFT WARE CAPABILITY (not limited to)</b>	Fully geometric and numerical display. Full CAD in/ CAD out capability.	
5.1	<b>Features</b>	Measuring, Recording, Analyzing, Reporting and Communicating	
5.2	<b>Units</b>	mm and Inch	
5.3	<b>Coordinate system</b>	Polar, Cartesian and Spherical	
5.4	<b>CAD interface</b>	AutoCAD	
5.5	<b>Reporting</b>	Customized Report Generator	
5.6	<b>Video Edge detection</b>	Algorithm for weak edges, calculation of farthest ,nearest and average points on feature	
5.7	<b>Construction Features</b>	PCD, midpoint, midlines	
5.8	<b>Export / Import</b>	DXF, IGES	
5.9	<b>CAD programming</b>	Auto programming with DXF files	
5.10	<b>Programming</b>	Conditional Programming tools like GOTO, IF, THEN, ELSE	
5.11	<b>Data Exchange</b>	Dynamic Data Exchange, Compatible with Team Viewer.	
5.12	<b>Analysis Tools</b>	Tool for tracing the complete part, Pattern Finder, Overlap Deviation Analysis	



**COMPLIANCE MATRIX TO BE FILLED BY VENDOR**

(Contd.)

5.13	<b>Measurement Tools</b>	Point, Line , Arc, Circle, Blob, Profile, Ellipse, Slot, Plane, Cylinder, Sphere, Cone,	
5.14	<b>DXF overlap on the image</b>	Ability to import DXF file on the real time image to see the variation	
5.15	<b>3D overlap Deviation Analysis</b>	Ability to import 3D model of the part and then overlap the points to check the profile of surface tolerance	
5.16	<b>Tolerance Features:</b>	Straightness, Roundness, Cylindricity, Flatness, TruePosition, Symmetry, Concentricity, Parallelism, Perpendicularity, Angularity, Profile of line and surface, Runout	
5.17	<b>Customized Report Generator</b>	With export options of Excel, PDF, BMP, TXT, Open Office etc.	
5.18	<b>Types of Reports format</b>	Minimum 7 inbuilt and Color coded pass & fail for toleranced values	
<b>6.0</b>	<b>ACCESSORIES AND SPARES</b>	Price shall be quoted and to be specified whether system includes these items or not.	
6.1	Illumination system	(Top)	
6.2	Programmable Light Control		
6.3	Auto-focusing, Laser based		
6.4	Rotary stage	Compatible, for rotating object	
6.5	Table	For above system	
6.6	3-axis motorized system with joystick	Compatible to above system	
<b>7.0</b>	<b>Mass (Main unit &amp; Power unit)</b>	Approx. :150kg	
<b>8.0</b>	<b>Power supply</b>	230 V-50Hz	
<b>9.0</b>	<b>Warranty</b>	Minimum 3 years. If the standard warranty is less, pl. quote from OEM.	
<b>10.0</b>	<b>Authorization certificate</b>	Authorization certificate must be attached with quote from the OEM	
<b>11.0</b>	<b>Documentation</b>	All the manuals like user manual, service manual should be supplied.	
<b>12.0</b>	<b>Installation</b>	Vendor shall install and demonstrate the performance of an instrument along with all other operations and software at SAC	
<b>13.0</b>	<b>Delivery Schedule</b>	2 Months from the date of purchase order	



**1 GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE  
PURCHASE DIVISION**

Tele No: 079-2691 3067 / Fax No: 079-2691 5848/02/35 / E-Mail ID: psoc@sac.isro.gov.in

**TENDER TERMS & CONDITIONS**

**INSTRUCTIONS TO TENDERERS**

1. Tenders should be sent in sealed envelopes super scribing the relevant tender No, and the due date of opening. Only one tender should be sent in each envelope. Unsigned bids shall be rejected.
2. Late tenders and delayed tenders will not be considered. Unsigned bids shall be rejected.
3. **Bidders shall submit an amount of ₹ 75,000/- with the bid / before the date of tender opening as stipulated in tender documents towards Earnest Money Deposit (EMD).**

The EMD shall be submitted in the form of DD/Banker's cheque/Bank Guarantee/Fixed Deposit Receipt (FDR) made in the name of Accounts Officer, Space Applications Centre, and be payable at par at Ahmedabad.

Bids received without EMD shall be treated as invalid and shall not be considered. In case of two-part (multi-part) tenders, EMD must be submitted either in separate sealed cover clearly marked as 'EMD against tender no. \_\_\_\_\_' or with technical bid, so that it should be available at the time of opening of the first part of bid documents itself. Tenders not complying with this requirement shall be rejected.

The following categories of bidders shall be exempted from paying EMD subject to submission of appropriate documentary evidence with the bid in support thereof (if applicable).

- ❖ Vendors already registered / empanelled with SAC as authorized vendors.
- ❖ Overseas bidders submitting offers directly without involving an Indian representative.
- ❖ Central PSUs/PSEs and autonomous bodies
- ❖ Micro and small Enterprises
- ❖ Khadi and Village Industries Commission
- ❖ National Small Industries Corporation
- ❖ Any other establishments specifically exempted from paying EMD by an order of the Government of India.

4. The EMD of bidders who withdraw their bid during the tender evaluation process shall be forfeited. EMD of unsuccessful bidders shall be refunded without interest after the tender has been awarded, within 30 days of the award of the tender.
5. Sales Tax and/or other duties/levies legally leviable and intended to be claimed should be distinctly shown separately in the tender.
6. As a Government of India Department, this office is exempted from payment of Octroi and similar local levies. Tenderers shall ensure that necessary Exemption Certificates are obtained by them from the Purchase Officer concerned to avoid any payment of such levies.
7. a) Your quotation should be valid for at least 90 days from the date of opening of the tender.  
b) Prices are required to be quoted according to the units indicated in the annexed tender form. When quotations are given in terms of units other than those specified in the tender form, relationship between the two sets of units must be furnished.
8. Preference will be given to those tenders offering supplies from ready stocks and on the basis of FOR destination/delivery at site.
9. (a) All available technical literature, catalogues and other data in support of the specifications and details of the items should be furnished along with the offer.  
(b) Samples, if called for, should be submitted free of all charges by the tenderer and the Purchaser shall not be responsible for any loss or damage thereof due to any reason whatsoever. In the event of non-acceptance of tender, the tenderer will have to remove the samples at his own expense.  
(c) Approximate net and gross weight of the items offered shall be indicated in your offer. If dimensional details are available the same should also be indicated in your offer.  
(d) **Specifications:** Stores offered should strictly conform to our specifications. Deviations, if any, should be clearly indicated by the tenderer in his quotation. The tenderer should also indicate the Make/Type number of the stores offered and provide catalogues, technical literature and samples, wherever necessary, along with the quotations. Test Certificates, wherever necessary, should be forwarded along with supplies. Wherever options have been called for in our specifications, the tenderer should address all such options. Wherever specifically mentioned by us, the tenderer could suggest changes to specifications with appropriate response for the same.

10. The Purchaser shall be under no obligation to accept the lowest or any tender and reserves the right of acceptance of the whole or any part of the tender or portions of the quantity offered and the tenderers shall supply the same at the rates quoted.
11. Corrections, if any, must be attested. All amounts shall be indicated both in words as well as in figures. Where there is difference between amount quoted in words and figures, amount quoted in words shall prevail.
12. The tenderer should supply along with his tender, the name of his bankers as well as the latest Income-Tax clearance certificate duly countersigned by the Income-Tax Officer of the Circle concerned under the seal of his office, if required by the Purchaser.
13. The Purchaser reserves the right to place order on the successful tenderer for additional quantity up to 25% of the quantity offered by them at the rates quoted.
14. The authority of the person signing the tender, if called for, should be produced.
15. We are exempted from the payment of Central Excise & Custom Duties vide notifications issued by Govt. of India.
16. In case, the vendors are falling under the category of MSME, registered under NSIC and would like to avail exemptions, their quotations should be accompanied with necessary registration certificate with declaration to consider their offer. Quotation received without such declaration and valid registration certificate will not be considered for exemptions under Public Procurement Policy.
17. No request for extension for due date for submission of tenders will be entertained.
18. **Quotations shall be submitted by the bidders only by post or by hand in sealed covers. Quotations received by Fax or email shall not be considered as valid offers and shall not be considered for evaluation.**

## TERMS & CONDITIONS

### 1. DEFINITIONS:

- (a) The term 'Purchaser' shall mean the President of India or his successors or assigns.
- (b) The term 'Contractor' shall mean, the person, firm or company with whom or with which the order for the supply of stores is placed and shall be deemed to include the Contractor's successors, representative, heirs, executors and administrators unless excluded by the Contract.
- (c) The term 'Stores' shall mean what the Contractor agrees to supply under the Contract as specified in the Purchase Order including erection of plants & machinery and subsequent testing, should such a condition is included in the Purchase Order.
- (d) The term 'Purchase Order' shall mean the communication signed on behalf of the Purchaser by an Officer duly authorised intimating the acceptance on behalf of the Purchaser on the terms and conditions mentioned or referred to in the said communication accepting the tender or offer of the Contractor for supply of stores or plant, machinery or equipment or part thereof.

**2. PRICES:** Tender offering firm prices will be preferred. Where a price variation clause is insisted upon by a tenderer, quotation with a reasonable ceiling should be submitted. Such offers should invariably be supported by the base price taken into account at the time of tendering and also the formula for any such variation/s.

**3. SECURITY DEPOSIT:** On acceptance of the tender, the Contractor shall, at the option of the Purchaser and within the period specified by him, deposit with him, in cash or in any other form as the Purchaser may determine, security deposit not exceeding ten percent of the value of the Contract as the Purchaser shall specify. If the Contractor is called upon by the Purchaser to deposit, 'Security' and the Contractor fails to provide the security within the period specified, such failure shall constitute a breach of the Contract, and the Purchaser shall be entitled to make other arrangements for the re-purchase of the stores Contracted at the risk of the Contractor in terms of Sub-Clause (ii) and (iii) of clause 10(b) hereof and/or to recover from the Contractor, damages arising from such cancellation.

### 4. GUARANTEE & REPLACEMENT:

- (a) The Contractor shall guarantee that the stores supplied shall comply fully with the specifications laid down, for material, workmanship and performance.
- (b) For a period of twelve months after the acceptance of the stores, if any defects are discovered therein or any defects therein found to have developed under proper use, arising from faulty stores design or workmanship, the Contractor shall remedy such defects at his own cost provided he is called upon to do so within a period of 14 months from the date of acceptance thereof by the Purchaser who shall state in writing in what respect the stores or any part thereof are faulty.
- (c) If, in the opinion of the Purchaser, it becomes necessary to replace or renew any defective stores such replacement or renewal shall be made by the Contractor free of all costs to the Purchaser, provided the

notice informing the Contractor of the defect is given by the Purchaser in this regard within the said period of 14 months from the date of acceptance thereof.

- (d) Should the Contractor fail to rectify the defects, the Purchaser shall have the right to reject or repair or replace at the cost of the Contractor the whole or any portion of the defective stores.
- (e) The decision of the Purchaser notwithstanding any prior approval or acceptance or inspection thereof on behalf of the Purchaser, as to whether or not the stores supplied by the Contractor are defective or any defect has developed within the said period of 12 months or as to whether the nature of the defects requires renewal or replacement, shall be final, conclusive and binding on the Contractor.
- (f) To fulfil guarantee conditions outlined in clause 4 (a) to (e) above, the Contractor shall, at the option of the Purchaser, furnish a Bank Guarantee (as prescribed by the Purchaser) from a Bank approved by the Purchaser for an amount equivalent to 10% of the value of the Contract along with first shipment documents. On the performance and completion of the Contract in all respects, the Bank Guarantee will be returned to the Contractor without any interest.
- (g) All the replacement stores shall also be guaranteed for a period of 12 months from the date of arrival of the stores at Purchaser's site.
- (h) Even while the 12 months guarantee applies to all stores, in case where a greater period is called for by our specifications then such a specification shall apply in such cases the period of 14 months referred to in para 4 (b) & (c) shall be the 'asked for' guarantee period plus two months.

**5. PACKING FORWARDING & INSURANCE:** The Contractor will be held responsible for the stores being sufficiently and properly packed for transport by rail, road, sea or air to withstand transit hazards and ensure safe arrival at the destination. The packing and marking of packages shall be done by and at the expense of the Contractor. The Purchaser will not pay separately for transit insurance, all risks in transit being exclusively of the Contractor and the Purchaser shall pay only for such stores as are actually received in good condition in accordance with the Contract.

**6. DESPATCH:** The Contractor is responsible for obtaining a clear receipt from the Transport Authorities specifying the goods despatched. The consignment should be despatched with clear Railway Receipt/Lorry Receipt. If sent in any other mode, it shall be at the risk of the Contractor. Purchaser will take no responsibility for short deliveries or wrong supply of goods when the same are booked on 'said to contain' basis. Purchaser shall pay for only such stores as are actually received by them in accordance with the Contract.

**7. TEST CERTIFICATE:** Wherever required, test certificates should be sent along with the despatch documents.

**8. ACCEPTANCE OF STORES:**

- (a) The stores shall be tendered by the Contractor for inspection at such places as may be specified by the Purchaser at the Contractor's own risk, expense and cost.
- (b) It is expressly agreed that the acceptance of the stores Contracted for, is subject to final approval by the Purchaser, whose decision shall be final.
- (c) If, in the opinion of the Purchaser, all or any of the stores do not meet the performance or quality requirements specified in the Purchase Order, they may be either rejected or accepted at a price to be fixed by the Purchaser and his decision as to rejection and the prices to be fixed shall be final and binding on the Contractor.
- (d) If the whole or any parts of the stores supplied are rejected in accordance with Clause No. 8 (c) above, the Purchaser shall be at liberty, with or without notice to the Contractor, to purchase in the open market at the expense of the Contractor stores meeting the necessary performance and quality Contracted for in place of those rejected, provided that either the purchase, or the agreement to purchase, from another supplier is made within six months from the date of rejection of the stores as aforesaid.

**9. REJECTED STORES:** Rejected stores will remain at destination at the Contractor's risk and responsibility. If instructions for their disposal are not received from the Contractor within a period of 14 days from the date of receipt of the advice of rejection, the Purchaser or his representative has, at his discretion, the right to scrap or sell or consign the rejected stores to Contractor's address at the Contractor's entire risk and expense, freight being payable by the Contractor at actuals.

**10. DELIVERY:**

- (a) The time for and the date of delivery of the stores stipulated in the Purchase Order shall be deemed to be the essence of the Contract and delivery must be completed on or before the specified dates.
- (b) Should the Contractor fail to deliver the stores or any consignment thereof within the period prescribed for such delivery, the Purchaser shall be entitled at his option either:

- (i) to recover from the Contractor as agreed liquidated damages and not by way of penalty, a sum of 0.5% per week of the price of any stores which the Contractor has failed to deliver as aforesaid or during which the delivery of such store may be in arrears subject to a minimum of 10%, or
- (ii) to purchase from elsewhere, without notice to the Contractor on the account and at the risk of the Contractor, the stores not delivered or others of a similar description (where others exactly complying with the particulars, are not, in the opinion of the Purchaser, readily procurable, such opinion being final) without cancelling the Contract in respect of the consignment (s) not yet due for delivery, or
- (iii) to cancel the Contract or a portion thereof and if so desired to purchase or authorise the purchase of stores not so delivered or others of a similar description (where others exactly if complying with the particulars are not, in the opinion of the Purchaser, readily procurable, such opinion final) at the risk and cost of the Contractor. In the event of action being taken under sub-clause (ii) & (iii) of clause 10 (b) above, the Contractor shall be liable for any loss which the Purchaser may sustain on that account, provided that the re-purchase or if there is an agreement to repurchase then such agreement is made within six months from the date of such failure. But the Contractor shall not be entitled to any gain on such re-purchase made against default. The manner and method of such re-purchase shall be at the discretion of the Purchaser, whose decision shall be final. It shall not be necessary for the Purchaser to serve a notice of such re-purchase on the defaulting Contractor. This right shall be without prejudice to the right of the Purchaser to recover damages for breach of Contract by the Contractor.

**11. EXTENSION OF TIME:** As soon as it is apparent that the Contract dates cannot be adhered to, an application shall be sent by the Contractor to the Purchaser. If failure, on the part of the Contractor, to deliver the stores in proper time shall have arisen from any cause which the Purchaser may admit as reasonable ground for an extension of the time (and his decision shall be final) he may allow such additional time as he considers it to be justified by circumstances, of the case without prejudice to the Purchaser's right to recover liquidated damages under clause 10 thereof.

**12. ERECTION OF PLANT & MACHINERY:** Wherever erection of a plant or machinery is the responsibility of the Contractor as per the terms of the Contract and in case the Contractor fails to carry out the erection as and when called upon to do so within the period specified by the Purchaser, the Purchaser shall have the right to get the erection done through any source of his choice. In such an event, the Contractor shall be liable to bear any additional expenditure that the Purchaser is liable to incur towards erection. The Contractor shall, however, not be entitled to any gain due to such an action by the Purchaser.

**13. PAYMENT:** Contractor's bill will be passed for payment only after the stores have been received, inspected and accepted by the Purchaser.

**14. MODE OF PAYMENT:** Normally payment will be made for the accepted stores within 30 days from the date of receipt of the materials.

**15. RECOVERY OF SUM DUE:** Whenever any claim for the payment of, whether liquidated or not, money arising out of or under this Contract against the Contractor, the Purchaser shall be entitled to recover such sum by appropriating in part or whole, the security deposited by the Contractor, if a security is taken against the Contract. In the event of the security being insufficient or if no security has been taken from the Contractor, then the balance or the total sum recoverable as the case may be, shall be deducted from any sum then due or which at any time thereafter may become due to the Contractor under this or any other Contract with the Purchaser. Should this sum be not sufficient to cover the full amount recoverable, the Contractor shall pay to the Purchaser on demand the remaining balance due. Similarly, if the Purchaser has or makes any claim, whether liquidated or not, against the Contractor under any other Contract with the Purchaser, the payment of all moneys payable under the Contract to the Contractor including the security deposit shall be withheld till such claims of the Purchaser are finally adjudicated upon and paid by the Contractor.

**16. INDEMNITY:** The Contractor shall warrant and be deemed to have warranted that all stores supplied against this Contract are free and clean of infringement of any Patent, Copyright or Trademark, and shall at all times indemnify the Purchaser against all claims which may be made in respect of the stores for infringement of any right protected by Patent Registration of design or Trade mark and shall take all risk of accidents or damage which may cause a failure of the supply from whatever cause arising and the entire responsibility for sufficiency of all means used by him for the fulfilment of the contract.

**17. ARBITRATION:** In the event of any question, dispute or difference arising under these conditions or any conditions contained in the Purchase Order or in connection with this Contract (except as to any matter the decision of which is specially provided for by these conditions), the same shall be referred to the sole arbitration



of the Head of the Purchase office or some other person appointed by him. It will be no objection that the arbitrator is a Government servant that he had to deal with matter to which the Contract relates or that in the course of his duties as Government servant he has expressed views on all or any other matters in dispute or difference. The award of the arbitrator shall be final and binding on the parties of this Contract.

If the arbitrator be the Head of the Centre/Unit –

- (i) In the event of his being transferred or vacating his office by resignation or otherwise, it shall be lawful for his successor-in-office either to proceed with reference himself, or to appoint another person as arbitrator, or
- (ii) In the event of his being unwilling or unable to act for any reason, it shall be lawful for the Head of the Centre/Unit to appoint another person as arbitrator. If the arbitrator be a person appointed by the Head of the Purchase Office – In the event of his dying, neglecting or refusing to act or resigning or being unable to act, for any reason, it shall be lawful for the Head of the Centre/Unit either to proceed with the reference himself or appoint another person as arbitrator in place of the outgoing arbitrator. Subject as aforesaid the Arbitration & Conciliation Act 1996 and the rules thereunder and any statutory modifications thereof for the time being in force shall be deemed to apply to the arbitration proceedings under this Clause. The Arbitrator shall have the power to extend with the consent of the Purchaser and the Contractor the time for making and publishing the award. The venue of arbitration shall be the place as Purchaser in his absolute discretion may determine. Work under the Contract shall, if reasonably possible, continue during arbitration proceedings. In the event of any dispute or difference relating to the interpretation and application for the provisions of the Contracts, such dispute or difference shall be referred by either party to Arbitration of one of the Arbitrations in the Department of Public Enterprises. The Arbitration Act 1996 shall not be applicable to arbitration under this clause. The award of the Arbitrator shall be binding upon the parties to the dispute provided however any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law & Justice, Government of India. The parties to the dispute will share equally, the cost of arbitration as intimated by Arbitrator.

- 18. COUNTER TERMS AND CONDITION OF SUPPLIERS:** Where counter terms and conditions printed or cyclostyled conditions have been offered by the supplier, the same shall not be deemed to have been accepted by the Purchaser, unless specific written acceptance thereof is obtained.
- 19. SECURITY FOR PURCHASE OF MATERIALS:** Successful tenderer will have to furnish in the form of a bank guarantee or any other form as called for by the Purchaser towards adequate security for the materials and properties provided by the Purchaser for the due execution of the Contract.
- 20.** We are exempted from the payment of Central Excise & Custom Duties vide notifications issued by Govt. of India.
- 21.** In case, the vendors are falling under the category of MSME, registered under NSIC and would like to avail exemptions, their quotations should be accompanied with necessary registration certificate with declaration to consider their offer. Quotation received without such declaration and valid registration certificate will not be considered for exemptions under Public Procurement Policy.
- 22. LIQUIDATED DAMAGES:** If the Contractor fail to deliver the stores or within time the period specified in the contract/ purchase order or any extension thereof, the Purchaser shall recover from the contractor as liquidity damages sum of one-half of one percent(0.5 percent) of the contract/ purchase order price of the stores for each calendar week of delay or part thereof. The total liquidated damages shall not exceed ten percent (10%) of the total contract/purchase order price.
- 23. PERFORMANCE BANK GUARANTEE:** To fulfil guarantee conditions, the Contractor shall, at the option of the Purchaser, furnish a Performance Bank Guarantee (as prescribed by the Purchaser) from a Nationalized Bank for an amount equivalent to 10% of the value of the Contract valid till the expiry of warranty period. On the performance and completion of the Contract in all respects, the purchase order will be returned to the Contractor without any interest.
- 24.** In case the bidders propose any other payment terms in deviation with the standard terms mentioned above, it may be noted that applicable cash flow implications will be loaded on the prices quoted for commercial comparison of the offers. If advance payments are insisted by the bidders, interest at the rate of MCLR (Marginal Cost Linked Rate) as notified by State Bank of India from time to time shall be loaded on the prices for price comparison.



**STANDARD TENDER FORM**  
(Seal of the Company)

Tender No.: .....  
 Due on: .....  
 Ref. No.: .....  
 Date: .....

**TENDER FORM**

From: .....  
 .....  
 .....

To: The Sr. /Purchase & Stores Officer,  
 ..... (Name of the Centre/Unit)

Dear Sir,

I/We hereby offer to supply the stores detailed below at the price hereunder quoted and agree to hold this offer open till..... I/we shall be bound to supply the stores hereby offered upon the issue of the Purchase Order communicating the acceptance thereof on or before the expiry of the last mentioned date. You are at liberty to accept any one or more of the items of stores tendered for or any portion of any one or more of the items of such stores. I/We, notwithstanding that the offer in this tender has not been accepted in whole, shall be bound to supply to you such items and such items and such portion or portions of one or more of the items as may be specified in the said Purchase Order communicating the acceptance:

Sl. No.	Description	Quantity	Unit	Rate Rs.	Delivery Date

**Note: All the rates should be given both in figures and words**

Place at which delivery will be made	
Date by which the ordered item/s will be supplied	

2. I/We have understood the items of the tender annexed to the invitation to tender and have thoroughly examined the specifications/drawing and/or pattern quoted or referred to herein and am/are fully aware of the nature of the stores required and my/our offer is to supply the stores strictly in accordance with the requirements subject to the terms and conditions stipulated in the enquiry and contained in the Purchase Order communicating the acceptance of this tender either in whole or in part.

Signature of Tenderer

Date: .....

(Seal)

**COMPLIANCE STATEMENT REQUIRED TO BE FILLED AND ENCLOSED  
ALONG WITH THE TECHNICAL AND COMMERCIAL BID BY THE VENDOR.**

Sr. No.	Commercial terms	Compliance
1.	Delivery terms – The items shall be offered on FOR destination basis. If vendors are offering any other terms, please specify the same.	
2.	Packing & Forwarding charges are inclusive or extra. If extra please specify percentage in the price offer.	
3.	Freight charges whether inclusive or extra. If extra Please specify percentage in price offer.	
4.	Delivery period – in weeks/months	
5..	<p>Payment terms :</p> <p>Our standard term is – 100% within 30 days of receipt and acceptance of the items at our site.</p> <p>If advance payments are insisted they can be considered only against submission of bank guarantee for the equivalent amount. Any milestone payments which do not result in receipt of material are considered as advance payments and Bank Guarantees must be submitted for the same for the equivalent value.</p> <p>(Note: Vendor should specify the relevant terms in the opposite column and also in the offer)</p>	
6.	<p>Taxes (VAT/SERVICE TAX): The % of applicable taxes shall be shown separately and should not be included in the price. If no such mention of % in the offer, it will be assumed that they are inclusive and no claim will be entertained later in this regards. TAX REGISTRATION NUMBER MUST BE INDICATED IN THE OFFER.</p>	
7.	<p>Duties:</p> <ol style="list-style-type: none"> <li>1) We are eligible for Excise duty exemption under notification No.15/2007 and we will provide exemption certificate at appropriate time on the request of the vendor.</li> <li>2) We are eligible for Customs duty exemption as per notification No.21/2002 wherever items are imported by the vendor on High Sea Sales basis. However entire responsibility of customs clearance and delivery at our site is the responsibility of the vendor at his cost.</li> </ol> <p>(Vendor should specify the requirement of such certificate in the offer. If no such reference is made in the offer the certificates will not be provided.)</p>	
8.	Validity of the offer should be minimum 90 days from the date of opening.	
9.	Whether Cost of spares are included in the price bid. If so list out such spares in the price bid.	
10.	Will you able to provide consumables/spares for 10 years.	
11.	Wherever installation involved, Income Tax @ 2% will be deducted from the bill and a certificate issued.	
12.	Work order will attract work contract tax as per rules. Please confirm whether you have included WCT in your offer.	
13.	Octroi Duty/Entry Tax exempted. Exemption certificate will be issued, if required.	



14.	No Insurance is required at Purchaser's cost.	
15.	For two part bids two separate sealed envelopes are to be sent duly superscribed as follows : 1. TECHNICAL & COMMERCIAL BID 2. PRICE BID Please refer instructions.	
16.	Wherever EMD/tender fee is payable – provide the same in the form of crossed Demand Draft in favour of The Accounts Officer, SAC, Ahmedabad along with the bid but in a separate cover or along with technical bid. On the back side of the D.D, please write your company's name.	
17.	Language to be used in all correspondence – English	
18.	Measurements – Metric system to be followed	
19.	Warranty period – Minimum 1 year. If our RFP calls for more period than above, the same warranty period should be offered. (Specify the period being offered.)	
20.	Performance Bank Guarantee: 10% of order value valid till warranty/guarantee period.	
21.	Defective/Rejected items if any, are to be replaced free of cost. On receipt of replacements, the defective items will be by vendor or sent to vendor at his cost.	
22.	Confirm whether you will be able to provide samples if called for, free of cost.	
23.	Approximate weight (net and gross) of the consignment.	
24.	Instruction/operational manual to be supplied free of cost.	
25.	Supply and installation is subject to Purchaser's acceptance.	
26.	Wherever supply of free issue material is involved as per RFP, vendor shall submit Bank Guarantee for value of such material	
27.	Security Deposit, if called for shall be submitted to SAC by the successful bidder in the form of bank guarantee or as requested in RFP.	
28.	Training – Free of cost to be imparted at Purchaser's site.	
29.	Bank charges wherever applicable shall be paid by Purchaser/Contractor to their respective Bankers.	
30.	Arbitration proceedings shall be as per provision of Arbitration and Conciliation Act 1996.	
31.	Delivery schedule (please specify the period as indicated in your offer and this period should meet with our RFP requirement, if any).	
32.	Liquidated Damages – In case of delay in delivery of material as per delivery schedule committed by vendor, Liquidated Damages @ 0.5% per week or part thereof on the undelivered portion subject to a maximum of 10% of the contract value.	

भारत सरकार  
अंतरिक्ष विभाग  
अंतरिक्ष उपयोग केंद्र(इसरो)  
आंबावाडी विस्तार पी.ओ.  
अहमदाबाद - 380 015 (भारत)  
दूरभाष: +91-79-2691 3051/98  
फैक्स नं. : +91-79-2691 5835/02/48



Government of India  
Department of Space  
**SPACE APPLICATIONS CENTRE (ISRO)**  
Ambawadi Vistar P.O.  
Ahmedabad – 380 015 (INDIA)  
Telephone : +91-79 – 2691 3051/98  
Fax No. : +91-79 – 2691 5835 / 02 /48  
Email: publictender@sac.isro.gov.in

निविदा सूचना सं.: सैक/पीटी /08/2016-17  
Tender Notice No.: SAC/PT/08/2016-17

क्र. सं. Sr.No	निविदा नं. Tender No.	संक्षिप्त विवरण Brief Description	नियत तिथि (अपराह्न 3 बजे तक) Due on (Up to 3 pm)
3	AHSE 201600057801	Laser Interferometer with Accessories (Two Part)	17/08/2016

**GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE  
AHMEDABAD 380 015, INDIA  
PURCHASE & STORES**

Ph No: 079-2691 3067  
Fax 079-2691 5848/02/35

Date : 14/07/2016

**INVITATION TO TENDER**

M/s

000000

Our Ref No : AHSE 2016-000578-01

Tender Due: 15:00 Hrs ISTon 17/08/2016

Dear Sirs,

Please submit your sealed quotation , in the Tender Form enclosed here along with the descriptive catalogues / pamphlets / literature ,superscribed with Our Ref.No. and Due Date for the supply of the following items as per the terms & conditions mentioned in Annexure( Form No: As per enclosure. )

S.No.	Description of Items with Specifications	Unit	Quantity
1	Vibration insensitive Laser interferometer with accessories (As per attached Sheet)	No.	1

**DELIVERY AT:** SAC-STORES, AHBD.

**MODE OF DESPATCH** BY AIR FRE

**DUTY EXEMPTIONS** We are exempted from payment of customs duty.

**SPECIAL INSTRUCTIONS** Mention validity, warranty, payment terms & delivery terms.

**SPECIFIC TERMS** As per enclosure.

**INSTRUCTIONS TO TENDERERS:**

- Acceptance of Liquidated damages- As per enclosure; - Acceptance of Performance Bank Gurantee-As per enclosure; --EMD(Earnest Money Deposit)- As per clause 3 attached Terms & Conditons
- Please confirm acceptance for submission of Security Deposit for 10% of Purchase Order Value.
- "Quotations shall be submitted by the bidders only by post or by hand in sealed covers. Quotations received by FAX or e-mail shall not be considered as valid offers and will not be accepted for evaluation."
- "In case the bidders propose any other payment terms in deviation with the standard terms mentioned above, it may be noted that applicable cash flow implications will be loaded on the prices quoted for commercial comparison of the offers. If advance payments are insisted by the bidders, interest at the rate of MCLR (Marginal Cost Linked Rate) as notified by State Bank of India from time to time shall be loaded on the prices for price comparison."
- Please note that this is a TWO-PART TENDER. Send your quotation as per attached instructions only. Quotation not conforming to the instructions will be rejected. Fax & email quotations will not be accepted.
- Technical & Commercial Compliance statement confirming compliance with all the point of Tech & Commercial annexures enclosed with the tender document shall be submitted along with the offer. In the absence of the same, your offer shall be summarily rejected

**Specifications**

**Table1: Vibration insensitive Laser interferometer**

<b>Sr. No.</b>	<b>Parameter</b>	<b>Description/Specification</b>
1.0	Configuration	Fizeau Type interferometer.
1.1	Measurement Capability	(1.1.1) Interferometer shall measure reflective and transmitted wave front of optical components/systems.
		(1.1.2) Live phase acquisition mode for active monitoring of the alignment of an optical system with real time Zernike monitoring.
		(1.1.3) Dynamic or instantaneous Acquisition mode using carrier fringe method for vibration non-isolated condition and Phase-Shifting Interferometry (PSI) for vibration isolated condition.
		(1.1.4) Integrated calibration for retrace error during dynamic measurement
1.2	Alignment System	(1.2.1) For vibration uncontrolled condition: Alignment wizard with integrated calibration.
		(1.2.2) For vibration controlled condition PSI: Quick Fringe Acquisition system with twin spot reticle.
1.3	Test beam diameter (inch)	4
1.4	Alignment FOV (deg)	±3
1.5	Height of optical centre line (inch)	4.25 (Typical )
1.6	Integrated Computing system	Shall be compatible to the interferometer and loaded with metrology software with two display monitors. Latest windows OS windows 8 or above shall be provided. Processor should be i5 or better with a minimum RAM of 4 GB and hard disk of 500 GB or more.
1.7	Metrology software	Software should provide following feature but not limited to that: (1.7.1) Metrology software shall have provision to different masking option during acquisition and analysis. (1.7.2) Software shall display surface interactive plot in 2D and 3D and MTF profile. (1.7.3) Software should be capable of real time Zernike analysis and dynamic testing. (1.7.4) Software should provide facility

		for term removal of aberration coefficients while analysing the data.
1.8	Remote control	focus, zoom, new measurement, and alignment control
1.9	Input power supply	230 ± 10 V AC, 50 Hz
1.10	Installation and training	Installation and demonstration at SAC ISRO Ahmedabad by instrument manufacturer.
1.11	Warranty	2 years (standard). Optional extended warranty for 3 or more years shall be quoted.
<b>Section II : Operating Environment Condition</b>		
2.1	Temperature (Degree Celsius)	15 – 30
2.2	Storage temperature (Degree Celsius)	10-45
<b>Section III: Laser Specification</b>		
3.1	Laser source	Stabilized He- Ne, Class IIIa
3.2	Laser power	4.0 mW (Typical)
3.3	Laser	Inherently eye safe
3.4	Wavelength (nm)	632.8
3.5	Frequency stabilization (nm)	< 0.0001
3.6	Coherence Length (m)	> 100
3.7	Laser life time	Long life (typical > 50000 hrs )
<b>Section IV: Acquisition specifications</b>		
4.1	Minimum exposure time (µsec)	<15
4.2	Acquisition rate (frames/sec)	>75
4.3	Live phase	Real time phase with Zernike fit
4.4	Phase movie	Record events and generate AVI movie and raw data file
<b>Section V: Camera specifications</b>		
5.1	Camera resolution (pixel)	1200 X 1200
5.2	Optical zoom	Maximum optical zoom of at least 3X in discrete steps
5.3	Pupil focus range(m)	±2
5.4	Digitization (bits)	10
<b>Section VI: Mechanical Specifications</b>		
6.1	Mounting configuration	Both horizontal and vertical configuration, without any performance degradation
6.2	Transmission optics mount	Bayonet mounts compatible with standard transmission sphere/flat
<b>Section VII: Measurement Specifications</b>		
7.1	RMS wave front repeatability	(7.1.1) For vibration non-isolated condition: <1.0 nm, $\lambda/600$ (mean + 2 $\sigma$ ) (7.1.2) For typical vibration isolated condition PSI: <0.25 nm, $\lambda/2500$ (mean + 2 $\sigma$ )
7.2	Fringe Resolution <sup>a</sup>	(7.2.1) For vibration non-isolated condition: At least 250 Fringes. (at all optical magnification) (7.2.2) Typical ;for vibration isolated

		condition PSI: At least 500 Fringes (at all optical magnification)
7.3	Slope Acceptance	> 10 mrad at maximum magnification
7.4	Instrument transfer function (ITF)	> 70 % ( <b>Typ</b> ) at 0 to 11 cycles/mm

Note

a. Approx. maximum no. of fringe in tilt that can be resolved by interferometer

**Table 2**

Four inch Bayonet mount compatible Standard optical accessories for Laser Interferometer

Sr. No.	Item	Parameter	Description / Specification	QTY
1.	Transmission flat	Surface error (waves) PV	$\lambda/20$	Two
2.	Transmission Sphere F/1.5	Surface error (waves) PV	$\lambda/20$	Two
3.	Transmission Sphere F/3.3	Surface error (waves) PV	$\lambda/20$	Two
4.	Transmission Sphere F/7.1	Surface error (waves) PV	$\lambda/20$	Two
5.	Reference Flat	Surface error (waves) PV	$\lambda/20$	Two
6.	Attenuation Filter with mount	Surface error (waves) PV	Better or equal to $\lambda/10$ transmitted wave front. Used for measurement of highly reflective surface. Transmittance thru the pellicle is $20 \pm 4\%$ @ $10^\circ$ angle of incidence @ $\lambda = 632.8$ nm.	Two
7.	Adjustable two axis mount		Holds test parts or optics. 4.25 inch (108 mm) beam centre height. $\pm 2$ degree tip and tilt adjustment. Accepts matching	Two

			accessories. 4 inch interface as shown in Figure 1.	
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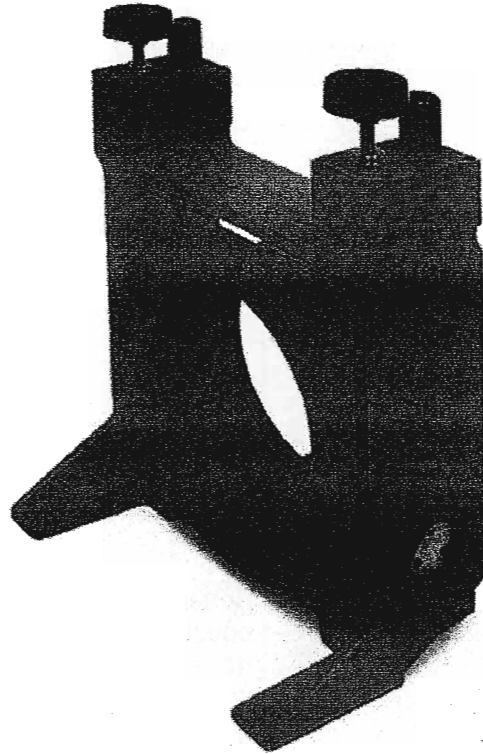


Figure 1  
Adjustable two axis  
mount to hold test  
parts or optics  
(Refer Table 2,  
S.No 7)

#### Guidelines for quotation

1. The supplier shall clearly mention the compliance/noncompliance to every Parameter/sub parameter (with corresponding values wherever applicable) given against the S.No of the specification tables. Supplier shall fill the compliance tables as per the format given in appendices I & II.
2. Suppliers shall also propose method of demonstration/justification of compliance of parameters agreed upon.
3. The supplier shall quote technical and commercial proposals (two parts) in separate sealed envelopes for the interferometer (Table I).
4. 4" Bayonet mount compatible Standard optical accessories for Laser Interferometer shall be separately quoted in technical and commercial proposals (two parts) in sealed envelopes (Table II).
5. The supplier shall quote minimum time period required for delivery and installation.
6. Supplier shall provide the list for the essential spares for interferometer system along with quotation in slabs.
7. Suppliers shall provide a list of users where this equipment is supplied.



Appendix 1

Compliance to Table 1 specifications

(The specification values shall be filled in the compliance column.).

<u>Sr. No.</u>	<u>Parameter</u>	<u>Description/Specification</u>	Compliance / non compliance /value	Remark
1.0	Configuration	Fizeau Type interferometer.		
1.1	Measurement Capability	(1.1.1) Interferometer shall measure reflective and transmitted wave front of optical components/systems.		
		(1.1.2) Live phase acquisition mode for active monitoring of the alignment of an optical system with real time Zernike monitoring.		
		(1.1.3) Dynamic or instantaneous Acquisition mode using carrier fringe method for vibration non-isolated condition and Phase-Shifting Interferometry (PSI) for vibration isolated condition.		
		(1.1.4) Integrated calibration for retrace error during dynamic measurement		
1.2	Alignment System	(1.2.1) For vibration uncontrolled condition: Alignment wizard with integrated calibration.		
		(1.2.2) For vibration controlled condition PSI: Quick Fringe Acquisition system with twin spot reticle.		
1.3	Test beam diameter (inch)	4		
1.4	Alignment FOV (deg)	±3		
1.5	Height of optical centre line (inch)	4.25 (Typical )		
1.6	Computer	Computer should be compatible to interferometer and metrology software. Latest windows OS windows 8 or above must be provided. Computer processor should be i5 or better with a minimum RAM of 4 GB and hard disk of 500 GB.		

1.7	Metrology software	Software should provide following feature but not limited to that: (1.7.1) Metrology software shall have provision to different masking option during accusation and analysis. (1.7.2) Software shall display surface interactive plot in 2D and 3D and MTF profile. (1.7.3) Software should be capable of real time Zernike analysis and dynamic testing. (1.7.4) Software should provide facility for term removal of aberration coefficients while analysing the data.		
1.8	Remote control	focus, zoom, new measurement, and alignment control		
1.9	Input power supply	230 ± 10 V AC, 50 Hz		
1.10	Installation and training	Installation and demonstration at SAC ISRO Ahmedabad by original equipment manufacturer.		
1.11	Warranty	2 years (standard). Optional extended warranty for 3 or more years shall be quoted.		
Section II : Operating Environment Condition				
2.1	Temperature (Degree Celsius)	15 – 30		
2.2	Storage temperature (Degree Celsius)	10-45		
Section III: Laser Specifications				
3.1	Laser source	stabilized He Ne, Class IIIa		
3.2	Laser power	4 mW (Typical)		
3.3	Laser	Inherently eye safe		
3.4	Wavelength (nm)	632.8		
3.5	Frequency stabilization (nm)	< 0.0001		
3.6	Coherence Length (m)	> 100		
3.7	Laser life time	Long life (typical > 50000 hrs )		
Section IV: Acquisition specifications				
4.1	Minimum	<15		

	exposure time (µsec)			
4.2	Acquisition rate (frames/sec)	>75		
4.3	Live phase	Real time phase with Zernike fit		
4.4	Phase movie	Record events and generate AVI movie and raw data file		
Section V: Camera specification				
5.1	Camera resolution (pixel)	1200 X 1200		
5.2	Optical zoom	Maximum optical zoom of at least 3X in discrete steps		
5.3	Pupil focus range(m)	±2		
5.4	Digitization (bits)	10		
Section VI: Mechanical Specifications				
6.1	Mounting configuration	Both horizontal and vertical configuration, without any performance degradation		
6.2	Transmission optics mount	Bayonet mounts compatible with standard transmission sphere/flat		
Section VII: Measurement Specifications				
7.1	RMS wave front repeatability	(6.1.1) For vibration non-isolated condition: <1.0 nm, $\lambda/600$ (mean + $2\sigma$ ) (6.1.2) For typical vibration isolated condition PSI: <0.25 nm, $\lambda/2500$ (mean + $2\sigma$ )		
7.2	Fringe Resolution <sup>a</sup>	(6.2.1) For vibration non-isolated condition: At least 250 Fringe. (at all optical magnification) (6.2.2) For typical vibration isolated condition PSI: At least 500 Fringe (at all optical magnification)		
7.3	Slope Acceptance	> 10 mrad at maximum magnification		
7.4	Instrument transfer function (ITF)	> 70 % (Typ) at 0 to 11 cycles/mm		

Note a. Approx. maximum no. of fringe in tilt that can be resolved by interferometer

Appendix 2  
Table 2

Compliance table for 4" Bayonet mount compatible Standard optical accessories for Laser Interferometer

Sr. No.	Item	Parameter	Description / Specification	QTY	Compliance / non compliance /value	Remark
1.	Transmission flat	Surface error (waves) PV	$\lambda/20$	Two		
2.	Transmission Sphere/1.5	Surface error (waves) PV	$\lambda/20$	Two		
3.	Transmission Sphere F/3.3	Surface error (waves) PV	$\lambda/20$	Two		
4.	Transmission Sphere F/7.1	Surface error (waves) PV	$\lambda/20$	Two		
5.	Reference Flat	Surface error (waves) PV	$\lambda/20$	Two		
6.	Attenuation Filter with mount	Surface error (waves) PV	Better or equal to $\lambda/10$ transmitted wave front. Used for measurement of highly reflective surface. Transmittance thru the pellicle is $20\pm 4\%$ @ $10^\circ$ angle of incidence @ $\lambda = 632.8$ nm.	Two		
7.	Adjustable two axis mount		Holds test parts or optics. 4.25 inch (108 mm) beam centre height. $\pm 2$ degree tip and tilt adjustment. Accepts matching accessories. 4 inch interface as shown in Figure 1.	Two		

## Instructions for Two Part Tender

We are proposing to invite tenders in two parts viz.

- Part I : Technical and Commercial
- Part II: Price

All tenderers are requested to carefully follow the following instructions before preparing their offer.

### 1) Part I: Technical & Commercial Bid

#### Part - (a) Technical

1. This part should contain detailed specifications of the items quoted by you along with technical literature and leaflets if any.
2. A compliance statement showing the compliance of the item quoted by you with that of item tendered by us should be prepared and enclosed to this.
3. Any other information called for in the tender related technical and specifications can also come in this part.
4. Prices should not be indicated in this cover.

#### Part - (b) Commercial Terms: (Without Prices)

1. The commercial terms applicable for the item quoted by you should be indicated in this part.
2. If any compliance statement is called for the commercial terms / contractual terms and conditions, the same is to be attached in this part.
3. Prices should not be indicated in this part. However a copy of the price bid (without prices) can be enclosed in this part to enable to understand whether all the items required to be quoted by you have been quoted in the price bid. Alternatively a statement is to be made indicating that you have quoted prices for all the items as per the tender and enclosed in the Price Bid as per the format.
4. The Commercial terms such as delivery terms, delivery period, payment terms, Warranty, validity of the offer, installation & commissioning, duties and taxes etc., shall come into this.

Notes:

1. Either Technical Specifications or terms & conditions as above should be very clearly reflected item-wise with reference to the items called for in the tender.
2. Please note that the **PRICE SHOULD NOT BE** indicated in this part.
3. Technical and Commercial part as described above shall be prepared and put it in a sealed cover & super scribed and addressed as follows:

Tender No. :

Due Date :

**PART I : Technical & Commercial Bid**

**The Sr. Head Purchase & Stores  
Space Applications Centre  
Ambawadi Vistar P.O.  
Ahmedabad - 380 015**

From:

## 2) Part II: Price Bid

1. The prices applicable for the items, item-wise in response to the tender shall come into this part.
2. Tenderer shall indicate very clearly item-wise prices with reference to their technical offer.
3. Price part prepared as above shall be enveloped and superscribed as follows:

Tender No. :	
Due Date :	
<b>PART II :</b>	<b>Price Bid</b>
	<b>The Sr. Head Purchase &amp; Stores</b>
	<b>Space Applications Centre</b>
	<b>Ambawadi Vistar P.O.</b>
	<b>Ahmedabad - 380 015</b>
From :	

- 3) The Technical & Commercial envelope (Part I) and Price cover (Part II) prepared as above along with 'Tender fee cover' (if applicable) should be inserted in another envelope and superscribed as follows:

Tender No. :	
Due Date :	
	<b>Part I &amp; Part II are individually sealed and kept inside:</b>
	<b>(DD towards tender fee also is kept inside)</b>
	<b>The Sr. Head Purchase &amp; Stores</b>
	<b>Space Applications Centre</b>
	<b>Ambawadi Vistar P.O.</b>
	<b>Ahmedabad - 380 015</b>
From:	

### Important Notes:

1. Being a Two-Part Tender, fax/mail quotations will not be accepted. Please ensure your offers are received by post before due date and time.
2. In case you are going to download the documents from our website and submitting the offer, you are requested to submit the demand draft towards Tender fee in a separate cover along with a covering letter duly superscribing on the cover "Tender fee in respect of Tender No. \_\_\_\_\_".
3. Quotations submitted contrary to above instructions are liable to be rejected.

**Compliance Statement required to be filled and enclosed along with the technical and commercial bid by the vendor.**

Sr. No.	Commercial terms	Compliance/Remarks/Comments by Vendor
1.	Delivery terms (Ex-works, FOB, FCA, etc.)	
	Purchaser is having an air consolidation contract and their freight forwarder will arrange to collect the consignment from your premises/will take the responsibility for onward transmission from the point of delivery as per INCOTERMS 2010. This is applicable for import cases.	
2.	Packing charges (inclusive/exclusive)	
3.	Delivery period (in weeks/months)	
4.	Payment terms: Our standard term is Sight Draft (import) Within 30 days from the date of acceptance (indigenous).	
5.	Country of origin To be declared in the invoice.	
6.	Name and address of the Indian Agent.(if any)	
7.	Percentage of agency commission included in the quoted price – payable in Indian Rupees only directly to the Indian Agent.	
8.	Validity of the offer Minimum of 120 days from the date of opening.	
9.	If you are an Indian Agent, please enclose the authorization letter of your Principal and confirm that whether you have enrolled with DGS&D as per rules.	
10.	In a tender, either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.	
11.	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.	
12.	Cost of spares Included in the price bid / not included.	
13.	Will you be able to provide consumables/spares for 10 years?	
14.	Taxes and duties :  Taxes in India to the account of Purchaser. Outside India to Seller's/Contractor's account. Please indicate your Tax Registration Number.  Wherever installation involved, Income Tax @ 2% will be deducted from the bill and a certificate issued.  Installation in India will attract Service Tax @ 12.36%. If required, orders for supply and installation can be issued separately.  Work order will attract work contract tax as per rules. Please confirm whether you have included WCT in your offer.	

	<p>Customs Duty Exemption Certificate (CDEC) will be issued by Purchaser. Hence no CD is to be included in your offer wherever applicable.</p> <p>Please indicate rate of the Sales Tax/VAT applicable.</p> <p>Octroi Duty/Entry Tax exempted. Exemption certificate will be issued, if required.</p> <p>Purchaser is eligible for full Excise Duty exemption. Excise Duty exemption certificate will be issued.</p>	
15.	No Insurance is required at Purchaser's cost.	
16.	<p>For two part bids two separate sealed envelopes are to be sent duly superscripted as follows :</p> <ol style="list-style-type: none"> <li>1. Technical &amp; Commercial Bid</li> <li>2. Price Bid</li> </ol> <p>Please refer instructions.</p>	
17.	<p>Wherever EMD/tender fee is payable Provide the same in the form of crossed Demand Draft in favour of The Accounts Officer, SAC, Ahmedabad along with the bid but in a separate cover or along with technical bid.</p> <p>On the back side of the D.D, please write your company's name.</p>	
18.	Language to be used in all correspondence - English	
19.	Measurements - Metric system to be followed	
20.	Whether prequalification of your facility procedure completed (if applicable).	
21.	<p>Warranty period</p> <p>We need minimum 3 years from the date of acceptance. In case the product has a standard warranty of 1 year, confirm that additional 2 years warranty cost is indicated in the price bid/prices.</p> <p>However the warranty requirement if projected in RFP shall prevail.</p>	
22.	Defective/rejected items if any, are to be replaced free of cost.	
23.	Confirm whether you will be able to provide samples if called for, free of cost.	
24.	Approximate weight (net and gross) of the consignment.	
25.	Instruction/operational manual to be supplied free of cost.	
26.	Supply and installation is subject to Purchaser's acceptance.	
27.	LC extension charges to your account, in case of delay from your side.	
28.	Items from latest production batch only are to be supplied.	
29.	Wherever Export Licence required, payment will be made after getting export licence and after confirmation by the supplier, with a copy of Export Licence.	
30.	<p>Bank Guarantees (from Nationalised/ Scheduled Bank/ Bank approved by Purchaser.</p> <p>Advance payment for the equal value valid till the completion of contract/acceptance, is to be provide by you.</p> <p>Towards issue of "Free Issue Material" by Purchaser for the value of the material issued, is to be provided.</p>	



	<p>The Bill of material for the material used for the Fabrication work and available balance to be prepared by you and countersigned by the User Department is to be sent along with the final bill for arranging the balance/payment.</p> <p>Towards Performance of the Contract and Product for 10% value valid till the expiry of warranty period.</p>	
31.	Security Deposit is to be submitted to SAC by the successful bidder (wherever applicable )on awarding the contract	
32.	Training – free of cost – to be imparted at Purchaser’s site.	
33.	Bank charges wherever applicable shall be paid by Purchaser/Contractor to their respective Bankers.	
34.	Arbitration proceedings Within India as per provisions of Arbitration and Conciliation Act 1996.	
35.	Liquidated Damages @ 0.5% per week for the delayed portion maximum 10% of the contract value.	
36.	Force Majeure conditions applicable?	
37.	<p>Acceptance of Fall clause.</p> <p>“The rates as per the charges of the Contract should not in any event exceed the lowest rates, the supplier charge to any other party or organization. If at any time during the period of contract, the supplier reduce the charges to any other party, then they shall forth-with notify such reduction to Sr. Head, Purchase &amp; Stores, SAC and reduce the contract rates subsequently, from the date of coming into force of such reduction” .</p>	
38.	You are requested to indicate the registration number; you have for Sales Tax/Service Tax as the case may be with concerned Government authorities. Also you are requested to provide company registration details wherever applicable along with copy of the company registration certificate. The offers received without the above information will be summarily rejected.	



GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE  
PURCHASE DIVISION

**INSTRUCTIONS TO TENDERERS AND TERMS & CONDITIONS OF TENDER (Foreign)**

1. The Tenderers should submit quotations in sealed envelope, superscribing the Tender No. and due date of opening and complete in all respects with technical specifications, including pamphlets and catalogues. Separate instructions, if any in this regard should be strictly complied with.
2. A Proforma Invoice may also be given which should contain the following information:
  - a) The FOB/FCA value, for import by Sea freight / Air freight up to Ahmedabad and for air parcel post up to Ahmedabad should be separately indicated.
  - b) Agency Commission: The amount of commission included in the price and payable to the Indian Agent of the Contractor shall be paid directly to the Indian Agent by the Purchaser in equivalent Indian Rupees on the basis of an Invoice from him applying T.T. buying rate of exchange ruling on the date of placement of the Purchase Order and which shall not be subject to any further exchange variations. This payment will be released to the Indian Agent after receipt and acceptance the goods in India.
  - c) The Contractor shall invoice only for the net amount payable to him, after deducting the amount of Agency Commission included in the invoice which will be paid to the Indian Agent directly by the Purchaser. However, the Contractor's invoice should separately reflect the amount of commission payable to his Indian Agent.
  - d) The earliest delivery period and country of origin of the Stores.
  - e) Banker's name, address, telephone/fax Nos. & e-Mail ID of the Contractor.
  - f) The approximate net and gross weight and dimensions of packages / cases.
  - g) Recommended spares for satisfactory operation for a minimum period of one year beyond warranty.
  - h) Details of any technical service, if required for erection, assembly, commissioning and demonstration.
3. "Bidders shall submit an amount of **Rs.5,00,000/- (Rupees Five Lakhs only)** with the bid before the date of tender opening as stipulated in tender schedule towards Earnest Money Deposit(EMD)

The EMD shall be submitted in the form of DD/Banker's cheque/Bank Guarantee/Fixed Deposit Receipt (FDR) made in the name of Accounts Officer, Space Applications Centre, and be payable at par at Ahmedabad.

Bids received without EMD shall be treated as invalid and shall not be considered. In case of two-part (multi-part) tenders, EMD must be submitted either in separate sealed cover clearly marked as 'EMD against tender no. \_\_\_\_\_' or with technical bid, so that it should be available at the time of opening of the first part of bid document itself. Tenders not complying with this requirement shall be rejected.

The following categories of bidders shall be exempt from paying EMD subject to submission of appropriate documentary evidence with the bid in support thereof(if applicable)



- Vendors already registered / empanelled with SAC as authorized vendors.
- Overseas bidders submitting offers directly without involving an Indian Representative.
- Central PSUs/PSEs and autonomous bodies
- Micro and Small Enterprises
- Khadi and Village Industries Commission
- National Small Industries Corporation
- Any other establishments specifically exempted from paying EMD by an order of the Government of India.

The EMD of bidders who withdraw their bid during the tender evaluation process shall be forfeited. EMD of unsuccessful bidders shall be refunded without interest after the tender has been awarded, within 30 days of the award of the tender.

EMD of successful tenderer may be retained and converted to Security Deposit, if applicable.”

4. The FOB/FCA prices quoted should be inclusive of all taxes, levies, duties arising in the tenderer's country.
5. The offer should be valid for a minimum period of 90 days or longer if called for from the due date of opening of the tender.
6. Samples, if called for, should be sent free of all charges.
7. Late and delayed tenders will not be considered. Quotations by fax must be followed by detailed offers.
8. Offers made by Indian Agents on behalf of their Principals, should be supported by the proforma invoice of their Principals.
  - a) In a tender either the Indian Agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.
  - b) 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.
9. We are exempted from Customs/Excise Duties.
10. The details of Import Licence will be furnished in the Purchase Order.
11. The authority of person signing the tender, if called for, shall be produced.
12. Instructions / Operation Manual containing all assembly details including wiring diagrams should be sent wherever necessary in duplicate. All documents / correspondence should be in English language only.



13. The Purchaser reserves the right to accept or reject the lowest or any offer in whole or part without assigning any reason.
14. It is expressly agreed that the acceptance of the Stores Contracted for is subject to final approval in writing by the Purchaser.
15. a) Part shipment is not allowed unless specifically agreed to by us.  
b) As far as possible stores should be despatched by Indian Flag Vessels / Air India through an Agency nominated by us.
16. Inspection / Test Certificate should be provided for the goods after testing it thoroughly at the Contractor's works. If any Inspection by Lloyds or any other testing agency is considered necessary, it shall be arranged by Contractor.
17. Where erection or assembly or commissioning is a part of the Contract, it should be done immediately on notification. The Contractor shall be responsible for any loss/damage sustained due to delay in fulfilling this responsibility.
18. For items having shelf life, those with maximum shelf life should be supplied if order is placed.
19. No request for extension for due date for submission of tenders will be entertained.
20. Unsigned quotations will be rejected.
21. In case, the vendors are falling under the category of MSME, registered under NSIC and would like to avail exemptions, their quotations should be accompanied with necessary registration certificate with declaration to consider their offer. Quotation received without such declaration and valid registration certificate will not be considered for exemptions under Public Procurement Policy.
22. "In case the bidders propose any other payment terms in deviation with the standard terms mentioned above, it may be noted that applicable cash flow implications will be loaded on the prices quoted for commercial comparison of the offers. If advance payments are insisted by the bidders, interest at the rate of MCLR (Marginal Cost Linked Rate) as notified by State Bank of India from time to time shall be loaded on the prices for price comparison."

## **TERMS AND CONDITIONS**

### **1. DEFINITIONS:**

- (a) The term 'Purchaser' shall mean the President of India or his successors or assignees.
- (b) The term 'Contractor' shall mean, the person, firm or company with whom or with which the order for the supply of stores is placed and shall be deemed to include the Contractor's Successors, representatives, heirs, executors and administrators unless excluded by the Contract.
- (c) The term 'Purchase Order' shall mean the communication signed on behalf of the Purchaser by duly authorised officer intimating the acceptance on behalf of the Purchaser on the terms and conditions mentioned or referred to in the said communication accepting the Tender or offer of the Contractor for supply of stores, plant, machinery or equipment or part thereof.
- (d) The term 'Stores' shall mean what the Contractor agrees to supply under the Contract as specified in the Purchase Order.



## **2. PRICES:**

Tenders offering firm prices will be preferred. Where a price variation clause is insisted upon by tenderer, quotations with a reasonable ceiling should be submitted. Such offers should invariably be supported by the base price taken into account at the time of tendering and also the formula for any such variations. However, such clauses will be subject to final acceptance by Purchaser.

## **3. TERMS OF PAYMENT:**

3.1 Being a Department of the Government of India, the normal terms of payment are by Sight Draft. However other terms of payment like establishment of Letter of Credit may be considered by the Purchaser on such terms and conditions as may be agreed upon.

3.2 The Sight Draft / Letter of Credit will be operative on presentation of the under mentioned documents:

- a) Original Bill of Lading / Airway Bill
- b) Commercially certified invoices in triplicate, describing the stores delivered, quantity, unit rate and their total value. The invoice should indicate discounts, and Agency Commission if any separately.
- c) Packing List showing individual dimensions and weight of packages.
- d) Country of Origin Certificate in duplicate.
- e) Test Certificate.
- f) Declaration by the Seller that the contents in each case are not less than those entered in the invoices and the quality of the Stores are guaranteed as per the specifications asked for by the Purchaser.
- g) Warrantee and guarantee Certificate/s vide Clause 20 herein below

## **4. IMPORT LICENCE:**

Reference to Import License No. & date and Contract number & date shall be prominently indicated in all the documents vide Para 3.2.

## **5. DEMURRAGE:**

Supplier shall bear demurrage charges, if any, incurred by the Purchaser due to delayed presentation of shipping documents as prescribed in Para 3.2 to the bankers beyond a reasonable time (say within 10-12 days) from the date of bill of lading for sea consignments and within 3-4 days from the date of Air Way Bill for air consignments.

## **6. ADDRESS OF INDIAN AGENT:**

.....

## **7. GUARANTEED TIME OF DELIVERY:**

The time for and the date of delivery stipulated in the Purchase Order shall be deemed to be the essence of the Contract. Delivery must be completed within the date specified therein.



**8. INSPECTION AND ACCEPTANCE TESTS:**

- 8.1 The Purchaser's representatives shall also be entitled at all reasonable times during manufacture to inspect, examine and test on the Contractor's premises the material and workmanship of all stores to be supplied under the Contract and if part of the said stores is being manufactured on other premises, the Contractor shall obtain for the Purchaser's representative permission to inspect, examine and test as if the equipment were being manufactured on the Contractor's premises. Such inspection, examination and testing shall not release the Contractor from the obligations under this Contract.
- 8.2 For tests on the premises of the Contractor or of any of his sub-Contractors, the Contractor shall provide free of cost assistance, labour, material, electricity, fuel and instruments as may be required or as may be reasonably needed by the Purchaser's representative to carry out the tests efficiently.
- 8.3 When the stores have passed the specified test, the Purchaser's representative shall furnish a certificate to the effect in writing to the Contractor. The Contractor shall provide copies of the test/s certificates to the Purchaser as may be required.

**9. MODE OF DESPATCH:**

Generally, stores should be despatched through Indian Flagged Vessel / Air India or through any other Agency nominated by the Purchaser. A copy of the invoice and packing list should invariably be kept inside each of the packages.

**10. PORT OF ENTRY:**

FOR AIR SHIPMENTS: AHMEDABAD (Via Mumbai, if required)  
FOR SEA SHIPMENTS: NHAVASHEVA/Mumbai Seaport

**11. CONSIGNEE:**

Sr. Purchase & Stores Officer,  
Central Stores,  
Space Applications Centre (SAC),  
Ahmedabad

**12. SHIPPING MARKS:**

The mark on the shipping documents such as invoice, bill of lading and on the packages should be as follow:

PURCHASE ORDER NO. ....  
DATED .....

GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE

Destination: ..... &  
Port of Entry: .....

**13. INSURANCE OF THE STORES:**



The necessity or otherwise of insurance will be as indicated in the Purchase Order.

**14. CONTRACTOR'S DEFAULT LIABILITY:**

14.1 The Purchaser may upon written notice of default to the Contractor terminate the Contract in whole or in part in circumstances detailed hereunder:

- a) If in the judgement of the Purchaser the Contractor fails to make delivery of Stores within the time specified in the Contract/agreement or within the period for which extension has been granted by the Purchaser to the Contractor.
- b) If in the judgment of the Purchaser the Contractor fails to comply with any of the other provisions of this Contract.

15. In the event the Purchaser terminates the Contract in whole or in part as provided in Clause 14 the Purchaser reserves the right to Purchase, upon such terms and in such a manner as he may deem appropriate, stores similar to that terminated and the Contractor shall be liable to the Purchaser for any additional costs for such similar stores and/or for liquidated damages for delay as defined in Clause 19 until such reasonable time as may be required for the final supply of stores.

15.1 If this Contract is terminated as provided in Clause 14 the Purchaser in addition to any other rights provided in this Article, may require the Contractor to transfer title and deliver to the Purchaser under any of the following clauses in the manner and as directed by the Purchaser:

- a) Any completed stores.
- b) Such partially completed stores, drawing, information and Contract rights (hereinafter called manufacturing material) as the Contractor has specifically produced or acquired for the performance of the Contract as terminated. The Purchaser shall pay to the Contractor the Contract price for completed stores delivered to and accepted by the Purchaser and for manufacturing material delivered and accepted.

15.2 In the event the Purchaser does not terminate the Contract as provided in Clause 14, the Contractor shall continue the performance of the Contract in which case he shall be liable to the Purchaser for liquidated damages for delay as set out in Clause 19 until the stores are accepted.

**16. REPLACEMENT:**

If the stores or any portion thereof is damaged or lost during transit, the Purchaser shall give notice to the Contractor setting forth particulars of such stores damaged or lost during transit. The replacement of such stores shall be effected by the Contractor within a reasonable time to avoid unnecessary delay in the intended usage of the Stores. In case the Purchaser agrees, the price towards replacement items shall be paid by the Purchaser on the basis of original price quoted in the tender or as reasonably worked out from the tender.

**17. REJECTION:**

In the event that any of the stores supplied by the Contractor is found defective in material or workmanship or otherwise not in conformity with the requirements of the Contract specifications, the Purchaser shall either reject the stores or request the



Contractor, in writing, to rectify the same. The Contractor, on receipt of such notification, shall either rectify or replace the defective stores free of cost to the Purchaser. If the Contractor fails to do so, the Purchaser may at his option either:

- a) Replace or rectify such defective stores and recover the extra cost so involved from the Contractor, or
- b) Terminate the Contract for default as provided under Clause 14 above, or
- c) Acquire the defective stores at a reduced price considered equitable under the circumstances. The provision of this article shall not prejudice any other rights of Purchaser's under the Contract including recovery of liquidated damages for delay.

**18. EXTENSION OF TIME:**

If the completion of supply of stores is delayed due to reasons of *force majeure* such as acts of god, acts of public enemy, acts of Government, fires, floods, epidemics, quarantine restriction, strikes, freight embargoes, etc., the Contractor shall give notice within 15 days to the Purchaser in writing of his claim for an extension of time. The Purchaser on receipt of such notice after verification, if necessary, may agree to extend the Contract delivery date as may be reasonable but without prejudice to other terms and conditions of the Contract.

**19. DELAY IN COMPLETION / LIQUIDATED DAMAGES:**

If the Contractor fails to deliver the stores within the time specified in the Contract or any extension thereof, the Purchaser shall recover from the Contractor as liquidated damages a sum of one-half of one percent (0.5%) of the Contract price of the undelivered stores for each calendar week of delay. The total liquidated damages shall not exceed ten percent (10 %) of the Contract price of the portion of stores so delayed. Stores will be deemed to have been delivered only when all their component parts are also delivered. If certain components are not delivered in time, the stores will be considered as delayed until such time as the missing parts are delivered.

**20. GUARANTEE & REPLACEMENT:**

- a) The Contractor shall guarantee that the stores supplied shall comply fully with the specifications laid down for material, workmanship and performance.
- b) For a period of twelve months (or such period as agreed upon by the parties) after the acceptance of the stores, if any defects are discovered therein or any defects therein are found to have developed under proper use arising from faulty materials, design or workmanship, the Contractor shall remedy such defects at his own cost provided he is called upon to do so within a period of 14 months (or such period as specified in Contract) from the date of acceptance thereof by the Purchaser who shall state in writing in what respect the stores or any parts thereof are faulty.
- c) If in the opinion of the Purchaser it becomes necessary to replace or renew any defective stores, such replacements or renewals shall be made by the Contractor free of all costs to the Purchaser provided the notice informing the Contractor of the defect is given by the Purchaser in this regard within the said period of 14





months (or such period as specified in Contract) from the date of acceptance thereof.

- d) Should the Contractor fail to rectify the defects, the Purchaser shall have the right to reject or repair or replace at the cost of the Contractor the whole or any portion of the defective stores.
- e) The decision of the Purchaser, notwithstanding any prior approval or acceptance or inspection thereof on behalf of the Purchaser, as to whether or not the stores supplied by the Contractor are defective or any defects has developed within the said period of 12 months (or such agreed period) or as to whether the nature of the defects requires renewal or replacement shall be final, conclusive and binding on the Contractor.
- f) To fulfill guarantee conditions outlined in Clause 20 (a) to (e) above, the Contractor shall, at the option of the Purchaser, furnish a Bank Guarantee (as prescribed by the Purchaser - Bank Guarantee format enclosed) from a Bank approved by the Purchaser for an amount equivalent to 10% of the value of the Contract along with first shipment documents. On the performance and completion of the Contract in all respects, the Bank Guarantee will be returned to the Contractor without any interest.
- g) All the replacement stores shall also be guaranteed for a period of 12 months from the date of arrival of stores at Purchaser's site.
- h) Even while the 12 months guarantee applies to all stores, in case where a greater period is called for by our specifications, then such a specification shall apply, and in such cases, the period of 14 months referred to in Clause 20 (b) and (c) shall be asked for guarantee period plus two months.**

#### **21 REQUIREMENT OF ADDITIONAL NUMBERS OF THE STORES/SPARE PARTS ORDERED:**

The Contractor shall also undertake the supply of additional number of items covered by the order as considered necessary by the Purchaser at a later date, the actual price to be paid shall be mutually agreed to after negotiations.

#### **22. PACKING:**

- a) The Contractor wherever applicable shall pack and crate all stores for sea / air shipment as applicable in a manner suitable for export to a tropical humid climate, in accordance with internationally accepted export practices and in such a manner so as to protect it from damage and deterioration in transit by road, rail or sea for space qualified stores. The Contractors shall be held responsible for all damages due to improper packing.
- b) The Contractor shall ensure that each box / unit of shipment is legible and properly marked for correct identification. The failure to comply with this requirement shall make the Contractor liable for additional expenses involved.
- c) The Contractor shall notify the Purchaser of the date of shipment from the port of embarkation as well as the expected date of arrival of such shipment at the designated port of arrival.
- d) The Contractor shall give complete shipment information concerning the weight, size, content of each packages, etc.



- e) Transshipment of equipment shall not be permitted except with the written permission of the Purchaser.
- f) Apart from the despatch documents negotiated through Bank, the following documents shall also be airmailed to the Purchaser within 7 days from the date of shipment by sea and within 3 days in case of air-consignments:
  - a) Commercial Bill of Lading / Air Way Bill / Post parcel Receipt.  
(Two non-negotiable copies)
  - b) Invoice (3 copies)
  - c) Packing List (3 copies)
  - d) Test Certificate (3 copies)
  - e) Certificate of Origin.

The Contractor shall also ensure that one copy of the packing list is enclosed in each case.

**23. ARBITRATION:**

If at any time any question, dispute or difference whatsoever shall arise between the Purchaser and the Contractor upon or in connection with this Contract, either party may forthwith give to the other notice in writing of the existence of such question, dispute or difference and the same shall be referred to the adjudication of two arbitrators, one to be nominated by Purchaser, other by a Contractor and in the event of any difference of opinion, the arbitrators will refer the matter to the umpire. The arbitration shall be conducted in accordance with the rules and procedure for arbitration of the International Chamber of Commerce at Paris. The expenses of the arbitrators and umpire shall be paid as may be determined by them. However, the venue of such arbitration should be in India.

**24. LANGUAGE AND MEASURES:**

All documents pertaining to the Contract including specification, schedule, notice, correspondence, operating and maintenance instructions, drawings or any other writings shall be written in English language. The metric system of measurement shall be used exclusively in the Contract.

**25. INDEMNITY:**

The Contractor shall warrant and be deemed to have warranted that all Stores supplied against this Contract are free and clean of infringement of any patent, copyright or trade mark and shall at all times indemnify the Purchaser against all claims which may be made in respect of stores for infringement of any right protected by Patent, Registration of design or Trade Mark, and shall take all risk of accident or damage which may cause a failure of the supply from whatever cause arising and the entire responsibility for the sufficiency of all the means used by him for the fulfilment of the Contract.

**26. COUNTER TERMS AND CONDITIONS OF SUPPLIERS:**

Where counter terms and conditions/printed or cyclostyled conditions have been offered by the bidder, the same shall not be deemed to have been accepted by the Purchaser unless specific written acceptance thereof is obtained.



**27. SECURITY INTEREST:**

On each item to be delivered under this Contract, including an item of work in progress in respect of which payments have been made in accordance with the terms of the Contract, Purchaser shall have a security interest in such items which shall be deemed to be released only at the time when the applicable deliverable item is finally accepted and delivered to the Purchaser in accordance with the terms of the Contract. Such security interest of the Purchaser shall constitute a prior charge as against any other charge or interest created in respect of such items by any entity.

**28. BANK CHARGES:**

While the Purchaser shall bear the bank charge payable to his Bankers (State Bank of India), the Contractor shall bear the Bank charges payable to his Bankers including the cheques towards advising amendment commissions.

**29. TRAINING:**

The Contractor shall, if required by the Purchaser, provide facilities for the practical training of Purchaser's engineering / technical personnel from India and for their active association on the manufacturing processes throughout the manufacturing period of the Contract / stores. Number of such personnel to be mutually agreed upon.

**30. APPLICABLE LAW:**

The Contract shall be interpreted, construed and governed by the laws of India.

**PACKING INSTRUCTIONS**

1. In tune with the requirement of international plant protection convention of the FAO, UN the following has become mandatory with immediate effect.
2. All packing materials of any kind of plant origin used for packing shall require treatment including heat-kiln treatment at 56 degree centigrade for a minimum of 30 hours of methylbromide fumigation at 48g/cum for 32 hours of chemical impregnation as per international standards.
3. If the consignments are sent without the aforesaid certificate, all demurrages and other charges for treatment etc. will be to the account of the suppliers.
4. This aspect also should be taken care of while submitting the offers.
5. If the packaging material being used for your product does not come under the category "material of plant origin" (i.e. Leaves, grass, wood etc.) Please certify the same in your quote and ignore the above instructions. However, the same should be ascertained at the time of actual shipment if the order is awarded to you.

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**STANDARD TENDER FORM**  
(Seal of the Company)

Tender No.: .....  
Due on: .....  
Ref. No.: .....  
Date: .....

**TENDER FORM**

From: .....  
.....  
.....

To: The Sr. /Purchase & Stores Officer,  
..... (Name of the Centre/Unit)  
.....

Dear Sir,

I/We hereby offer to supply the stores detailed below at the price hereunder quoted and agree to hold this offer open till..... I/we shall be bound to supply the stores hereby offered upon the issue of the Purchase Order communicating the acceptance thereof on or before the expiry of the last mentioned date. You are at liberty to accept any one or more of the items of stores tendered for or any portion of any one or more of the items of such stores. I/We, notwithstanding that the offer in this tender has not been accepted in whole, shall be bound to supply to you such items and such items and such portion or portions of one or more of the items as may be specified in the said Purchase Order communicating the acceptance:

Sl. No.	Description	Quantity	Unit	Rate Rs.	Delivery Date

**Note: All the rates should be given both in figures and words**

Place at which delivery will be made	
Date by which the ordered item/s will be supplied	

2. I/We have understood the items of the tender annexed to the invitation to tender and have thoroughly examined the specifications/drawing and/or pattern quoted or referred to herein and am/are fully aware of the nature of the stores required and my/our offer is to supply the stores strictly in accordance with the requirements subject to the terms and conditions stipulated in the enquiry and contained in the Purchase Order communicating the acceptance of this tender either in whole or in part.

Signature of Tenderer

Date: .....

भारत सरकार  
अंतरिक्ष विभाग  
अंतरिक्ष उपयोग केंद्र(इसरो)  
आंबावाडी विस्तार पी.ओ.  
अहमदाबाद - 380 015 (भारत)  
दूरभाष: +91-79-2691 3051/98  
फैक्स नं. : +91-79-2691 5835/02/48



Government of India  
Department of Space  
**SPACE APPLICATIONS CENTRE (ISRO)**  
Ambawadi Vistar P.O.  
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Telephone : +91-79 – 2691 3051/98  
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निविदा सूचना सं.: सैक/पीटी /08/2016-17  
Tender Notice No.: SAC/PT/08/2016-17

क्र. सं. Sr.No	निविदा नं. Tender No.	संक्षिप्त विवरण Brief Description	नियत तिथि (अपराह्न 3 बजे तक) Due on (Up to 3 pm)
4	AHSE 201600048101	Reference Flat (Two Part)	17/08/2016

**GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE  
AHMEDABAD 380 015, INDIA  
PURCHASE & STORES**

Ph No: 079-2691 3067  
Fax 079-2691 5848/02/35

Date : 14/07/2016

**INVITATION TO TENDER**

M/s

000000

Our Ref No : AHSE 2016-000481-01

Tender Due: 15:00 Hrs ISTon 17/08/2016

Dear Sirs,

Please submit your sealed quotation , in the Tender Form enclosed here along with the descriptive catalogues / pamphlets / literature ,superscribed with Our Ref.No. and Due Date for the supply of the following items as per the terms & conditions mentioned in Annexure( Form No: As per enclosure. )

S.No.	Description of Items with Specifications	Unit	Quantity
1	FABRICATION, TESTING AND SUPPLY OF A 1500 MM FLAT MIRROR WITH TWO AXIS GIMBAL (AS PER ATTACHED RFP)	No.	1

**DELIVERY AT:** SAC-STORES, AHBD.

**MODE OF DESPATCH** BY AIR FRE

**DUTY EXEMPTIONS** We are exempted from payment of customs duty.

**SPECIAL INSTRUCTIONS** Mention validity, warranty, payment terms & delivery terms.

**SPECIFIC TERMS** As per enclosure.

**INSTRUCTIONS TO TENDERERS:**

- Acceptance of Liquidated damages- As per enclosure; - - Acceptance of Performance Bank Gurantee-As per enclosure; --EMD(Earnest Money Deposit)- As per clause 3 attached Terms & Conditons
- Please confirm acceptance for submission of Security Deposit for 10% of Purchase Order Value.
- "Quotations shall be submitted by the bidders only by post or by hand in sealed covers. Quotations received by FAX or e-mail shall not be considered as valid offers and will not be accepted for evaluation."
- "In case the bidders propose any other payment terms in deviation with the standard terms mentioned above, it may be noted that applicable cash flow implications will be loaded on the prices quoted for commercial comparison of the offers. If advance payments are insisted by the bidders, interest at the rate of MCLR (Marginal Cost Linked Rate) as notified by State Bank of India from time to time shall be loaded on the prices for price comparison."
- Please note that this is a TWO-PART TENDER. Send your quotation as per attached instructions only. Quotation not conforming to the instructions will be rejected. Fax & email quotations will not be accepted.
- Technical & Commercial Compliance statement confirming compliance with all the point of Tech & Commercial annexures enclosed with the tender document shall be submitted along with the offer. In the absence of the same, your offer shall be summarily rejected

**REQUEST FOR PROPOSAL (RFP) FOR FABRICATION,  
TESTING AND SUPPLY OF A 1500 MM FLAT MIRROR  
WITH TWO AXIS GIMBAL**



**SPACE APPLICATIONS CENTRE (SAC)  
INDIAN SPACE RESEARCH ORGANISATION (ISRO)  
AHMEDABAD - 380 015**

## **SECTION I**

### **1.1 Introduction**

ISRO is in the process of developing a ground based optical system utilizing a large size optical flat mirror. This request for proposal (RFP) is for fabrication, testing and supply of a 1500 mm diameter optical flat mirror

The RFP provides details of the specifications for this mirror along with 2 axis gimbal, as well as the tests to be carried out to demonstrate performance compliance to the specifications.

### **1.2 Scope**

The scope of the work to be carried out by the supplier includes:

- Study of the specifications provided by ISRO
- Procurement of the mirror blank and to provide incoming material inspection report to ISRO
- Fabrication of 1500 mm diameter reference flat.
- Design and Fabrication of mount for the reference flat.
- Stress free mounting of reference flat on to the mount.
- Design and Fabrication of gimbal mount for the reference flat assembly.
- Demonstration of performance of the reference flat as laid down in this contract.
- Confirm performance of the mirror and provide test data to ISRO for dispatch clearance
- Packing in a suitable container and shipment to ISRO.

### **1.3 Supplier's Responsibility**

The supplier shall be responsible for demonstrating the satisfactory performance as required by the applicable specifications and worldwide adopted standards.

It is the supplier's responsibility to submit a schedule of activities. It is supplier's responsibility to inform about the developments on a monthly basis and also at every milestone identified in the schedule.



The supplier should submit the write-up highlighting their expertise in the design and development of a similar type of reference flat with gimbal, the available test set up and facilities etc. This is the mandatory requirement for considering the technical offer.

#### **1.4 Conditions and methods of tests**

The design, predicted performance and test methods of reference flat at various stages namely, component reference flat level, reference flat mounted on its mount and reference flat with its mount held on the gimbal mount shall be submitted to ISRO or mutually agreed upon. The performance analysis due to various parameters namely, stress, gravity etc., shall be submitted individually as well as all parameters together.

#### **1.5 Inspection Rights**

ISRO reserves the right to participate/monitor any of the tests envisaged in this contract at manufacture's place. If any inspection is to be carried out at a place other than manufacturer's place, supplier shall make the appropriate arrangement for the participation of ISRO nominee (s)

#### **1.6 Response to the RFP**

Fabricators should provide a detailed offer in response to the RFP for fabrication of a flat mirror. The offer should contain the following information:

- Compliance statement to all the specifications. This should be substantiated by providing details of methods of fabrication, testing, inspection, and delivery.
- The fabricator should provide details of previous experience in fabrication of 1500 mm diameter and larger optical components including flat mirrors.

The proposal should also contain the commitment to submit the following information during the course of fabrication:

- a. Product realisation plan detailing the aspects of
  - Fabrication and process control
  - Inspection and acceptance criteria to be followed
  - Configuration control and traceability

- b. Test and evaluation plan for each specification section, giving the test facilities, test procedure and instruments proposed to be used during the acceptance tests.

## SECTION II

### 2.1 Description of the item

A high quality Reference flat will be used in the interferometric evaluation setup. The axis of the reference flat shall be parallel to the mounting surface i.e. perpendicular to the gravity direction as shown in figure 2.2. The mounted reference flat hereafter referred, as "*reference flat assembly*" shall be rested on a two-axis gimbal mount. The tip-tilt adjustments using micrometer screws shall have a resolution of 5 arc seconds.

### 2.2 Requirement Details on reference flat:

Since this component forms the reference flat of an interferometer setup, its long-term performance stability shall be ensured. The optical material used shall be free from internal stress as well as external stress at various stages of realization. This should be ensured by conducting polariscopic tests at each stage of fabrication. The reference flat along with its mount shall meet the required performance for a thermal environment of  $22 \pm 2$  ° C. In addition to this, the system shall withstand a storage temperature range from 15° C to 40°C.

The mounted reference flat shall be held on a suitably designed stress free two-axis gimbal mount. Handling provision (hooks) shall be provided at appropriate location for handling with a crane. Design of mounts shall ensure the performance stability even after multiple handling of reference flat assembly with the gimbal mount. Handling provision shall be available separately for gimbal mount and for reference flat assembly. To protect the reference flat from dust when not in use, the supplier shall provided transparent protective cover attached to the both sides of reference flat assembly. A soft cover made of antistatic material shall be supplied to protect the reference flat from dust, when not in use. This should be sufficiently large to cover the reference flat assembly completely.

To ensure that the reference flat assembly is rigidly bolted on to the height raiser, mounting holes on the reference flat assembly base are required. The gimbal mount base shall have at least three mounting holes. The number and size of the holes should be sufficient to keep this reference flat assembly stable at the desired height.

The effect of gravity on the flatness of the optical component in the required configuration shall be analyzed in terms of wave front error. The effect of gravity on to the various parameters (tilt of the mirror and etc.,) of the reference flat assembly shall also be analyzed and supplied. The specified performance of the reference flat at extreme tilt value of gimbal shall be demonstrated. As in the case of tilt about x axis (figure 2.2) the specified performance shall be met at an angle of tilt of not less than  $\pm 2.5^\circ$

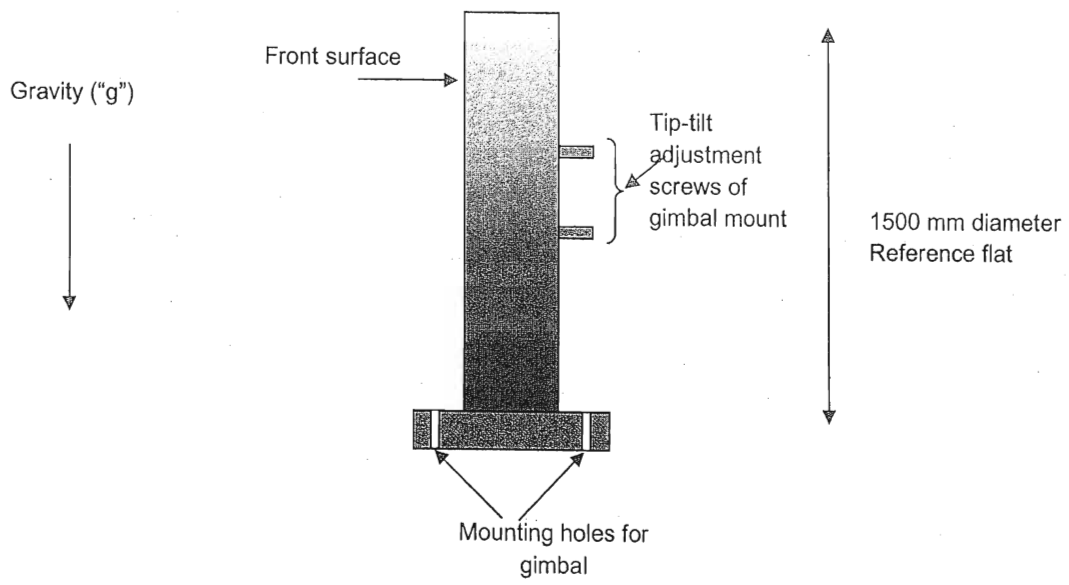


Figure 2.1: Typical view of Reference flat assembly-Gimbal mount

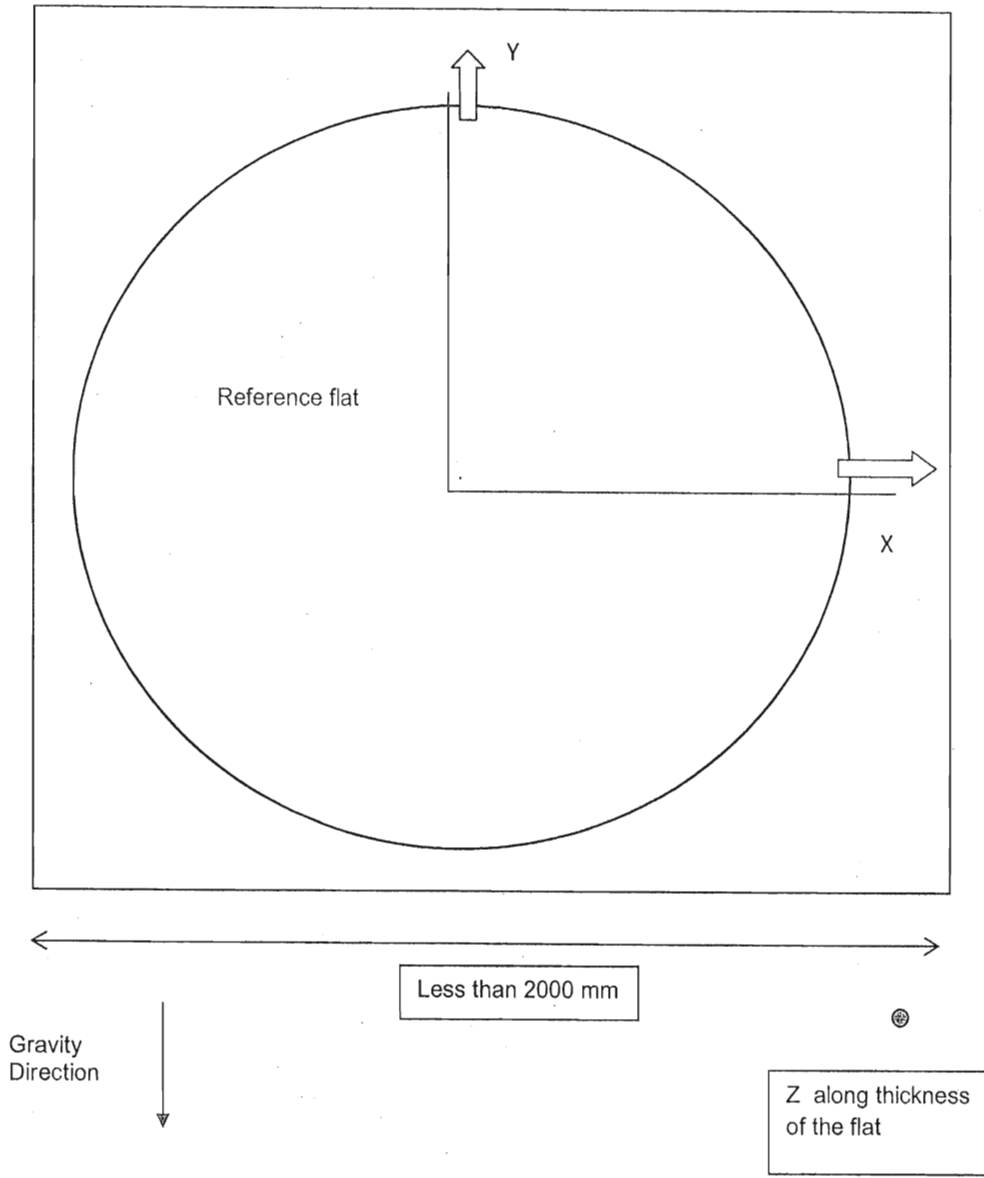


Figure 2.2: DEFINITION OF AXIS

### 2.3 Specification for the Reference Flat

TABLE 2.1

#### SPECIFICATION FOR THE REFERENCE FLAT

S.No.	Parameter	Value	Comment
1.	Material of reference flat	Zerodur (SCHOTT) or equivalent	Standard Grade
2.	Reference flat mount material	Vacuum compatible dull black epoxy paint or equivalent	
3.	Shape of reference flat	Circular	
4.	Physical aperture	1500 mm.	
5.	Clear aperture	≥ 1450 mm	
6.	Thickness	As required to meet the specification	If necessary supplier can modify these values to meet the performance specification. Supplier shall attempt to minimize the thickness and the weight
	Weight of the solid reference flat	Typically Less than 1120 Kg	
7.	Reference flat assembly held on gimbal	Surface figure Front face	1. Front surface radius of curvature $>5 \times 10^9$ km 2. Front and rear face shall have distinguished identification mark.
		Surface figure Rear face	
8.	Scratch & Dig	Front face	60/40
		Rear face	80/60
9	Wedge Angle	0.1°	
10	Chamfering	3 mm X 45° Typical	
11	Gimbal mount material	Vacuum compatible dull black epoxy paint or equivalent	

12	Tilt Provision on gimbal mount about x and y axis as (defined in the figure 2.2)	Range: $\pm 2.5^\circ$ Resolution: 5 arc sec	Standard Manual tip tilt provision along with Vacuum compatible motorized tip tilt stage.
13	A compatible controller with all required accessories to drive the vacuum compatible motorized tip-tilt stage. Input voltage to controller shall be 220 to 240 V AC, 50 hz.		
14.	Weight of the Reference flat assembly with Gimbal mount	Typically 2000 Kg	Supplier shall attempt to minimize the weight
15.	Gimbal mount dimension in x direction	Typically 2000mm	

Note:

1. Base of the Gimbal mount shall have provision for locking with the platform or with the vibration isolation table.
2. Vendor shall suggest compatible feed for the cable of motor and the controller at respective sides of the vacuum chamber.
3. Vendor shall supply (i) 5 meter cable length required to connect tip tilt motor to feed of the flange of vacuum chamber. (ii) Another 5 meter length required to connect motion controller to feed of flange of the vacuum chamber.



## SECTION III

### 3.1 Detail of Test

The detailed test methods/procedures shall be suggested by the supplier to ISRO and mutually agreed upon, in advance (at least 4 weeks before the start of test). The test methods/procedures shall include but not limited to the following.

- Test procedure right from the start to finish of the reference flat fabrication.
- Description of test procedures, test facilities, environmental conditions, calibration, tolerance and operation details of test facilities and equipment.
- Test results at various identified major stages shall be communicated to SAC, ISRO for study and approval.

Test matrix is given below but not limited to:

**Table: 3.1 TEST MATRIX FOR ACCEPTANCE**

S.No.	PARAMETER	STAGE / LEVEL	REMARKS
1	Material properties	Procurement	Data to be provided to ISRO
2	Clear aperture	After fabrication	Data to be provided
3	Scratch / dig	After fabrication	Data to be provided
4	Surface figure	Mirror assembly in the actual gimbal mount	Interferogram to be provided.
5	Stress study	Before & After fabrication	Polariscope data to be provided
6	2 axis gimbal mount specifications and features verification	After assembly of reference flat assembly with gimbal mount	Data to be provided

### **3.2 Documentation requirements**

- Material selection criteria details and properties.
- Material acceptance report in case of procurement from other source.
- Theoretical analysis results / reports for gravity effects.
- Mount design and analysis details.
- Test-plan documents including Performance evaluation test set up and calibration details.
- Stress study set up details and results.
- Final results / reports.
- Interferogram of the reference flat surfaces before and after mounting.
- Handling details
- Packaging, transportation & insurance details.

## SECTION IV

### 4.1 Required information

- ◆ Data / Design data pertaining to compliance to all the specifications and requirements.
- ◆ Details of analysis and processes substantiating the ability to meet all the specifications and requirements.
- ◆ Design sensitivity to fabrication and assembly tolerances.
- ◆ Information on past experience and observation with similar type of system for the long term multiple usages.

The required information shall also contain but not limited to the following information:

- a. List of materials proposed to be used.
- b. Thermal and mechanical design details.
- c. Non-compliance, if any, of the specifications and alternatives.
- d. Engineering drawings with dimensions and weight of the proposed design.
- e. Product assurance plan detailing the aspects of
  - Fabrication and process control
  - Inspection and acceptance criteria to be followed
  - Non conformance control
  - Configuration control and traceability
- f. Broad "test and evaluation plan" giving the test facilities and instruments proposed to be used during the qualification and acceptance tests.
- g. Project plan envisaging all matters relating to the performance of all phases of the contract. The plan shall also include major milestone and identify all hardware and other deliverables specified in the contract.

### 4.2 Deliverables

Sr. No.	Description	Qty
1	Reference flat assembly	01
2	Two axes gimbal mount with the required	01

	provisions	
3	Transparent protective cover for the reference flat assembly	01 (For each side i.e total 2 Nos.)
4	Soft cover completely enclosing the reference flat assembly	02
5	Handling Fixture for mirror	01
6	Handling Fixture for 2 Axes Gimbal	01
7	All Documents and test reports	As applicable

### 4.3 Delivery Schedule

Completion of contract : T<sub>0</sub>+18~20 months

The supplier shall draw up the schedule and milestones for:

1. Design review
2. Material procurement
3. Fabrication of flat assembly and two axis gimbal
4. Acceptance tests
5. Delivery and installation at SAC.

### 4.4 Packaging and transportation

The complete assembly (Mirror and two axes Gimbal assembly) shall be packed in appropriate containers in order to protect it from any degradation from the required specification due to various factors (namely shocks, humidity, vibrations, shock, dust etc.,) during storage, handling and transportation.

The design of the container should ensure adequate support for the mirror to prevent any deterioration in the surface figure during transportation and storage. The mirror should be placed in a sealed aluminium foil envelope purged with dry nitrogen.

The manufacturer shall provide handling and storage instructions for the deliverables. The container shall be reusable.

#### **4.5 Warranty**

The mirror shall be warranted to meet the specified performance for a period of minimum one year standard after installation at ISRO.

#### **4.6 Guidelines for quotation**

- The supplier should clearly mention the compliance/noncompliance to every section/ subsection of the RFP as per appendix I. Compliance table shall be filled by original equipment manufacturer (OEM).
- In case of the non-compliance to any section, the non-compliance should be explained clearly. Alternative, if any, shall be proposed and explained.
- The supplier shall quote **technical and commercial proposals** (two parts) in separate **sealed envelope**.
- **Technical proposal** shall also include various aspects considered to arrive at the price in the form of BLANK PRICE BID (i.e without inclusion of price).
- OEM shall certify the Indian representative if any.

## APPENDIX I

### Blank Technical Compliance Table

Section	Sr. No.	Description	Specification or Value	Comply/Not comply (With wherever applicable) value	Remark
I	1.1	Introduction			
	1.2	Scope			
	1.3	Supplier Responsibility			
	1.4	Conditions and methods of tests			
	1.5	Inspection right			
	1.6	Response of the RFP			
II	2.1	Description of the item			
	2.2	Requirement Details on reference flat			
	2.3(Table 2.1 sr. No. 1)	Material of reference flat	Zerodur (SCHOTT) or equivalent		
	Table 2.1 sr. No. 2)	Reference flat mount material	Vacuum compatible dull black epoxy paint or equivalent		
	Table 2.1 sr. No. 3)	Shape of reference flat	Circular		
	Table 2.1 sr. No. 4)	Physical aperture	1500 mm		
	Table 2.1 sr. No. 5)	Clear aperture	≥ 1450 mm		
	Table 2.1 sr. No. 6)	Thickness  Weight of the solid reference flat	As required to meet the specification  Typically Less than 1120 Kg		
	Table 2.1 sr. No. 7. (Reference flat assembly held on gimbal)	Surface figure Front face	Less than 63 nm PV Less than 10 nm rms		

	Table 2.1 sr. No. 7 (Reference flat assembly held on gimbal)	Surface figure Rear face	Optical finish (approx: 1265 nm PV)		
	Table 2.1 Sr. No. 8	Front face Scratch and dig	60/40		
	Table 2.1 Sr. No. 8	Rear face scratch and dig	80/60		
	Table 2.1 Sr. No. 9	Wedge Angle	0.1°		
	Table 2.1 Sr. No. 10	Chamfering	3 mm X 45° Typical		
	Table 2.1 Sr. No. 11	Gimbal mount material	Vacuum compatible dull black epoxy paint or equivalent		
	Table 2.1 Sr. No. 12	Tilt Provision on gimbal mount about x and y axis as (defined in the figure 2.2)	Range: ± 2.5° Resolution: 5 arc sec		
	Table 2.1 Sr. No. 13	A compatible controller with all required accessories to drive the vacuum compatible motorized tip-tilt stage. Input voltage to controller shall be 220 to 240 V AC, 50 hz.			
	Table 2.1 Sr. No. 14	Weight of the Reference flat assembly with Gimbal mount	Typically 2000 Kg		
	Table 2.1 Sr. No. 15	Gimbal mount dimension in x direction	Typically 2000mm		
III	3.1	Detail of Test as per table 3.1			
	3.2	Documentation requirements			
IV	4.1	Required information			
	4.2	Deliverable			
	4.3	Delivery Schedule			
	4.4	Packaging and transportation			
	4.5	Warranty			
	4.6	Guideline for quotation			

## Instructions for Two Part Tender

We are proposing to invite tenders in two parts viz.

- Part I : Technical and Commercial
- Part II: Price

All tenderers are requested to carefully follow the following instructions before preparing their offer.

### 1) Part I: Technical & Commercial Bid

#### Part - (a) Technical

1. This part should contain detailed specifications of the items quoted by you along with technical literature and leaflets if any.
2. A compliance statement showing the compliance of the item quoted by you with that of item tendered by us should be prepared and enclosed to this.
3. Any other information called for in the tender related technical and specifications can also come in this part.
4. Prices should not be indicated in this cover.

#### Part - (b) Commercial Terms: (Without Prices)

1. The commercial terms applicable for the item quoted by you should be indicated in this part.
2. If any compliance statement is called for the commercial terms / contractual terms and conditions, the same is to be attached in this part.
3. Prices should not be indicated in this part. However a copy of the price bid (without prices) can be enclosed in this part to enable to understand whether all the items required to be quoted by you have been quoted in the price bid. Alternatively a statement is to be made indicating that you have quoted prices for all the items as per the tender and enclosed in the Price Bid as per the format.
4. The Commercial terms such as delivery terms, delivery period, payment terms, Warranty, validity of the offer, installation & commissioning, duties and taxes etc., shall come into this.

Notes:

1. Either Technical Specifications or terms & conditions as above should be very clearly reflected item-wise with reference to the items called for in the tender.
2. Please note that the **PRICE SHOULD NOT BE** indicated in this part.
3. Technical and Commercial part as described above shall be prepared and put it in a sealed cover & super scribed and addressed as follows:

Tender No. :

Due Date :

**PART I : Technical & Commercial Bid**

**The Sr. Head Purchase & Stores  
Space Applications Centre  
Ambawadi Vistar P.O.  
Ahmedabad - 380 015**

From:



## 2) Part II: Price Bid

1. The prices applicable for the items, item-wise in response to the tender shall come into this part.
2. Tenderer shall indicate very clearly item-wise prices with reference to their technical offer.
3. Price part prepared as above shall be enveloped and superscribed as follows:

Tender No. :	
Due Date :	
<b>PART II :</b>	<b>Price Bid</b>
	<b>The Sr. Head Purchase &amp; Stores Space Applications Centre Ambawadi Vistar P.O. Ahmedabad - 380 015</b>
From :	

- 3) The Technical & Commercial envelope (Part I) and Price cover (Part II) prepared as above along with 'Tender fee cover' (if applicable) should be inserted in another envelope and superscribed as follows:

Tender No. :	
Due Date :	
	<b>Part I &amp; Part II are individually sealed and kept inside: (DD towards tender fee also is kept inside)</b>
	<b>The Sr. Head Purchase &amp; Stores Space Applications Centre Ambawadi Vistar P.O. Ahmedabad - 380 015</b>
From:	

### Important Notes:

1. Being a Two-Part Tender, fax/mail quotations will not be accepted. Please ensure your offers are received by post before due date and time.
2. In case you are going to download the documents from our website and submitting the offer, you are requested to submit the demand draft towards Tender fee in a separate cover along with a covering letter duly superscribing on the cover "Tender fee in respect of Tender No. \_\_\_\_\_".
3. Quotations submitted contrary to above instructions are liable to be rejected.

**Compliance Statement required to be filled and enclosed along with the technical and commercial bid by the vendor.**

Sr. No.	Commercial terms	Compliance/Remarks/Comments by Vendor
1.	Delivery terms (Ex-works, FOB, FCA, etc.)	
	Purchaser is having an air consolidation contract and their freight forwarder will arrange to collect the consignment from your premises/will take the responsibility for onward transmission from the point of delivery as per INCOTERMS 2010. This is applicable for import cases.	
2.	Packing charges (inclusive/exclusive)	
3.	Delivery period (in weeks/months)	
4.	Payment terms: Our standard term is  Sight Draft (import)  Within 30 days from the date of acceptance (indigenous).	
5.	Country of origin To be declared in the invoice.	
6.	Name and address of the Indian Agent.(if any)	
7.	Percentage of agency commission included in the quoted price – payable in Indian Rupees only directly to the Indian Agent.	
8.	Validity of the offer Minimum of 120 days from the date of opening.	
9.	If you are an Indian Agent, please enclose the authorization letter of your Principal and confirm that whether you have enrolled with DGS&D as per rules.	
10.	In a tender, either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.	
11.	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.	
12.	Cost of spares Included in the price bid / not included.	
13.	Will you be able to provide consumables/spares for 10 years?	
14.	Taxes and duties :  Taxes in India to the account of Purchaser. Outside India to Seller's/Contractor's account. Please indicate your Tax Registration Number.  Wherever installation involved, Income Tax @ 2% will be deducted from the bill and a certificate issued.  Installation in India will attract Service Tax @ 12.36%. If required, orders for supply and installation can be issued separately.  Work order will attract work contract tax as per rules. Please confirm whether you have included WCT in your offer.	

	<p>Customs Duty Exemption Certificate (CDEC) will be issued by Purchaser. Hence no CD is to be included in your offer wherever applicable.</p> <p>Please indicate rate of the Sales Tax/VAT applicable.</p> <p>Octroi Duty/Entry Tax exempted. Exemption certificate will be issued, if required.</p> <p>Purchaser is eligible for full Excise Duty exemption. Excise Duty exemption certificate will be issued.</p>	
15.	No Insurance is required at Purchaser's cost.	
16.	<p>For two part bids two separate sealed envelopes are to be sent duly superscripted as follows :</p> <ol style="list-style-type: none"> <li>1. Technical &amp; Commercial Bid</li> <li>2. Price Bid</li> </ol> <p>Please refer instructions.</p>	
17.	<p>Wherever EMD/tender fee is payable Provide the same in the form of crossed Demand Draft in favour of The Accounts Officer, SAC, Ahmedabad along with the bid but in a separate cover or along with technical bid.</p> <p>On the back side of the D.D, please write your company's name.</p>	
18.	Language to be used in all correspondence - English	
19.	Measurements - Metric system to be followed	
20.	Whether prequalification of your facility procedure completed (if applicable).	
21.	<p>Warranty period</p> <p>We need minimum 3 years from the date of acceptance. In case the product has a standard warranty of 1 year, confirm that additional 2 years warranty cost is indicated in the price bid/prices.</p> <p>However the warranty requirement if projected in RFP shall prevail.</p>	
22.	Defective/rejected items if any, are to be replaced free of cost.	
23.	Confirm whether you will be able to provide samples if called for, free of cost.	
24.	Approximate weight (net and gross) of the consignment.	
25.	Instruction/operational manual to be supplied free of cost.	
26.	Supply and installation is subject to Purchaser's acceptance.	
27.	LC extension charges to your account, in case of delay from your side.	
28.	Items from latest production batch only are to be supplied.	
29.	Wherever Export Licence required, payment will be made after getting export licence and after confirmation by the supplier, with a copy of Export Licence.	
30.	<p>Bank Guarantees (from Nationalised/ Scheduled Bank/ Bank approved by Purchaser.</p> <p>Advance payment for the equal value valid till the completion of contract/acceptance, is to be provide by you.</p> <p>Towards issue of "Free Issue Material" by Purchaser for the value of the material issued, is to be provided.</p>	

	<p>The Bill of material for the material used for the Fabrication work and available balance to be prepared by you and countersigned by the User Department is to be sent along with the final bill for arranging the balance/payment.</p> <p>Towards Performance of the Contract and Product for 10% value valid till the expiry of warranty period.</p>	
31.	Security Deposit is to be submitted to SAC by the successful bidder (wherever applicable )on awarding the contract	
32.	Training – free of cost – to be imparted at Purchaser’s site.	
33.	Bank charges wherever applicable shall be paid by Purchaser/Contractor to their respective Bankers.	
34.	Arbitration proceedings Within India as per provisions of Arbitration and Conciliation Act 1996.	
35.	Liquidated Damages @ 0.5% per week for the delayed portion maximum 10% of the contract value.	
36.	Force Majeure conditions applicable?	
37.	<p>Acceptance of Fall clause.</p> <p>“The rates as per the charges of the Contract should not in any event exceed the lowest rates, the supplier charge to any other party or organization. If at any time during the period of contract, the supplier reduce the charges to any other party, then they shall forth-with notify such reduction to Sr. Head, Purchase &amp; Stores, SAC and reduce the contract rates subsequently, from the date of coming into force of such reduction” .</p>	
38.	You are requested to indicate the registration number; you have for Sales Tax/Service Tax as the case may be with concerned Government authorities. Also you are requested to provide company registration details wherever applicable along with copy of the company registration certificate. The offers received without the above information will be summarily rejected.	



GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE  
PURCHASE DIVISION

**INSTRUCTIONS TO TENDERERS AND TERMS & CONDITIONS OF TENDER (Foreign)**

1. The Tenderers should submit quotations in sealed envelope, superscribing the Tender No. and due date of opening and complete in all respects with technical specifications, including pamphlets and catalogues. Separate instructions, if any in this regard should be strictly complied with.
2. A Proforma Invoice may also be given which should contain the following information:
  - a) The FOB/FCA value, for import by Sea freight / Air freight up to Ahmedabad and for air parcel post up to Ahmedabad should be separately indicated.
  - b) Agency Commission: The amount of commission included in the price and payable to the Indian Agent of the Contractor shall be paid directly to the Indian Agent by the Purchaser in equivalent Indian Rupees on the basis of an Invoice from him applying T.T. buying rate of exchange ruling on the date of placement of the Purchase Order and which shall not be subject to any further exchange variations. This payment will be released to the Indian Agent after receipt and acceptance the goods in India.
  - c) The Contractor shall invoice only for the net amount payable to him, after deducting the amount of Agency Commission included in the invoice which will be paid to the Indian Agent directly by the Purchaser. However, the Contractor's invoice should separately reflect the amount of commission payable to his Indian Agent.
  - d) The earliest delivery period and country of origin of the Stores.
  - e) Banker's name, address, telephone/fax Nos. & e-Mail ID of the Contractor.
  - f) The approximate net and gross weight and dimensions of packages / cases.
  - g) Recommended spares for satisfactory operation for a minimum period of one year beyond warranty.
  - h) Details of any technical service, if required for erection, assembly, commissioning and demonstration.
3. "Bidders shall submit an amount of **Rs.5,00,000/- (Rupees Five Lakhs only)** with the bid before the date of tender opening as stipulated in tender schedule towards Earnest Money Deposit(EMD)

The EMD shall be submitted in the form of DD/Banker's cheque/Bank Guarantee/Fixed Deposit Receipt (FDR) made in the name of Accounts Officer, Space Applications Centre, and be payable at par at Ahmedabad.

Bids received without EMD shall be treated as invalid and shall not be considered. In case of two-part (multi-part) tenders, EMD must be submitted either in separate sealed cover clearly marked as 'EMD against tender no. \_\_\_\_\_' or with technical bid, so that it should be available at the time of opening of the first part of bid document itself. Tenders not complying with this requirement shall be rejected.

The following categories of bidders shall be exempt from paying EMD subject to submission of appropriate documentary evidence with the bid in support thereof(if applicable)



- Vendors already registered / empanelled with SAC as authorized vendors.
- Overseas bidders submitting offers directly without involving an Indian Representative.
- Central PSUs/PSEs and autonomous bodies
- Micro and Small Enterprises
- Khadi and Village Industries Commission
- National Small Industries Corporation
- Any other establishments specifically exempted from paying EMD by an order of the Government of India.

The EMD of bidders who withdraw their bid during the tender evaluation process shall be forfeited. EMD of unsuccessful bidders shall be refunded without interest after the tender has been awarded, within 30 days of the award of the tender.

EMD of successful tenderer may be retained and converted to Security Deposit, if applicable."

4. The FOB/FCA prices quoted should be inclusive of all taxes, levies, duties arising in the tenderer's country.
5. The offer should be valid for a minimum period of 90 days or longer if called for from the due date of opening of the tender.
6. Samples, if called for, should be sent free of all charges.
7. Late and delayed tenders will not be considered. Quotations by fax must be followed by detailed offers.
8. Offers made by Indian Agents on behalf of their Principals, should be supported by the proforma invoice of their Principals.
  - a) In a tender either the Indian Agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.
  - b) 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.
9. We are exempted from Customs/Excise Duties.
10. The details of Import Licence will be furnished in the Purchase Order.
11. The authority of person signing the tender, if called for, shall be produced.
12. Instructions / Operation Manual containing all assembly details including wiring diagrams should be sent wherever necessary in duplicate. All documents / correspondence should be in English language only.



13. The Purchaser reserves the right to accept or reject the lowest or any offer in whole or part without assigning any reason.
14. It is expressly agreed that the acceptance of the Stores Contracted for is subject to final approval in writing by the Purchaser.
15. a) Part shipment is not allowed unless specifically agreed to by us.  
b) As far as possible stores should be despatched by Indian Flag Vessels / Air India through an Agency nominated by us.
16. Inspection / Test Certificate should be provided for the goods after testing it thoroughly at the Contractor's works. If any Inspection by Lloyds or any other testing agency is considered necessary, it shall be arranged by Contractor.
17. Where erection or assembly or commissioning is a part of the Contract, it should be done immediately on notification. The Contractor shall be responsible for any loss/damage sustained due to delay in fulfilling this responsibility.
18. For items having shelf life, those with maximum shelf life should be supplied if order is placed.
19. No request for extension for due date for submission of tenders will be entertained.
20. Unsigned quotations will be rejected.
21. In case, the vendors are falling under the category of MSME, registered under NSIC and would like to avail exemptions, their quotations should be accompanied with necessary registration certificate with declaration to consider their offer. Quotation received without such declaration and valid registration certificate will not be considered for exemptions under Public Procurement Policy.
22. "In case the bidders propose any other payment terms in deviation with the standard terms mentioned above, it may be noted that applicable cash flow implications will be loaded on the prices quoted for commercial comparison of the offers. If advance payments are insisted by the bidders, interest at the rate of MCLR (Marginal Cost Linked Rate) as notified by State Bank of India from time to time shall be loaded on the prices for price comparison."

## **TERMS AND CONDITIONS**

### **1. DEFINITIONS:**

- (a) The term 'Purchaser' shall mean the President of India or his successors or assignees.
- (b) The term 'Contractor' shall mean, the person, firm or company with whom or with which the order for the supply of stores is placed and shall be deemed to include the Contractor's Successors, representatives, heirs, executors and administrators unless excluded by the Contract.
- (c) The term 'Purchase Order' shall mean the communication signed on behalf of the Purchaser by duly authorised officer intimating the acceptance on behalf of the Purchaser on the terms and conditions mentioned or referred to in the said communication accepting the Tender or offer of the Contractor for supply of stores, plant, machinery or equipment or part thereof.
- (d) The term 'Stores' shall mean what the Contractor agrees to supply under the Contract as specified in the Purchase Order.



## **2. PRICES:**

Tenders offering firm prices will be preferred. Where a price variation clause is insisted upon by tenderer, quotations with a reasonable ceiling should be submitted. Such offers should invariably be supported by the base price taken into account at the time of tendering and also the formula for any such variations. However, such clauses will be subject to final acceptance by Purchaser.

## **3. TERMS OF PAYMENT:**

3.1 Being a Department of the Government of India, the normal terms of payment are by Sight Draft. However other terms of payment like establishment of Letter of Credit may be considered by the Purchaser on such terms and conditions as may be agreed upon.

3.2 The Sight Draft / Letter of Credit will be operative on presentation of the under mentioned documents:

- a) Original Bill of Lading / Airway Bill
- b) Commercially certified invoices in triplicate, describing the stores delivered, quantity, unit rate and their total value. The invoice should indicate discounts, and Agency Commission if any separately.
- c) Packing List showing individual dimensions and weight of packages.
- d) Country of Origin Certificate in duplicate.
- e) Test Certificate.
- f) Declaration by the Seller that the contents in each case are not less than those entered in the invoices and the quality of the Stores are guaranteed as per the specifications asked for by the Purchaser.
- g) Warrantee and guarantee Certificate/s vide Clause 20 herein below

## **4. IMPORT LICENCE:**

Reference to Import License No. & date and Contract number & date shall be prominently indicated in all the documents vide Para 3.2.

## **5. DEMURRAGE:**

Supplier shall bear demurrage charges, if any, incurred by the Purchaser due to delayed presentation of shipping documents as prescribed in Para 3.2 to the bankers beyond a reasonable time (say within 10-12 days) from the date of bill of lading for sea consignments and within 3-4 days from the date of Air Way Bill for air consignments.

## **6. ADDRESS OF INDIAN AGENT:**

.....

## **7. GUARANTEED TIME OF DELIVERY:**

The time for and the date of delivery stipulated in the Purchase Order shall be deemed to be the essence of the Contract. Delivery must be completed within the date specified therein.





#### **8. INSPECTION AND ACCEPTANCE TESTS:**

- 8.1 The Purchaser's representatives shall also be entitled at all reasonable times during manufacture to inspect, examine and test on the Contractor's premises the material and workmanship of all stores to be supplied under the Contract and if part of the said stores is being manufactured on other premises, the Contractor shall obtain for the Purchaser's representative permission to inspect, examine and test as if the equipment were being manufactured on the Contractor's premises. Such inspection, examination and testing shall not release the Contractor from the obligations under this Contract.
- 8.2 For tests on the premises of the Contractor or of any of his sub-Contractors, the Contractor shall provide free of cost assistance, labour, material, electricity, fuel and instruments as may be required or as may be reasonably needed by the Purchaser's representative to carry out the tests efficiently.
- 8.3 When the stores have passed the specified test, the Purchaser's representative shall furnish a certificate to the effect in writing to the Contractor. The Contractor shall provide copies of the test/s certificates to the Purchaser as may be required.

#### **9. MODE OF DESPATCH:**

Generally, stores should be despatched through Indian Flagged Vessel / Air India or through any other Agency nominated by the Purchaser. A copy of the invoice and packing list should invariably be kept inside each of the packages.

#### **10. PORT OF ENTRY:**

FOR AIR SHIPMENTS: AHMEDABAD (Via Mumbai, if required)  
FOR SEA SHIPMENTS: NHAVASHEVA/Mumbai Seaport

#### **11. CONSIGNEE:**

Sr. Purchase & Stores Officer,  
Central Stores,  
Space Applications Centre (SAC),  
Ahmedabad

#### **12. SHIPPING MARKS:**

The mark on the shipping documents such as invoice, bill of lading and on the packages should be as follow:

PURCHASE ORDER NO. ....

DATED .....

GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE

Destination: ..... &

Port of Entry: .....

#### **13. INSURANCE OF THE STORES:**



The necessity or otherwise of insurance will be as indicated in the Purchase Order.

**14. CONTRACTOR'S DEFAULT LIABILITY:**

14.1 The Purchaser may upon written notice of default to the Contractor terminate the Contract in whole or in part in circumstances detailed hereunder:

- a) If in the judgement of the Purchaser the Contractor fails to make delivery of Stores within the time specified in the Contract/agreement or within the period for which extension has been granted by the Purchaser to the Contractor.
- b) If in the judgment of the Purchaser the Contractor fails to comply with any of the other provisions of this Contract.

15. In the event the Purchaser terminates the Contract in whole or in part as provided in Clause 14 the Purchaser reserves the right to Purchase, upon such terms and in such a manner as he may deem appropriate, stores similar to that terminated and the Contractor shall be liable to the Purchaser for any additional costs for such similar stores and/or for liquidated damages for delay as defined in Clause 19 until such reasonable time as may be required for the final supply of stores.

15.1 If this Contract is terminated as provided in Clause 14 the Purchaser in addition to any other rights provided in this Article, may require the Contractor to transfer title and deliver to the Purchaser under any of the following clauses in the manner and as directed by the Purchaser:

- a) Any completed stores.
- b) Such partially completed stores, drawing, information and Contract rights (hereinafter called manufacturing material) as the Contractor has specifically produced or acquired for the performance of the Contract as terminated. The Purchaser shall pay to the Contractor the Contract price for completed stores delivered to and accepted by the Purchaser and for manufacturing material delivered and accepted.

15.2 In the event the Purchaser does not terminate the Contract as provided in Clause 14, the Contractor shall continue the performance of the Contract in which case he shall be liable to the Purchaser for liquidated damages for delay as set out in Clause 19 until the stores are accepted.

**16. REPLACEMENT:**

If the stores or any portion thereof is damaged or lost during transit, the Purchaser shall give notice to the Contractor setting forth particulars of such stores damaged or lost during transit. The replacement of such stores shall be effected by the Contractor within a reasonable time to avoid unnecessary delay in the intended usage of the Stores. In case the Purchaser agrees, the price towards replacement items shall be paid by the Purchaser on the basis of original price quoted in the tender or as reasonably worked out from the tender.

**17. REJECTION:**

In the event that any of the stores supplied by the Contractor is found defective in material or workmanship or otherwise not in conformity with the requirements of the Contract specifications, the Purchaser shall either reject the stores or request the



Contractor, in writing, to rectify the same. The Contractor, on receipt of such notification, shall either rectify or replace the defective stores free of cost to the Purchaser. If the Contractor fails to do so, the Purchaser may at his option either:

- a) Replace or rectify such defective stores and recover the extra cost so involved from the Contractor, or
- b) Terminate the Contract for default as provided under Clause 14 above, or
- c) Acquire the defective stores at a reduced price considered equitable under the circumstances. The provision of this article shall not prejudice any other rights of Purchaser's under the Contract including recovery of liquidated damages for delay.

**18. EXTENSION OF TIME:**

If the completion of supply of stores is delayed due to reasons of *force majeure* such as acts of god, acts of public enemy, acts of Government, fires, floods, epidemics, quarantine restriction, strikes, freight embargoes, etc., the Contractor shall give notice within 15 days to the Purchaser in writing of his claim for an extension of time. The Purchaser on receipt of such notice after verification, if necessary, may agree to extend the Contract delivery date as may be reasonable but without prejudice to other terms and conditions of the Contract.

**19. DELAY IN COMPLETION / LIQUIDATED DAMAGES:**

If the Contractor fails to deliver the stores within the time specified in the Contract or any extension thereof, the Purchaser shall recover from the Contractor as liquidated damages a sum of one-half of one percent (0.5%) of the Contract price of the undelivered stores for each calendar week of delay. The total liquidated damages shall not exceed ten percent (10 %) of the Contract price of the portion of stores so delayed. Stores will be deemed to have been delivered only when all their component parts are also delivered. If certain components are not delivered in time, the stores will be considered as delayed until such time as the missing parts are delivered.

**20. GUARANTEE & REPLACEMENT:**

- a) The Contractor shall guarantee that the stores supplied shall comply fully with the specifications laid down for material, workmanship and performance.
- b) For a period of twelve months (or such period as agreed upon by the parties) after the acceptance of the stores, if any defects are discovered therein or any defects therein are found to have developed under proper use arising from faulty materials, design or workmanship, the Contractor shall remedy such defects at his own cost provided he is called upon to do so within a period of 14 months (or such period as specified in Contract) from the date of acceptance thereof by the Purchaser who shall state in writing in what respect the stores or any parts thereof are faulty.
- c) If in the opinion of the Purchaser it becomes necessary to replace or renew any defective stores, such replacements or renewals shall be made by the Contractor free of all costs to the Purchaser provided the notice informing the Contractor of the defect is given by the Purchaser in this regard within the said period of 14



months (or such period as specified in Contract) from the date of acceptance thereof.

- d) Should the Contractor fail to rectify the defects, the Purchaser shall have the right to reject or repair or replace at the cost of the Contractor the whole or any portion of the defective stores.
- e) The decision of the Purchaser, notwithstanding any prior approval or acceptance or inspection thereof on behalf of the Purchaser, as to whether or not the stores supplied by the Contractor are defective or any defects has developed within the said period of 12 months (or such agreed period) or as to whether the nature of the defects requires renewal or replacement shall be final, conclusive and binding on the Contractor.
- f) To fulfill guarantee conditions outlined in Clause 20 (a) to (e) above, the Contractor shall, at the option of the Purchaser, furnish a Bank Guarantee (as prescribed by the Purchaser - Bank Guarantee format enclosed) from a Bank approved by the Purchaser for an amount equivalent to 10% of the value of the Contract along with first shipment documents. On the performance and completion of the Contract in all respects, the Bank Guarantee will be returned to the Contractor without any interest.
- g) All the replacement stores shall also be guaranteed for a period of 12 months from the date of arrival of stores at Purchaser's site.
- h) Even while the 12 months guarantee applies to all stores, in case where a greater period is called for by our specifications, then such a specification shall apply, and in such cases, the period of 14 months referred to in Clause 20 (b) and (c) shall be asked for guarantee period plus two months.**

**21 REQUIREMENT OF ADDITIONAL NUMBERS OF THE STORES/SPARE PARTS ORDERED:**

The Contractor shall also undertake the supply of additional number of items covered by the order as considered necessary by the Purchaser at a later date, the actual price to be paid shall be mutually agreed to after negotiations.

**22. PACKING:**

- a) The Contractor wherever applicable shall pack and crate all stores for sea / air shipment as applicable in a manner suitable for export to a tropical humid climate, in accordance with internationally accepted export practices and in such a manner so as to protect it from damage and deterioration in transit by road, rail or sea for space qualified stores. The Contractors shall be held responsible for all damages due to improper packing.
- b) The Contractor shall ensure that each box / unit of shipment is legible and properly marked for correct identification. The failure to comply with this requirement shall make the Contractor liable for additional expenses involved.
- c) The Contractor shall notify the Purchaser of the date of shipment from the port of embarkation as well as the expected date of arrival of such shipment at the designated port of arrival.
- d) The Contractor shall give complete shipment information concerning the weight, size, content of each packages, etc.



- e) Transshipment of equipment shall not be permitted except with the written permission of the Purchaser.
- f) Apart from the despatch documents negotiated through Bank, the following documents shall also be airmailed to the Purchaser within 7 days from the date of shipment by sea and within 3 days in case of air-consignments:
  - a) Commercial Bill of Lading / Air Way Bill / Post parcel Receipt.  
(Two non-negotiable copies)
  - b) Invoice (3 copies)
  - c) Packing List (3 copies)
  - d) Test Certificate (3 copies)
  - e) Certificate of Origin.

The Contractor shall also ensure that one copy of the packing list is enclosed in each case.

**23. ARBITRATION:**

If at any time any question, dispute or difference whatsoever shall arise between the Purchaser and the Contractor upon or in connection with this Contract, either party may forthwith give to the other notice in writing of the existence of such question, dispute or difference and the same shall be referred to the adjudication of two arbitrators, one to be nominated by Purchaser, other by a Contractor and in the event of any difference of opinion, the arbitrators will refer the matter to the umpire. The arbitration shall be conducted in accordance with the rules and procedure for arbitration of the International Chamber of Commerce at Paris. The expenses of the arbitrators and umpire shall be paid as may be determined by them. However, the venue of such arbitration should be in India.

**24. LANGUAGE AND MEASURES:**

All documents pertaining to the Contract including specification, schedule, notice, correspondence, operating and maintenance instructions, drawings or any other writings shall be written in English language. The metric system of measurement shall be used exclusively in the Contract.

**25. INDEMNITY:**

The Contractor shall warrant and be deemed to have warranted that all Stores supplied against this Contract are free and clean of infringement of any patent, copyright or trade mark and shall at all times indemnify the Purchaser against all claims which may be made in respect of stores for infringement of any right protected by Patent, Registration of design or Trade Mark, and shall take all risk of accident or damage which may cause a failure of the supply from whatever cause arising and the entire responsibility for the sufficiency of all the means used by him for the fulfilment of the Contract.

**26. COUNTER TERMS AND CONDITIONS OF SUPPLIERS:**

Where counter terms and conditions/printed or cyclostyled conditions have been offered by the bidder, the same shall not be deemed to have been accepted by the Purchaser unless specific written acceptance thereof is obtained.



**27. SECURITY INTEREST:**

On each item to be delivered under this Contract, including an item of work in progress in respect of which payments have been made in accordance with the terms of the Contract, Purchaser shall have a security interest in such items which shall be deemed to be released only at the time when the applicable deliverable item is finally accepted and delivered to the Purchaser in accordance with the terms of the Contract. Such security interest of the Purchaser shall constitute a prior charge as against any other charge or interest created in respect of such items by any entity.

**28. BANK CHARGES:**

While the Purchaser shall bear the bank charge payable to his Bankers (State Bank of India), the Contractor shall bear the Bank charges payable to his Bankers including the cheques towards advising amendment commissions.

**29. TRAINING:**

The Contractor shall, if required by the Purchaser, provide facilities for the practical training of Purchaser's engineering / technical personnel from India and for their active association on the manufacturing processes throughout the manufacturing period of the Contract / stores. Number of such personnel to be mutually agreed upon.

**30. APPLICABLE LAW:**

The Contract shall be interpreted, construed and governed by the laws of India.

**PACKING INSTRUCTIONS**

1. In tune with the requirement of international plant protection convention of the FAO, UN the following has become mandatory with immediate effect.
2. All packing materials of any kind of plant origin used for packing shall require treatment including heat-kiln treatment at 56 degree centigrade for a minimum of 30 hours of methylbromide fumigation at 48g/cum for 32 hours of chemical impregnation as per international standards.
3. If the consignments are sent without the aforesaid certificate, all demurrages and other charges for treatment etc. will be to the account of the suppliers.
4. This aspect also should be taken care of while submitting the offers.
5. If the packaging material being used for your product does not come under the category "material of plant origin" (i.e. Leaves, grass, wood etc.) Please certify the same in your quote and ignore the above instructions. However, the same should be ascertained at the time of actual shipment if the order is awarded to you.

\*\*\*



**STANDARD TENDER FORM**  
(Seal of the Company)

Tender No.: .....  
Due on: .....  
Ref. No.: .....  
Date: .....

**TENDER FORM**

From: .....  
.....  
.....

To: The Sr. /Purchase & Stores Officer,  
..... (Name of the Centre/Unit)  
.....

Dear Sir,

I/We hereby offer to supply the stores detailed below at the price hereunder quoted and agree to hold this offer open till..... I/we shall be bound to supply the stores hereby offered upon the issue of the Purchase Order communicating the acceptance thereof on or before the expiry of the last mentioned date. You are at liberty to accept any one or more of the items of stores tendered for or any portion of any one or more of the items of such stores. I/We, notwithstanding that the offer in this tender has not been accepted in whole, shall be bound to supply to you such items and such items and such portion or portions of one or more of the items as may be specified in the said Purchase Order communicating the acceptance:

Sl. No.	Description	Quantity	Unit	Rate Rs.	Delivery Date

**Note: All the rates should be given both in figures and words**

Place at which delivery will be made	
Date by which the ordered item/s will be supplied	

2. I/We have understood the items of the tender annexed to the invitation to tender and have thoroughly examined the specifications/drawing and/or pattern quoted or referred to herein and am/are fully aware of the nature of the stores required and my/our offer is to supply the stores strictly in accordance with the requirements subject to the terms and conditions stipulated in the enquiry and contained in the Purchase Order communicating the acceptance of this tender either in whole or in part.

Signature of Tenderer

Date: .....

भारत सरकार  
अंतरिक्ष विभाग  
अंतरिक्ष उपयोग केंद्र(इसरो)  
आंबावाडी विस्तार पी.ओ.  
अहमदाबाद - 380 015 (भारत)  
दूरभाष: +91-79-2691 3051/98  
फैक्स नं. : +91-79-2691 5835/02/48



Government of India  
Department of Space  
**SPACE APPLICATIONS CENTRE (ISRO)**  
Ambawadi Vistar P.O.  
Ahmedabad – 380 015 (INDIA)  
Telephone : +91-79 – 2691 3051/98  
Fax No. : +91-79 – 2691 5835 / 02 /48  
Email: publictender@sac.isro.gov.in

निविदा सूचना सं.: सैक/पीटी /08/2016-17  
Tender Notice No.: SAC/PT/08/2016-17

क्र. सं. Sr.No	निविदा नं. Tender No.	संक्षिप्त विवरण Brief Description	नियत तिथि (अपराह्न 3 बजे तक) Due on (Up to 3 pm)
5	AHEP 201600066001	Methane Flux Measurement System (Single Part)	17/08/2016



**GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE  
AHMEDABAD 380 015, INDIA  
PURCHASE & STORES**

Ph No: 079-2691 3067  
Fax 079-2691 5848/02/35

Date :14/07/2016

**INVITATION TO TENDER**

M/s

Our Ref No : AHEP 2016-000660-01

Tender Due: 15:00 Hrs ISTon 17/08/2016

Opening : 15:30 Hrs ISTon 17/08/2016

Dear Sirs,

Please submit your sealed quotation , in the Tender Form enclosed here along with the descriptive catalogues / pamphlets /literature ,superscribed with Our Ref.No. and Due Date for the supply of the following items as per the terms & conditions mentioned in Annexure( Form No: As per attached sheet. )

S.No.	Description of Items with Specifications	Unit	Quantity
1	METHANE FLUX MEASUREMENT SYSTEM	No.	1

**DELIVERY AT:** SAC STORE

**MODE OF DESPATCH** BY AIR FRE

**DUTY EXEMPTIONS** We are exempted from the payment of Excise Duty/Custom Duty.

**SPECIAL INSTRUCTIONS** NIL

**SPECIFIC TERMS** As per attached sheet.

**INSTRUCTIONS TO TENDERERS:**

- 1) Please submit your quotations in sealed cover only. Quotations by fax/e-mail not valid.
  - 2) Indicate percentage of agency commission payable to your Indian agent, If any.
  - 3) All bank charges outside India will be to your account only.
  - 4) Specifications: As per attached sheet. Please submit Compliance statement for the Technical/Commercial Specifications alongwith your offer.
  - 5) EMD: Bidders shall submit an amount of Rs.1,11,000/- alongwith their offer if you are not registered Vendors in our panel/Central PSUs/PSEs & Autonomous Bodies/MSE/Khadi & Village Industries Commission/NSIC. Foreign vendors, registered vendors or vendors who have already applied for renewal of registration, Central PSUs/PSEs/Autonomous Bodies, Micro & Small Enterprises, KVIC, NSIC etc., shall be exempt from the payment of EMD.
- The EMD shall be submitted in the form of DD/Banker's Cheque/Bank Guarantee/Fixed Deposit Receipt(FDR) made in the name of Accounts Officer, Space Applications Centre & payable at par at Ahmedabad.
- Bids received without EMD shall be treated as invalid and shall not be considered.



JAYASHREE N. S.  
PUR & STORES OFFICER (ADHOC)  
For and on behalf of the President of India  
The Purchaser

## **Specification for Methane Flux Measurement System :-**

One complete unit will be fixed and mounted on a tower through an arm.

### **General Specifications:**

1. The system should be able to monitor fluxes of greenhouse gases such as methane with 3d sonic anemometer as high speed measurements system, over crop canopy/Forest Canopy or in Urban Areas.
2. The System will consist of "Analyzer Interface Unit with remote connectivity" & Ethernet connectivity for system monitoring, configuration and data transfer also for interactions with instruments remotely using networked computers or wireless communication methods such as cell phone modem (GSM) or satellite modem.
3. The system will constitute of fully developed and established enclosures and mounting hardware for Analyzer Interface Unit, 12V/150 AH rechargeable SMF Batteries, Solar Panel, Charge Controller, and Accessories.
4. The sensors must comply with the type, range, accuracy, resolution and operating temperature conditions of the specifications.
5. All the sensors will be mounted on a tower which should cater for fitments of assemblies for sensors, Analyzer Interface Unit, solar panel and other accessories.
6. The complete system should be capable of being upgraded with other Greenhouse gas analyzer in future operations.
7. The Analyzer Interface Unit should incorporate the latest state-of-the-art technology and must consume very low power and should be rugged and sealed to avoid ingress of moisture.
8. The integration of CH<sub>4</sub> with data logging, Data dissemination, Communication of Flux Data should be carried out by only single company. The Tender from the Company offering all these as one complete package will only be accepted.
9. Software, for processing the data collected through USB/Ethernet/RS-232.
10. Training should be provided to the scientist on the operation and maintenance of the station.

### **Methane Analyzer Specifications:**

#### **1. Open Path Methane (CH<sub>4</sub>) Analyzer: (1 Nos. required)**

The CH<sub>4</sub> Analyzer should be open path, in-situ methane density measurement system using laser spectroscopy. The analyzer should use a single-mode tunable near-infrared laser source using Wavelength Modulation Spectroscopy (WMS), 2f detection and Data output at 40Hz.

- Detection method : Wavelength Modulation Spectroscopy 2f detection
- Measuring Range : 0 to 25 ppm @ - 25 °C or better  
0 to 40 ppm @ +50 °C or better
- Accuracy : typically < 1%, maximum < 2% at constant temperature
- Bandwidth : 1,2,5,10, or 20 Hz
- Optical Path : 0.5 m physical path (1.65 ft),  
30 m measurement path (98.4 ft)
- Sensor Dimension : 14.33cm diameter (5.64 in),  
82.8cm height(32.6in)
- Data Communication : Ethernet (up to 40 Hz)
- Power Consumption : 8 W nominal,  
16 W during cleaning cycle

- Power Requirements : 10.5 to 30 VDC

Must be interfaced with data logger /Analyzer Interface Unit on the tower along with 3D Sonic Anemometer.

Also should have a provision to connect with 3D sonic anemometer directly without involving analyzer interface unit.

**Open Path Methane (CH<sub>4</sub>) Analyzer should be supplied with:** Power cable , Ethernet Cable , Calibration Fixture, Washer Assembly, Mounting Hardware, Spare Kit, Carrying Case, Software CD and Instruction Manual.

## 2. Three Dimensional (3D) Sonic Anemometer: (1 Nos. required)

This anemometer should be of stainless steel external construction and is particularly suitable for precision 3-axis wind measurement applications for data involving high wind speeds also should have provision to measure winds from any direction. The Sonic Anemometer should have the 30Hz output rate, U, V, W vector outputs and sonic temperature output.

### Measurement

- Sampling Rate : 30Hz or better
- Formats : UxVyWz

### Wind Speed

- Measuring Range: 0 to 60m/s
- Resolution : 0.01m/s

### Direction

- Range : 0 to 359°
- Resolution : 0.1°
- Accuracy : 0.5° @ 12m/s

### Sonic Temperature

- Range : -30 °C to + 50°C
- Resolution : 0.01 °C

### Speed of Sound

- Range : 300 to 370m/s
- Resolution : 0.01m/s
- Accuracy : <+/-0.5% @ 20 °C

### Digital Output

- Communication : RS232, 422,485

### Ambient Temperature Specifications

- Total Accuracy: ±0.15°C (-30° to +50°C)

### Environmental

- Protection Rating : IP65 or better
- Operating Temper: -30 °C to + 50 °C
- Humidity : <5% to 100%RH

### Sonic Anemometer should include the following:

Cable Set, Carrying Case, Connecting Cable, Serial Communication Cable, Mounting Kit, Instruction manual

## 3. Flux calculation module with methane flux calculation software: (1 No. required)

For processing & interpretation of raw data recorded from the Gas Analyzer. Flux processing software should be included with the System and should be free downloadable.

### The System should be with following technical features:

- Automated processing of raw data at the research site using eddy covariance processing software.
- Fully corrected fluxes of sensible heat, latent heat, evapo-transpiration, and CH<sub>4</sub> at the site and in real time.
- Advanced, site-specific raw data processing (in-situ spectral correction, planar fit etc.).

- GPS time synchronization to prevent clock drift, and keeps instrument clocks in sync within and across sites.
- Should be able to view computed fluxes in real time, including sensible heat flux (H), latent heat flux (LE), Evapotranspiration (ET), methane flux, ambient concentration of (CH<sub>4</sub> number density), and a wind rose plot showing the predominant wind direction.
- Flux calculation module should be an autonomous system to collect data from the Analyzer Interface Unit, and it should be able to process it using eddy covariance software, incorporating corrections such as coordinate rotation, frequency response corrections, and synchronization of variables from all instruments.
- Flux calculation module should be able to provide a variety of outputs including random error estimates for fluxes, spectra and co-spectra, footprint estimates, and daily summary files well suited for system diagnostics.
- The corrections implemented in flux module should enable optimal computation of fluxes to provide the best eddy covariance flux measurements.
- It should also be possible to connect the system using smart phone application, facility of retrieving old data, viewing real time data and uploading program file through smart phone application.
- A web based software which should allow us to see final, fully-corrected fluxes online in real time, at any time, and from any web-connected device- Station Desktop, laptop or even on Mobile Phones. Software should be able to provide, QC and QA, error notifications, email alerts, individual user access to help keep track of multiple flux towers in future.

#### 4. Data collection with flux calculation and communication - (1 No. required)

- The Analyzer Interface Unit with Inbuilt Module for Flux Calculation with GPS should incorporate the latest state-of-the-art technology and must consume very low power.
- Analyzer Interface Unit with Inbuilt Module for Flux Calculation with GPS should be enclosed in a weather proof NEMA-IV enclosure with all hardware, accessories, cables and wires supplied by vendor.
- The fluxes with different corrections should be computed and it should be possible to use the data in the eddy software's for further processing.
- Data storage device (2.5 GHz intel core i7-6500 u processor, 8 GB RAM DDR3L RAM, 1 TB 5400 rpm serial ATA hard drive, 15.6-inch screen, AMD Radeson R5-M330 2GB graphics, window 8 operating system)

#### 5. Toolkit: (1 No. required)

A good quality toolkit for smooth opening and operational maintenance of different sensors asked for in the tender

#### 6. Power Supply Assembly – (1 Nos. required)

Vendor should provide power budget calculations

It should accordingly include:

- Solar Panel 150Watt x 2 Nos. OR 100Watt x 3 Nos. (total 300 Watt) OR MORE \* as per requirement) with mounting and cover
- Rechargeable Batteries - 12VDC 100/150AH sealed maintenance free batteries sufficient for the complete system along with proper battery casing.
- A suitable in-built charge controller having over and under voltage protection should be provided in the DCP.
- The capacity of the Solar panel should be such that the battery can be charged with 30% to 50% sunshine
- Cable assembly etc.

#### 7. Vendor should quote of mounting structures as -

Should be designed with following atmospheric conditions consideration:

- Should withstand severe weather, including wind gusts of up to 160-200 kph with a full load of instrumentation.
- Corrosion resistant aluminum/iron structure designed for long term field deployment of scientific

instruments.

- measurement height user described
- Fixed to the tower through an arm
- The cross arm can be attached to a tower and cross arm mounting hardware, Guy kit, grounding kit and instruction manual.

**Scope of work:**

- The methane flux system should be supplied complete with user Manual of all items asked.
- Vendor needs to also integrate and install all items viz. Item 1 to 5 essentially and optionally Item No. 6 and 7. Vendor is required to carry out complete integration, installation & commissioning and demonstration of the flux monitoring system including necessary civil work required for the system.
- Factory acceptance test (FAT) – Training for two scientists in instrumentation, sensors assembly, operation and maintenance, data acquisition, analysis, correction and processing at the field factory and experimental site of parent company. Vendor may quote extra cost separately.
- Site acceptance test(SAT) –Complete demonstration and training on working of the installed system Should be provided at site to at least 2 representatives.
- Complete demonstration and training on the working, data downloading, maintenance and other necessary functionalities of the complete system should be provided by the vendor at the agricultural research field site by trained Engineers.
- **One year warranty after installation, and 3 years annual maintenance contract charges should be included in the offer.**



GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE  
PURCHASE DIVISION

Tele No: 079-26913072/71/78 Fax No: 079-26915848 / e-Mail ID.: ps\_o\_h@sac.isro.gov.in

**INSTRUCTIONS TO TENDERERS AND TERMS & CONDITIONS OF TENDER**

1. The Tenderers should submit quotations in sealed envelope, superscribing the Tender No. and due date of opening and complete in all respects with technical specifications, including pamphlets and catalogues. Separate instructions, if any in this regard should be strictly complied with.
2. A Proforma Invoice may also be given which should contain the following information:
  - a) The FOB/FCA value, for import by Sea freight / Air freight up to Ahmedabad and for air parcel post up to Ahmedabad should be separately indicated.
  - b) Agency Commission: The amount of commission included in the price and payable to the Indian Agent of the Contractor shall be paid directly to the Indian Agent by the Purchaser in equivalent Indian Rupees on the basis of an Invoice from him applying T.T. buying rate of exchange ruling on the date of placement of the Purchase Order and which shall not be subject to any further exchange variations. This payment will be released to the Indian Agent after receipt and acceptance the goods in India.
  - c) The Contractor shall invoice only for the net amount payable to him, after deducting the amount of Agency Commission included in the invoice which will be paid to the Indian Agent directly by the Purchaser. However, the Contractor's invoice should separately reflect the amount of commission payable to his Indian Agent.
  - d) The earliest delivery period and country of origin of the Stores.
  - e) Banker's name, address, telephone/fax Nos. & e-Mail ID of the Contractor.
  - f) The approximate net and gross weight and dimensions of packages / cases.
  - g) Recommended spares for satisfactory operation for a minimum period of one year beyond warranty.
  - h) Details of any technical service, if required for erection, assembly, commissioning and demonstration.
3. The FOB/FCA prices quoted should be inclusive of all taxes, levies, duties arising in the tenderer's country.
4. The offer should be valid for a minimum period of 90 days or longer if called for from the due date of opening of the tender.
5. Samples, if called for, should be sent free of all charges.
6. Late and delayed tenders will not be considered. Quotations by fax must be followed by detailed offers.
7. Offers made by Indian Agents on behalf of their Principals, should be supported by the proforma invoice of their Principals.
  - a) In a tender either the Indian Agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.
  - b) 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.
8. We are exempted from Customs/Excise Duties.
9. The details of Import Licence will be furnished in the Purchase Order.
10. The authority of person signing the tender, if called for, shall be produced.
11. Instructions / Operation Manual containing all assembly details including wiring diagrams should be sent wherever necessary in duplicate. All documents / correspondence should be in English language only.
12. The Purchaser reserves the right to accept or reject the lowest or any offer in whole or part without assigning any reason.
13. It is expressly agreed that the acceptance of the Stores Contracted for is subject to final approval in writing by the Purchaser.
14. a) Part shipment is not allowed unless specifically agreed to by us.  
b) As far as possible stores should be despatched by Indian Flag Vessels / Air India through an Agency nominated by us.
15. Inspection / Test Certificate should be provided for the goods after testing it thoroughly at the Contractor's works. If any Inspection by Lloyds or any other testing agency is considered necessary, it shall be arranged by Contractor.
16. Where erection or assembly or commissioning is a part of the Contract, it should be done immediately on notification. The Contractor shall be responsible for any loss/damage sustained due to delay in fulfilling this responsibility.
17. For items having shelf life, those with maximum shelf life should be supplied if order is placed.
17. No request for extension for due date for submission of tenders will be entertained.
18. Unsigned quotations will be rejected.



19. In case, the vendors are falling under the category of MSME, registered under NSIC and would like to avail exemptions, their quotations should be accompanied with necessary registration certificate with declaration to consider their offer. Quotation received without such declaration and valid registration certificate will not be considered for exemptions under Public Procurement Policy.

#### TERMS AND CONDITIONS

##### 1. DEFINITIONS:

- (a) The term 'Purchaser' shall mean the President of India or his successors or assignees.
- (b) The term 'Contractor' shall mean, the person, firm or company with whom or with which the order for the supply of stores is placed and shall be deemed to include the Contractor's Successors, representatives, heirs, executors and administrators unless excluded by the Contract.
- (c) The term 'Purchase Order' shall mean the communication signed on behalf of the Purchaser by duly authorised officer intimating the acceptance on behalf of the Purchaser on the terms and conditions mentioned or referred to in the said communication accepting the Tender or offer of the Contractor for supply of stores, plant, machinery or equipment or part thereof.
- (d) The term 'Stores' shall mean what the Contractor agrees to supply under the Contract as specified in the Purchase Order.

##### 2. PRICES:

Tenders offering firm prices will be preferred. Where a price variation clause is insisted upon by tenderer, quotations with a reasonable ceiling should be submitted. Such offers should invariably be supported by the base price taken into account at the time of tendering and also the formula for any such variations. However, such clauses will be subject to final acceptance by Purchaser.

##### 3. TERMS OF PAYMENT:

- 3.1 Being a Department of the Government of India, the normal terms of payment are by Sight Draft. However other terms of payment like establishment of Letter of Credit may be considered by the Purchaser on such terms and conditions as may be agreed upon.
- 3.2 The Sight Draft / Letter of Credit will be operative on presentation of the under mentioned documents:
- Original Bill of Lading / Airway Bill
  - Commercially certified invoices in triplicate, describing the stores delivered, quantity, unit rate and their total value. The invoice should indicate discounts, and Agency Commission if any separately.
  - Packing List showing individual dimensions and weight of packages.
  - Country of Origin Certificate in duplicate.
  - Test Certificate.
  - Declaration by the Seller that the contents in each case are not less than those entered in the invoices and the quality of the Stores are guaranteed as per the specifications asked for by the Purchaser.
  - Warranty and guarantee Certificate/s vide Clause 20 herein below

##### 4. IMPORT LICENCE:

Reference to Import License No. & date and Contract number & date shall be prominently indicated in all the documents vide Para 3.2.

##### 5. DEMURRAGE:

Supplier shall bear demurrage charges, if any, incurred by the Purchaser due to delayed presentation of shipping documents as prescribed in Para 3.2 to the bankers beyond a reasonable time (say within 10-12 days) from the date of bill of lading for sea consignments and within 3-4 days from the date of Air Way Bill for air consignments.

##### 6. ADDRESS OF INDIAN AGENT:

.....

##### 7. GUARANTEED TIME OF DELIVERY:

The time for and the date of delivery stipulated in the Purchase Order shall be deemed to be the essence of the Contract. Delivery must be completed within the date specified therein.

##### 8. INSPECTION AND ACCEPTANCE TESTS:

- 8.1 The Purchaser's representatives shall also be entitled at all reasonable times during manufacture to inspect, examine and test on the Contractor's premises the material and workmanship of all stores to be supplied under the Contract and if part of the said stores is being manufactured on other premises, the Contractor shall obtain for the Purchaser's representative permission to inspect, examine and test as if the equipment were being manufactured on the Contractor's premises. Such inspection, examination and testing shall not release the Contractor from the obligations under this Contract.



8.2 For tests on the premises of the Contractor or of any of his sub- Contractors, the Contractor shall provide free of cost assistance, labour, material, electricity, fuel and instruments as may be required or as may be reasonably needed by the Purchaser's representative to carry out the tests efficiently.

8.3 When the stores have passed the specified test, the Purchaser's representative shall furnish a certificate to the effect in writing to the Contractor. The Contractor shall provide copies of the test/s certificates to the Purchaser as may be required.

**9. MODE OF DESPATCH:**

Generally, stores should be despatched through Indian Flagged Vessel / Air India or through any other Agency nominated by the Purchaser. A copy of the invoice and packing list should invariably be kept inside each of the packages.

**10. PORT OF ENTRY:**

FOR AIR SHIPMENTS: AHMEDABAD (Via Mumbai, if required) FOR SEA SHIPMENTS:  
NHAVASHEVA/Mumbai Seaport

**11. CONSIGNEE:**

Sr. Purchase & Stores Officer,  
Central Stores,  
Space Applications Centre (SAC),  
Ahmedabad

**12. SHIPPING MARKS:**

The mark on the shipping documents such as invoice, bill of lading and on the packages should be as follow:

PURCHASE ORDER NO. ....

DATED .....

GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE

Destination: ..... &

Port of Entry: .....

**13. INSURANCE OF THE STORES:**

The necessity or otherwise of insurance will be as indicated in the Purchase Order.

**14. CONTRACTOR'S DEFAULT LIABILITY:**

14.1 The Purchaser may upon written notice of default to the Contractor terminate the Contract in whole or in part in circumstances detailed hereunder:

- a) If in the judgement of the Purchaser the Contractor fails to make delivery of Stores within the time specified in the Contract/agreement or within the period for which extension has been granted by the Purchaser to the Contractor.
- b) If in the judgment of the Purchaser the Contractor fails to comply with any of the other provisions of this Contract.

15. In the event the Purchaser terminates the Contract in whole or in part as provided in Clause 14 the Purchaser reserves the right to Purchase, upon such terms and in such a manner as he may deem appropriate, stores similar to that terminated and the Contractor shall be liable to the Purchaser for any additional costs for such similar stores and/or for liquidated damages for delay as defined in Clause 19 until such reasonable time as may be required for the final supply of stores.

15.1 If this Contract is terminated as provided in Clause 14 the Purchaser in addition to any other rights provided in this Article, may require the Contractor to transfer title and deliver to the Purchaser under any of the following clauses in the manner and as directed by the Purchaser: a) Any completed stores.

b) Such partially completed stores, drawing, information and Contract rights (hereinafter called manufacturing material) as the Contractor has specifically produced or acquired for the performance of the Contract as terminated. The Purchaser shall pay to the Contractor the Contract price for completed stores delivered to and accepted by the Purchaser and for manufacturing material delivered and accepted.

15.2 In the event the Purchaser does not terminate the Contract as provided in Clause 14, the Contractor shall continue the performance of the Contract in which case he shall be liable to the Purchaser for liquidated damages for delay as set out in Clause 19 until the stores are accepted.

**16. REPLACEMENT:**

If the stores or any portion thereof is damaged or lost during transit, the Purchaser shall give notice to the Contractor setting forth particulars of such stores damaged or lost during transit. The replacement of such stores shall be effected by the Contractor within a reasonable time to avoid unnecessary delay in the intended usage of the Stores. In case the Purchaser agrees, the price towards replacement items shall be paid by the Purchaser on the basis of original price quoted in the tender or as reasonably worked out from the tender.





## 17. REJECTION:

In the event that any of the stores supplied by the Contractor is found defective in material or workmanship or otherwise not in conformity with the requirements of the Contract specifications, the Purchaser shall either reject the stores or request the Contractor, in writing, to rectify the same. The Contractor, on receipt of such notification, shall either rectify or replace the defective stores free of cost to the

Purchaser. If the Contractor fails to do so, the Purchaser may at his option either:

- a) Replace or rectify such defective stores and recover the extra cost so involved from the Contractor, or
- b) Terminate the Contract for default as provided under Clause 14 above, or
- c) Acquire the defective stores at a reduced price considered equitable under the circumstances. The provision of this article shall not prejudice any other rights of Purchaser's under the Contract including recovery of liquidated damages for delay.

## 18. EXTENSION OF TIME:

If the completion of supply of stores is delayed due to reasons of *force majeure* such as acts of god, acts of public enemy, acts of Government, fires, floods, epidemics, quarantine restriction, strikes, freight embargoes, etc., the Contractor shall give notice within 15 days to the Purchaser in writing of his claim for an extension of time. The Purchaser on receipt of such notice after verification, if necessary, may agree to extend the Contract delivery date as may be reasonable but without prejudice to other terms and conditions of the Contract.

## 19. DELAY IN COMPLETION / LIQUIDATED DAMAGES:

If the Contractor fails to deliver the stores within the time specified in the Contract or any extension thereof, the Purchaser shall recover from the Contractor as liquidated damages a sum of one-half of one percent (0.5%) of the Contract price of the undelivered stores for each calendar week of delay. The total liquidated damages shall not exceed ten percent (10 %) of the Contract price of the portion of stores so delayed. Stores will be deemed to have been delivered only when all their component parts are also delivered. If certain components are not delivered in time, the stores will be considered as delayed until such time as the missing parts are delivered.

## 20. GUARANTEE & REPLACEMENT:

- a) The Contractor shall guarantee that the stores supplied shall comply fully with the specifications laid down for material, workmanship and performance.
- b) For a period of twelve months (or such period as agreed upon by the parties) after the acceptance of the stores, if any defects are discovered therein or any defects therein are found to have developed under proper use arising from faulty materials, design or workmanship, the Contractor shall remedy such defects at his own cost provided he is called upon to do so within a period of 14 months (or such period as specified in Contract) from the date of acceptance thereof by the Purchaser who shall state in writing in what respect the stores or any parts thereof are faulty.
- c) If in the opinion of the Purchaser it becomes necessary to replace or renew any defective stores, such replacements or renewals shall be made by the Contractor free of all costs to the Purchaser provided the notice informing the Contractor of the defect is given by the Purchaser in this regard within the said period of 14 months (or such period as specified in Contract) from the date of acceptance thereof.
- d) Should the Contractor fail to rectify the defects, the Purchaser shall have the right to reject or repair or replace at the cost of the Contractor the whole or any portion of the defective stores.
- e) The decision of the Purchaser, notwithstanding any prior approval or acceptance or inspection thereof on behalf of the Purchaser, as to whether or not the stores supplied by the Contractor are defective or any defects has developed within the said period of 12 months (or such agreed period) or as to whether the nature of the defects requires renewal or replacement shall be final, conclusive and binding on the Contractor.
- f) To fulfill guarantee conditions outlined in Clause 20 (a) to (e) above, the Contractor shall, at the option of the Purchaser, furnish a Bank Guarantee (as prescribed by the Purchaser - Bank Guarantee format enclosed) from a Bank approved by the Purchaser for an amount equivalent to 10% of the value of the Contract along with first shipment documents. On the performance and completion of the Contract in all respects, the Bank Guarantee will be returned to the Contractor without any interest.
- g) All the replacement stores shall also be guaranteed for a period of 12 months from the date of arrival of stores at Purchaser's site.
- h) Even while the 12 months guarantee applies to all stores, in case where a greater period is called for by our specifications, then such a specification shall apply, and in such cases, the period of 14 months referred to in Clause 20 (b) and (c) shall be asked for guarantee period plus two months.

**21 REQUIREMENT OF ADDITIONAL NUMBERS OF THE STORES/SPARE PARTS ORDERED:** The Contractor shall also undertake the supply of additional number of items covered by the order as considered necessary by the Purchaser at a later date, the actual price to be paid shall be mutually agreed to after negotiations.

## 22. PACKING:



- a) The Contractor wherever applicable shall pack and crate all stores for sea / air shipment as applicable in a manner suitable for export to a tropical humid climate, in accordance with internationally accepted export practices and in such a manner so as to protect it from damage and deterioration in transit by road, rail or sea for space qualified stores. The Contractors shall be held responsible for all damages due to improper packing.
- b) The Contractor shall ensure that each box / unit of shipment is legible and properly marked for correct identification. The failure to comply with this requirement shall make the Contractor liable for additional expenses involved.
- c) The Contractor shall notify the Purchaser of the date of shipment from the port of embarkation as well as the expected date of arrival of such shipment at the designated port of arrival.
- d) The Contractor shall give complete shipment information concerning the weight, size, content of each packages, etc.
- e) Transshipment of equipment shall not be permitted except with the written permission of the Purchaser.
- f) Apart from the despatch documents negotiated through Bank, the following documents shall also be airmailed to the Purchaser within 7 days from the date of shipment by sea and within 3 days in case of air-consignments:
  - a) Commercial Bill of Lading / Air Way Bill / Post parcel Receipt. (Two non-negotiable copies) b) Invoice (3 copies)
  - c) Packing List (3 copies)
  - d) Test Certificate (3 copies)
  - e) Certificate of Origin.

The Contractor shall also ensure that one copy of the packing list is enclosed in each case.

### **23. ARBITRATION:**

If at any time any question, dispute or difference whatsoever shall arise between the Purchaser and the Contractor upon or in connection with this Contract, either party may forthwith give to the other notice in writing of the existence of such question, dispute or difference and the same shall be referred to the adjudication of two arbitrators, one to be nominated by Purchaser, other by a Contractor and in the event of any difference of opinion, the arbitrators will refer the matter to the umpire. The arbitration shall be conducted in accordance with the rules and procedure for arbitration of the International Chamber of Commerce at Paris. The expenses of the arbitrators and umpire shall be paid as may be determined by them. However, the venue of such arbitration should be in India.

### **24. LANGUAGE AND MEASURES:**

All documents pertaining to the Contract including specification, schedule, notice, correspondence, operating and maintenance instructions, drawings or any other writings shall be written in English language. The metric system of measurement shall be used exclusively in the Contract.

### **25. INDEMNITY:**

The Contractor shall warrant and be deemed to have warranted that all Stores supplied against this Contract are free and clean of infringement of any patent, copyright or trade mark and shall at all times indemnify the Purchaser against all claims which may be made in respect of stores for infringement of any right protected by Patent, Registration of design or Trade Mark, and shall take all risk of accident or damage which may cause a failure of the supply from whatever cause arising and the entire responsibility for the sufficiency of all the means used by him for the fulfilment of the Contract.

### **26. COUNTER TERMS AND CONDITIONS OF SUPPLIERS:**

Where counter terms and conditions/printed or cyclostyled conditions have been offered by the bidder, the same shall not be deemed to have been accepted by the Purchaser unless specific written acceptance thereof is obtained.

### **27. SECURITY INTEREST:**

On each item to be delivered under this Contract, including an item of work in progress in respect of which payments have been made in accordance with the terms of the Contract, Purchaser shall have a security interest in such items which shall be deemed to be released only at the time when the applicable deliverable item is finally accepted and delivered to the Purchaser in accordance with the terms of the Contract. Such security interest of the Purchaser shall constitute a prior charge as against any other charge or interest created in respect of such items by any entity.

### **28. BANK CHARGES:**

While the Purchaser shall bear the bank charge payable to his Bankers (State Bank of India), the Contractor shall bear the Bank charges payable to his Bankers including the cheques towards advising amendment commissions.

### **29. TRAINING:**

The Contractor shall, if required by the Purchaser, provide facilities for the practical training of Purchaser's engineering / technical personnel from India and for their active association on the manufacturing processes throughout the manufacturing period of the Contract / stores. Number of such personnel to be mutually agreed upon.

### **30. APPLICABLE LAW:**



The Contract shall be interpreted, construed and governed by the laws of India.

**PACKING INSTRUCTIONS**

1. In tune with the requirement of international plant protection convention of the FAO, UN the following has become mandatory with immediate effect.
2. All packing materials of any kind of plant origin used for packing shall require treatment including hear-kiln treatment at 56 degree centigrade for a minimum of 30 hours of methylbromide fumigation at 48g/cum for 32 hours of chemical impregnation as per international standards.
3. If the consignments are sent without the aforesaid certificate, all demurrages and other charges for treatment etc. will be to the account of the suppliers.
4. This aspect also should be taken care of while submitting the offers.
5. If the packaging material being used for your product does not come under the category "material of plant origin" (i.e. Leaves, grass, wood etc.) Please certify the same in your quote and ignore the above instructions. However, the same should be ascertained at the time of actual shipment if the order is awarded to you.

\*\*\*

**STANDARD TENDER FORM**  
(Seal of the Company)

Tender No.: .....  
 Due on: .....  
 Ref. No.: .....  
 Date: .....

**TENDER FORM**

From: .....  
.....  
.....

To: The Sr. /Purchase & Stores Officer, ..... (Name of the Centre/Unit)  
.....

Dear Sir,

I/We hereby offer to supply the stores detailed below at the price hereunder quoted and agree to hold this offer open till..... I/we shall be bound to supply the stores hereby offered upon the issue of the Purchase Order communicating the acceptance thereof on or before the expiry of the last mentioned date. You are at liberty to accept any one or more of the items of stores tendered for or any portion of any one or more of the items of such stores. I/We, notwithstanding that the offer in this tender has not been accepted in whole, shall be bound to supply to you such items and such items and such portion or portions of one or more of the items as may be specified in the said Purchase Order communicating the acceptance:

Sl. No.	Description	Quantity	Unit	Rate Rs.	Delivery Date

**Note: All the rates should be given both in figures and words**

Place at which delivery will be made	
Date by which the ordered item/s will be supplied	

2. I/We have understood the items of the tender annexed to the invitation to tender and have thoroughly examined the specifications/drawing and/or pattern quoted or referred to herein and am/are fully aware of the nature of the stores required and my/our offer is to supply the stores strictly in accordance with the requirements subject to the terms and conditions stipulated in the enquiry and contained in the Purchase Order communicating the acceptance of this tender either in whole or in part.

Signature of Tenderer

Date: .....

**COMPLIANCE STATEMENT REQUIRED TO BE FILLED AND ENCLOSED ALONG  
WITH THE TECHNICAL AND COMMERCIAL BID BY THE VENDOR.**

Sr. No.	Commercial terms	Compliance/Remarks/Comments by Vendor
1.	Delivery terms -Ex-works/FOB/ FCA etc.	
1.1	Purchaser is having an air consolidation contract and their freight forwarder will arrange to collect the consignment from your premises/will take the responsibility for onward transmission from the point of delivery as per INCOTERMS 2010. This is applicable for import cases.	
2.	Packing charges inclusive/exclusive.	
3.	Delivery period – in weeks/months	
4.	Payment terms : Our standard term is - Sight Draft (import) /within 30 days from the date of acceptance (indigenous).	
5.	Country of origin – to be declared in the invoice.	
6.	Name and address of the Indian Agent.	
7.	Percentage of agency commission included in the quoted price – payable in Indian Rupees only directly to the Indian Agent.	
8.	Validity of the offer- minimum of 120 days from the date of opening.	
9.	If you are an Indian Agent, please enclose the authorization letter of your Principal and confirm that whether you have enrolled with DGS&D as per rules.	
10.	In a tender, either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.	
11.	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.	
12.	Cost of spares included in the price bid not included.	
13.	Will you be able to provide consumables/spares for 10 years?	
14.	Taxes and duties :	
14.1	Taxes in India to the account of Purchaser. Outside India to Seller's/Contractor's account. Please indicate your Tax Registration Number.	
14.2	Wherever installation involved, Income Tax @ 2% will be deducted from the bill and a certificate issued.	
14.3	Installation in India will attract Service Tax @ 12.36%. If required, orders for supply and installation can be issued separately.	
14.4	Work order will attract work contract tax as per	

14.5	rules. Please confirm whether you have included WCT in your offer. Customs Duty Exemption Certificate (CDEC) will be issued by Purchaser. Hence no CD is to be included in your offer wherever applicable.	
14.6	Please indicate rate of the Sales Tax/VAT applicable.	
14.7	Octroi Duty/Entry Tax exempted. Exemption certificate will be issued, if required.	
14.8	Purchaser is eligible for full Excise Duty exemption. Excise Duty exemption certificate will be issued.	
15.	No Insurance is required at Purchaser's cost.	
16.	For Single part bids one separate sealed envelope are to be sent duly superscribed as follows : 1. TECHNICAL & COMMERCIAL BID Please refer instructions.	
17.	Wherever EMD/tender fee is payable – provide the same in the form of crossed Demand Draft in favour of The Accounts Officer, SAC, Ahmedabad along with the bid but in a separate cover or along with technical bid. On the back side of the D.D, please write your company's name.	
18.	Language to be used in all correspondence – English	
19.	Measurements – Metric system to be followed	
20.	Whether prequalification of your facility procedure completed (if applicable).	
21.	Warranty period – We need minimum 3 years from the date of acceptance. In case the product has a standard warranty of 1 year, confirm that additional 2 years warranty cost is indicated in the price bid/prices. However the warranty requirement if projected in RFP shall prevail.	
22.1	Defective/rejected items if any, are to be replaced free of cost.	
23.	Confirm whether you will be able to provide samples if called for, free of cost.	
24	Approximate weight (net and gross) of the consignment.	
25.	Instruction/operational manual to be supplied free of cost.	
26.	Supply and installation is subject to Purchaser's acceptance.	
27.	LC extension charges to your account, in case of delay from your side.	
28.	Items from latest production batch only are to be supplied.	
29.	Wherever Export Licence required, payment will be made after getting export licence and after confirmation by the supplier, with a copy of Export Licence.	
30.	Bank Guarantees (from Nationalized/Scheduled Bank/ Bank approved by Purchaser.	
30.1	Advance payment for the equal value valid till	

30.2	the completion of contract/acceptance, is to be provide by you. Towards issue of "Free Issue Material" by Purchaser for the value of the material issued, is to be provided.	
30.2.1	The Bill of material for the material used for the Fabrication work and available balance to be prepared by you and countersigned by the User Department is to be sent along with the final bill for arranging the balance/payment.	
30.3	Towards Performance of the Contract and Product for 10% value valid till the expiry of warranty period.	
31.	Security Deposit: An amount equivalent to maximum 10% of annual contract value shall be remitted through Account Payee DD/Fixed Deposit Receipt (FDR) in favour of Accounts Officer, SAC as Security Deposit towards performance of contract. Security Deposit will be released only after satisfactory completion of the contract. Security Deposit is to be submitted to SAC by the successful bidder (wherever applicable ) on awarding the contract	
32.	Training – free of cost – to be imparted at Purchaser's site.	
33.	Bank charges wherever applicable shall be paid by Purchaser/Contractor to their respective Bankers.	
34.	Arbitration proceedings – Within India as per provisions of Arbitration and Conciliation Act 1996.	
35.	Liquidated Damages - @ 0.5% per week for the delayed portion – maximum 10% of the contract value.	
36.	Force Majeure conditions applicable?	
37.	Acceptance of Fall clause. "The rates as per the charges of the Contract should not in any event exceed the lowest rates, the supplier charge to any other party or organization. If at any time during the period of contract, the supplier reduce the charges to any other party, then they shall forth-with notify such reduction to Head, Purchase & Stores, SAC and reduce the contract rates subsequently, from the date of coming into force of such reduction" .	
38.	You are requested to indicate the registration number; you have for Sales Tax/Service Tax as the case may be with concerned Government authorities. Also you are requested to provide company registration details wherever applicable along with copy of the company registration certificate. The offers received without the above information will be summarily rejected.	

भारत सरकार  
अंतरिक्ष विभाग  
अंतरिक्ष उपयोग केंद्र(इसरो)  
आंबावाडी विस्तार पी.ओ.  
अहमदाबाद - 380 015 (भारत)  
दूरभाष: +91-79-2691 3051/98  
फैक्स नं. : +91-79-2691 5835/02/48



Government of India  
Department of Space  
**SPACE APPLICATIONS CENTRE (ISRO)**  
Ambawadi Vistar P.O.  
Ahmedabad – 380 015 (INDIA)  
Telephone : +91-79 – 2691 3051/98  
Fax No. : +91-79 – 2691 5835 / 02 /48  
Email: publictender@sac.isro.gov.in

निविदा सूचना सं.: सैक/पीटी /08/2016-17  
Tender Notice No.: SAC/PT/08/2016-17

क्र. सं. Sr.No	निविदा नं. Tender No.	संक्षिप्त विवरण Brief Description	नियत तिथि (अपराह्न 3 बजे तक) Due on (Up to 3 pm)
6	AHSE 201600060101	Infra – Red (IR) Interferometer (Two Part)	22/08/2016

**GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE  
AHMEDABAD 380 015, INDIA  
PURCHASE & STORES**

Ph No: 079-2691 3067  
Fax 079-2691 5848/02/35

Date : 14/07/2016

**INVITATION TO TENDER**

M/s

000000

Our Ref No : AHSE 2016-000601-01

Tender Due: 15:00 Hrs ISTon 22/08/2016

Dear Sirs,

Please submit your sealed quotation , in the Tender Form enclosed here along with the descriptive catalogues / pamphlets / literature ,superscribed with Our Ref.No. and Due Date for the supply of the following items as per the terms & conditions mentioned in Annexure( Form No: As per enclosure. )

S.No.	Description of Items with Specifications	Unit	Quantity
1	Infra-red (IR) Interferometer (As per attached specifications)	No.	1

**DELIVERY AT:** SAC-STORES, AHBD.

**MODE OF DESPATCH** BY AIR FRE

**DUTY EXEMPTIONS** We are exempted from payment of customs duty.

**SPECIAL INSTRUCTIONS** Mention validity, warranty, payment terms & delivery terms.

**SPECIFIC TERMS** As per enclosure.

**INSTRUCTIONS TO TENDERERS:**

- Acceptance of Liquidated damages- As per enclosure; - Acceptance of Performance Bank Gurantee-As per enclosure; --EMD(Earnest Money Deposit)- As per clause 3 attatched Terms & Conditons
- Please confirm acceptance for submission of Security Deposit for 10% of Purchase Order Value.
- "Quotations shall be submitted by the bidders only by post or by hand in sealed covers. Quotations received by FAX or e-mail shall not be considered as valid offers and will not be accepted for evaluation."
- "In case the bidders propose any other payment terms in deviation with the standard terms mentioned above, it may be noted that applicable cash flow implications will be loaded on the prices quoted for commercial comparison of the offers. If advance payments are insisted by the bidders, interest at the rate of MCLR (Marginal Cost Linked Rate) as notified by State Bank of India from time to time shall be loaded on the prices for price comparison."
- Please note that this is a TWO-PART TENDER. Send your quotation as per attached instructions only. Quotation not conforming to the instructions will be rejected. Fax & email quotations will not be accepted.
- Technical & Commercial Compliance statement confirming compliance with all the point of Tech & Commercial annexures enclosed with the tender document shall be submitted along with the offer. In the absence of the same, your offer shall be summarily rejected



## Technical specifications of Infra-Red (IR) interferometer

S.NO.	PARAMETER	SPECIFICATIONS
<b>I.</b>	<b>MEASUREMENT CAPABILITY</b>	<ul style="list-style-type: none"> <li>• Shall be able to measure IR telescopes and lens systems.</li> <li>• Shall be able to measure concave, convex and afocal IR components.</li> <li>• Capability of measuring overall form of reflective surfaces and optics and transmitted wavefront of optics.</li> </ul>
<b>II.</b>	<b>SYSTEM</b>	
1.	Description	IR Laser Interferometer
2.	Configuration	Fizeau design
3.	Acquisition Mode	<ul style="list-style-type: none"> <li>• Phase shifting interferometry</li> <li>• Vibration Robust Acquisition mode</li> </ul>
4.	Laser Wavelength	Between 3 - 4 $\mu\text{m}$
5.	Alignment System	Visible alignment beam, Dual spot beam at IR wavelength
6.	Output Beam Diameter	Between 100 to 150 mm collimated
7.	Maximum Output Power	< 5 mW
8.	System Safety	Shall be inherently eye safe
9.	Optical Magnification	2x optical zoom
10.	Pupil Focus Range	$\geq \pm 1$ m
11.	Sampling	$\geq 600 \times 500$ pixels
12.	Beam Polarization	Linear
13.	RMS repeatability	$\lambda/1000$ ( $2\sigma$ )
14.	Input Voltage	220 – 240 VAC, 50 Hz
15.	Operating Temperature	15 – 30 deg C
16.	Weight	< 60 kgs
<b>III.</b>	<b>INTEGRATED COMPUTING SYSTEM</b>	
1.	Monitors	Dual Monitors (one main and one alignment) (> 17" flat panel)
2.	Processor	Intel Dual-core or better
3.	RAM	$\geq 8$ GB
4.	Storage	$\geq 500$ GB
5.	CD Drive	DVD – RW
6.	Accessories	Keyboard, mouse
7.	Network	Minimum two network interface cards

8.	Operating System	Windows 7 or later, 64-bit
9.	Software capability	<ul style="list-style-type: none"> <li>• Generate Reference Data</li> <li>• Provide averaging controls to improve measurement capability</li> <li>• Capable of masking data to define area of interest</li> <li>• Generate Zernike terms in CodeV/Zemax format</li> <li>• Generate slope data of surface or transmitted wavefront</li> <li>• Application of Fiducials to define reference points</li> <li>• Interactive 2D/3D surface maps</li> <li>• Use of patterns to automate measurement process</li> <li>• Generate profile plots to show contour maps and profiles of the test surface</li> <li>• Generate various plots such as MTF, PSF and encircled energy.</li> </ul>
<b>IV. ADDITIONAL ACCESSORIES</b>		
1.	Transmission Flat	$\lambda/20$ PV
2.	Transmission Sphere	Between f/0.7 to f/1.0 ( $\lambda/20$ PV)
3.	Transmission Sphere	Between f/2.0 to f/2.5 ( $\lambda/20$ PV)
4.	Transmission Sphere	Between f/3.0 to f/4.0 ( $\lambda/20$ PV)
5.	Attenuation filter	$\lambda/10$ PV
<b>V. WARRANTY &amp; INSTALLATION</b>		
1.	Warranty	Minimum One year (Please also quote for three years as an option)
2.	Installation	On site system installation and training preferably by instrument manufacturer

*Notes:*

1.  $\lambda$  = Operating wavelength
2. All accessories shall include mounts and adaptors, if required
3. All accessories shall be compatible with the IR interferometer

**General Terms and Conditions:**

- Offer will not be considered without compliance matrix for each specification as per Table given in Annexure-1.
- Vendors shall provide detailed datasheet and warranty conditions along with the quote.
- Authorization certificate from the original manufacturer is to be provided.
- User manual for all the parts should be provided.
- Price to be separately quoted for additional accessories.
- Vendor shall clearly provide the warranty of the equipment for a minimum period of one year and also give the quote for extended warranty for three years as an option.
- Equipment acceptance subject to successful installation and demonstration at SAC.

### ANNEXURE-1 : COMPLIANCE MATRIX

*Note: Vendor shall give the actual value of all the specifications.*

S.NO.	PARAMETER	SPECIFICATIONS	VALUE	COMPLIANCE/NON COMPLIANCE	COMMENTS
I.	MEASUREMENT CAPABILITY	<ul style="list-style-type: none"> <li>• Shall be able to measure IR telescopes and lens systems.</li> <li>• Shall be able to measure concave, convex and afocal IR components.</li> <li>• Capability of measuring overall form of reflective surfaces and optics and transmitted wavefront of optics.</li> </ul>			
II.	SYSTEM				
1.	Description	IR Laser Interferometer			
2.	Configuration	Fizeau design			
3.	Acquisition Mode	<ul style="list-style-type: none"> <li>• Phase shifting interferometry</li> <li>• Vibration Robust Acquisition mode</li> </ul>			
4.	Laser Wavelength	Between 3 - 4 $\mu$ m			

5.	Alignment System	Visible alignment beam, Dual spot beam at IR wavelength			
6.	Output Beam Diameter	Between 100 to 150 mm collimated			
7.	Maximum Output Power	< 5 mW			
8.	System Safety	Shall be inherently eye safe			
9.	Optical Magnification	2x optical zoom			
10.	Pupil Focus Range	$\geq \pm 1$ m			
11.	Sampling	$\geq 600 \times 500$ pixels			
12.	Beam Polarization	Linear			
13.	RMS repeatability	$\lambda/1000 (2\sigma)$			
14.	input Voltage	220 – 240 VAC, 50 Hz			
15.	Operating Temperature	15 – 30 deg C			
16.	Weight	< 60 kgs			
<b>III. INTEGRATED COMPUTING SYSTEM</b>					
1.	Monitors	Dual Monitors (one main and one alignment) (> 17" flat panel)			
2.	Processor	Intel Dual-core or better			
3.	RAM	$\geq 8$ GB			
4.	Storage	$\geq 500$ GB			
5.	CD Drive	DVD – RW			
6.	Accessories	Keyboard, mouse			

7.	Network	Minimum two network interface cards			
8.	Operating System	Windows 7 or later, 64-bit			
9.	Software capability	<ul style="list-style-type: none"> <li>• Generate Reference Data</li> <li>• Provide averaging controls to improve measurement capability</li> <li>• Capable of masking data to define area of interest</li> <li>• Generate Zernike terms in CodeV/Zemax format</li> <li>• Generate slope data of surface or transmitted wavefront</li> <li>• Application of Fiducials to define reference points</li> <li>• Interactive 2D/3D surface maps</li> <li>• Use of patterns to automate measurement process</li> <li>• Generate profile plots to show contour maps and profiles of the test surface</li> <li>• Generate various plots such as MTF, PSF and encircled energy.</li> </ul>			
<b>IV. ADDITIONAL ACCESSORIES</b>					
1.	Transmission Flat	$\lambda/20$ PV			

2.	Transmission Sphere	Between f/0.7 to f/1.0 ( $\lambda/20$ PV)			
3.	Transmission Sphere	Between f/2.0 to f/2.5 ( $\lambda/20$ PV)			
4.	Transmission Sphere	Between f/3.0 to f/4.0 ( $\lambda/20$ PV)			
5.	Attenuation filter	$\lambda/10$ PV			
<b>V. WARRANTY &amp; INSTALLATION</b>					
1.	Warranty	Minimum One year (Please also quote for three years as an option)			
2.	Installation	On site system installation and training preferably by instrument manufacturer			

## Instructions for Two Part Tender

We are proposing to invite tenders in two parts viz.

- Part I : Technical and Commercial
- Part II: Price

All tenderers are requested to carefully follow the following instructions before preparing their offer.

### 1) Part I: Technical & Commercial Bid

#### Part – (a) Technical

1. This part should contain detailed specifications of the items quoted by you along with technical literature and leaflets if any.
2. A compliance statement showing the compliance of the item quoted by you with that of item tendered by us should be prepared and enclosed to this.
3. Any other information called for in the tender related technical and specifications can also come in this part.
4. Prices should not be indicated in this cover.

#### Part – (b) Commercial Terms: (Without Prices)

1. The commercial terms applicable for the item quoted by you should be indicated in this part.
2. If any compliance statement is called for the commercial terms / contractual terms and conditions, the same is to be attached in this part.
3. Prices should not be indicated in this part. However a copy of the price bid (without prices) can be enclosed in this part to enable to understand whether all the items required to be quoted by you have been quoted in the price bid. Alternatively a statement is to be made indicating that you have quoted prices for all the items as per the tender and enclosed in the Price Bid as per the format.
4. The Commercial terms such as delivery terms, delivery period, payment terms, Warranty, validity of the offer, installation & commissioning, duties and taxes etc., shall come into this.

Notes:

1. Either Technical Specifications or terms & conditions as above should be very clearly reflected item-wise with reference to the items called for in the tender.
2. Please note that the **PRICE SHOULD NOT BE** indicated in this part.
3. Technical and Commercial part as described above shall be prepared and put it in a sealed cover & super scribed and addressed as follows:

Tender No. :

Due Date :

**PART I : Technical & Commercial Bid**

**The Sr. Head Purchase & Stores  
Space Applications Centre  
Ambawadi Vistar P.O.  
Ahmedabad – 380 015**

From:



## 2) Part II: Price Bid

1. The prices applicable for the items, item-wise in response to the tender shall come into this part.
2. Tenderer shall indicate very clearly item-wise prices with reference to their technical offer.
3. Price part prepared as above shall be enveloped and superscribed as follows:

Tender No. :	
Due Date :	
<b>PART II :</b>	<b>Price Bid</b>
	<b>The Sr. Head Purchase &amp; Stores</b>
	<b>Space Applications Centre</b>
	<b>Ambawadi Vistar P.O.</b>
	<b>Ahmedabad – 380 015</b>
From :	

- 3) The Technical & Commercial envelope (Part I) and Price cover (Part II) prepared as above along with "Tender fee cover" (if applicable) should be inserted in another envelope and superscribed as follows:

Tender No. :	
Due Date :	
	<b>Part I &amp; Part II are individually sealed and kept inside:</b>
	<b>(DD towards tender fee also is kept inside)</b>
	<b>The Sr. Head Purchase &amp; Stores</b>
	<b>Space Applications Centre</b>
	<b>Ambawadi Vistar P.O.</b>
	<b>Ahmedabad – 380 015</b>
From:	

### Important Notes:

1. Being a Two-Part Tender, fax/mail quotations will not be accepted. Please ensure your offers are received by post before due date and time.
2. In case you are going to download the documents from our website and submitting the offer, you are requested to submit the demand draft towards Tender fee in a separate cover along with a covering letter duly superscribing on the cover "Tender fee in respect of Tender No. \_\_\_\_\_".
3. Quotations submitted contrary to above instructions are liable to be rejected.

**Compliance Statement required to be filled and enclosed along with the technical and commercial bid by the vendor.**

Sr. No.	Commercial terms	Compliance/Remarks/Comments by Vendor
1.	Delivery terms (Ex-works, FOB, FCA, etc.)	
	Purchaser is having an air consolidation contract and their freight forwarder will arrange to collect the consignment from your premises/will take the responsibility for onward transmission from the point of delivery as per INCOTERMS 2010. This is applicable for import cases.	
2.	Packing charges (inclusive/exclusive)	
3.	Delivery period (in weeks/months)	
4.	Payment terms: Our standard term is  Sight Draft (import)  Within 30 days from the date of acceptance (indigenous).	
5.	Country of origin To be declared in the invoice.	
6.	Name and address of the Indian Agent.(if any)	
7.	Percentage of agency commission included in the quoted price – payable in Indian Rupees only directly to the Indian Agent.	
8.	Validity of the offer Minimum of 120 days from the date of opening.	
9.	If you are an Indian Agent, please enclose the authorization letter of your Principal and confirm that whether you have enrolled with DGS&D as per rules.	
10.	In a tender, either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.	
11.	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.	
12.	Cost of spares Included in the price bid / not included.	
13.	Will you be able to provide consumables/spares for 10 years?	
14.	Taxes and duties :  Taxes in India to the account of Purchaser. Outside India to Seller's/Contractor's account. Please indicate your Tax Registration Number.  Wherever installation involved, Income Tax @ 2% will be deducted from the bill and a certificate issued.  Installation in India will attract Service Tax @ 12.36%. If required, orders for supply and installation can be issued separately.  Work order will attract work contract tax as per rules. Please confirm whether you have included WCT in your offer.	

	<p>Customs Duty Exemption Certificate (CDEC) will be issued by Purchaser. Hence no CD is to be included in your offer wherever applicable.</p> <p>Please indicate rate of the Sales Tax/VAT applicable.</p> <p>Octroi Duty/Entry Tax exempted. Exemption certificate will be issued, if required.</p> <p>Purchaser is eligible for full Excise Duty exemption. Excise Duty exemption certificate will be issued.</p>	
15.	No Insurance is required at Purchaser's cost.	
16.	<p>For two part bids two separate sealed envelopes are to be sent duly superscripted as follows :</p> <ol style="list-style-type: none"> <li>1. Technical &amp; Commercial Bid</li> <li>2. Price Bid</li> </ol> <p>Please refer instructions.</p>	
17.	<p>Wherever EMD/tender fee is payable Provide the same in the form of crossed Demand Draft in favour of The Accounts Officer, SAC, Ahmedabad along with the bid but in a separate cover or along with technical bid.</p> <p>On the back side of the D.D, please write your company's name.</p>	
18.	Language to be used in all correspondence – English	
19.	Measurements – Metric system to be followed	
20.	Whether prequalification of your facility procedure completed (if applicable).	
21.	<p>Warranty period</p> <p>We need minimum 3 years from the date of acceptance. In case the product has a standard warranty of 1 year, confirm that additional 2 years warranty cost is indicated in the price bid/prices.</p> <p>However the warranty requirement if projected in RFP shall prevail.</p>	
22.	Defective/rejected items if any, are to be replaced free of cost.	
23.	Confirm whether you will be able to provide samples if called for, free of cost.	
24.	Approximate weight (net and gross) of the consignment.	
25.	Instruction/operational manual to be supplied free of cost.	
26.	Supply and installation is subject to Purchaser's acceptance.	
27.	LC extension charges to your account, in case of delay from your side.	
28.	Items from latest production batch only are to be supplied.	
29.	Wherever Export Licence required, payment will be made after getting export licence and after confirmation by the supplier, with a copy of Export Licence.	
30.	<p>Bank Guarantees (from Nationalised/ Scheduled Bank/ Bank approved by Purchaser.</p> <p>Advance payment for the equal value valid till the completion of contract/acceptance, is to be provide by you.</p> <p>Towards issue of "Free Issue Material" by Purchaser for the value of the material issued, is to be provided.</p>	

	<p>The Bill of material for the material used for the Fabrication work and available balance to be prepared by you and countersigned by the User Department is to be sent along with the final bill for arranging the balance/payment.</p> <p>Towards Performance of the Contract and Product for 10% value valid till the expiry of warranty period.</p>	
31.	Security Deposit is to be submitted to SAC by the successful bidder (wherever applicable )on awarding the contract	
32.	Training – free of cost – to be imparted at Purchaser’s site.	
33.	Bank charges wherever applicable shall be paid by Purchaser/Contractor to their respective Bankers.	
34.	Arbitration proceedings Within India as per provisions of Arbitration and Conciliation Act 1996.	
35.	Liquidated Damages @ 0.5% per week for the delayed portion maximum 10% of the contract value.	
36.	Force Majeure conditions applicable?	
37.	Acceptance of Fall clause. “The rates as per the charges of the Contract should not in any event exceed the lowest rates, the supplier charge to any other party or organization. If at any time during the period of contract, the supplier reduce the charges to any other party, then they shall forth-with notify such reduction to Sr. Head, Purchase & Stores, SAC and reduce the contract rates subsequently, from the date of coming into force of such reduction” .	
38.	You are requested to indicate the registration number; you have for Sales Tax/Service Tax as the case may be with concerned Government authorities. Also you are requested to provide company registration details wherever applicable along with copy of the company registration certificate. The offers received without the above information will be summarily rejected.	



GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE  
PURCHASE DIVISION

**INSTRUCTIONS TO TENDERERS AND TERMS & CONDITIONS OF TENDER (Foreign)**

1. The Tenderers should submit quotations in sealed envelope, superscribing the Tender No. and due date of opening and complete in all respects with technical specifications, including pamphlets and catalogues. Separate instructions, if any in this regard should be strictly complied with.
2. A Proforma Invoice may also be given which should contain the following information:
  - a) The FOB/FCA value, for import by Sea freight / Air freight up to Ahmedabad and for air parcel post up to Ahmedabad should be separately indicated.
  - b) Agency Commission: The amount of commission included in the price and payable to the Indian Agent of the Contractor shall be paid directly to the Indian Agent by the Purchaser in equivalent Indian Rupees on the basis of an Invoice from him applying T.T. buying rate of exchange ruling on the date of placement of the Purchase Order and which shall not be subject to any further exchange variations. This payment will be released to the Indian Agent after receipt and acceptance the goods in India.
  - c) The Contractor shall invoice only for the net amount payable to him, after deducting the amount of Agency Commission included in the invoice which will be paid to the Indian Agent directly by the Purchaser. However, the Contractor's invoice should separately reflect the amount of commission payable to his Indian Agent.
  - d) The earliest delivery period and country of origin of the Stores.
  - e) Banker's name, address, telephone/fax Nos. & e-Mail ID of the Contractor.
  - f) The approximate net and gross weight and dimensions of packages / cases.
  - g) Recommended spares for satisfactory operation for a minimum period of one year beyond warranty.
  - h) Details of any technical service, if required for erection, assembly, commissioning and demonstration.
3. "Bidders shall submit an amount of **Rs.5,00,000/- (Rupees Five Lakhs only)** with the bid before the date of tender opening as stipulated in tender schedule towards Earnest Money Deposit(EMD)

The EMD shall be submitted in the form of DD/Banker's cheque/Bank Guarantee/Fixed Deposit Receipt (FDR) made in the name of Accounts Officer, Space Applications Centre, and be payable at par at Ahmedabad.

Bids received without EMD shall be treated as invalid and shall not be considered. In case of two-part (multi-part) tenders, EMD must be submitted either in separate sealed cover clearly marked as 'EMD against tender no. \_\_\_\_\_' or with technical bid, so that it should be available at the time of opening of the first part of bid document itself. Tenders not complying with this requirement shall be rejected.

The following categories of bidders shall be exempt from paying EMD subject to submission of appropriate documentary evidence with the bid in support thereof(if applicable)



- Vendors already registered / empanelled with SAC as authorized vendors.
- Overseas bidders submitting offers directly without involving an Indian Representative.
- Central PSUs/PSEs and autonomous bodies
- Micro and Small Enterprises
- Khadi and Village Industries Commission
- National Small Industries Corporation
- Any other establishments specifically exempted from paying EMD by an order of the Government of India.

The EMD of bidders who withdraw their bid during the tender evaluation process shall be forfeited. EMD of unsuccessful bidders shall be refunded without interest after the tender has been awarded, within 30 days of the award of the tender.

EMD of successful tenderer may be retained and converted to Security Deposit, if applicable.”

4. The FOB/FCA prices quoted should be inclusive of all taxes, levies, duties arising in the tenderer's country.
5. The offer should be valid for a minimum period of 90 days or longer if called for from the due date of opening of the tender.
6. Samples, if called for, should be sent free of all charges.
7. Late and delayed tenders will not be considered. Quotations by fax must be followed by detailed offers.
8. Offers made by Indian Agents on behalf of their Principals, should be supported by the proforma invoice of their Principals.
  - a) In a tender either the Indian Agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.
  - b) 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.
9. We are exempted from Customs/Excise Duties.
10. The details of Import Licence will be furnished in the Purchase Order.
11. The authority of person signing the tender, if called for, shall be produced.
12. Instructions / Operation Manual containing all assembly details including wiring diagrams should be sent wherever necessary in duplicate. All documents / correspondence should be in English language only.



13. The Purchaser reserves the right to accept or reject the lowest or any offer in whole or part without assigning any reason.
14. It is expressly agreed that the acceptance of the Stores Contracted for is subject to final approval in writing by the Purchaser.
15. a) Part shipment is not allowed unless specifically agreed to by us.  
b) As far as possible stores should be despatched by Indian Flag Vessels / Air India through an Agency nominated by us.
16. Inspection / Test Certificate should be provided for the goods after testing it thoroughly at the Contractor's works. If any Inspection by Lloyds or any other testing agency is considered necessary, it shall be arranged by Contractor.
17. Where erection or assembly or commissioning is a part of the Contract, it should be done immediately on notification. The Contractor shall be responsible for any loss/damage sustained due to delay in fulfilling this responsibility.
18. For items having shelf life, those with maximum shelf life should be supplied if order is placed.
19. No request for extension for due date for submission of tenders will be entertained.
20. Unsigned quotations will be rejected.
21. In case, the vendors are falling under the category of MSME, registered under NSIC and would like to avail exemptions, their quotations should be accompanied with necessary registration certificate with declaration to consider their offer. Quotation received without such declaration and valid registration certificate will not be considered for exemptions under Public Procurement Policy.
22. "In case the bidders propose any other payment terms in deviation with the standard terms mentioned above, it may be noted that applicable cash flow implications will be loaded on the prices quoted for commercial comparison of the offers. If advance payments are insisted by the bidders, interest at the rate of MCLR (Marginal Cost Linked Rate) as notified by State Bank of India from time to time shall be loaded on the prices for price comparison."

## **TERMS AND CONDITIONS**

### **1. DEFINITIONS:**

- (a) The term 'Purchaser' shall mean the President of India or his successors or assignees.
- (b) The term 'Contractor' shall mean, the person, firm or company with whom or with which the order for the supply of stores is placed and shall be deemed to include the Contractor's Successors, representatives, heirs, executors and administrators unless excluded by the Contract.
- (c) The term 'Purchase Order' shall mean the communication signed on behalf of the Purchaser by duly authorised officer intimating the acceptance on behalf of the Purchaser on the terms and conditions mentioned or referred to in the said communication accepting the Tender or offer of the Contractor for supply of stores, plant, machinery or equipment or part thereof.
- (d) The term 'Stores' shall mean what the Contractor agrees to supply under the Contract as specified in the Purchase Order.



## **2. PRICES:**

Tenders offering firm prices will be preferred. Where a price variation clause is insisted upon by tenderer, quotations with a reasonable ceiling should be submitted. Such offers should invariably be supported by the base price taken into account at the time of tendering and also the formula for any such variations. However, such clauses will be subject to final acceptance by Purchaser.

## **3. TERMS OF PAYMENT:**

3.1 Being a Department of the Government of India, the normal terms of payment are by Sight Draft. However other terms of payment like establishment of Letter of Credit may be considered by the Purchaser on such terms and conditions as may be agreed upon.

3.2 The Sight Draft / Letter of Credit will be operative on presentation of the under mentioned documents:

- a) Original Bill of Lading / Airway Bill
- b) Commercially certified invoices in triplicate, describing the stores delivered, quantity, unit rate and their total value. The invoice should indicate discounts, and Agency Commission if any separately.
- c) Packing List showing individual dimensions and weight of packages.
- d) Country of Origin Certificate in duplicate.
- e) Test Certificate.
- f) Declaration by the Seller that the contents in each case are not less than those entered in the invoices and the quality of the Stores are guaranteed as per the specifications asked for by the Purchaser.
- g) Warrantee and guarantee Certificate/s vide Clause 20 herein below

## **4. IMPORT LICENCE:**

Reference to Import License No. & date and Contract number & date shall be prominently indicated in all the documents vide Para 3.2.

## **5. DEMURRAGE:**

Supplier shall bear demurrage charges, if any, incurred by the Purchaser due to delayed presentation of shipping documents as prescribed in Para 3.2 to the bankers beyond a reasonable time (say within 10-12 days) from the date of bill of lading for sea consignments and within 3-4 days from the date of Air Way Bill for air consignments.

## **6. ADDRESS OF INDIAN AGENT:**

.....

## **7. GUARANTEED TIME OF DELIVERY:**

The time for and the date of delivery stipulated in the Purchase Order shall be deemed to be the essence of the Contract. Delivery must be completed within the date specified therein.





## **8. INSPECTION AND ACCEPTANCE TESTS:**

- 8.1 The Purchaser's representatives shall also be entitled at all reasonable times during manufacture to inspect, examine and test on the Contractor's premises the material and workmanship of all stores to be supplied under the Contract and if part of the said stores is being manufactured on other premises, the Contractor shall obtain for the Purchaser's representative permission to inspect, examine and test as if the equipment were being manufactured on the Contractor's premises. Such inspection, examination and testing shall not release the Contractor from the obligations under this Contract.
- 8.2 For tests on the premises of the Contractor or of any of his sub-Contractors, the Contractor shall provide free of cost assistance, labour, material, electricity, fuel and instruments as may be required or as may be reasonably needed by the Purchaser's representative to carry out the tests efficiently.
- 8.3 When the stores have passed the specified test, the Purchaser's representative shall furnish a certificate to the effect in writing to the Contractor. The Contractor shall provide copies of the test/s certificates to the Purchaser as may be required.

## **9. MODE OF DESPATCH:**

Generally, stores should be despatched through Indian Flagged Vessel / Air India or through any other Agency nominated by the Purchaser. A copy of the invoice and packing list should invariably be kept inside each of the packages.

## **10. PORT OF ENTRY:**

FOR AIR SHIPMENTS: AHMEDABAD (Via Mumbai, if required)  
FOR SEA SHIPMENTS: NHAVASHEVA/Mumbai Seaport

## **11. CONSIGNEE:**

Sr. Purchase & Stores Officer,  
Central Stores,  
Space Applications Centre (SAC),  
Ahmedabad

## **12. SHIPPING MARKS:**

The mark on the shipping documents such as invoice, bill of lading and on the packages should be as follow:

PURCHASE ORDER NO. ....  
DATED .....

GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE

Destination: ..... &  
Port of Entry: .....

## **13. INSURANCE OF THE STORES:**



The necessity or otherwise of insurance will be as indicated in the Purchase Order.

**14. CONTRACTOR'S DEFAULT LIABILITY:**

14.1 The Purchaser may upon written notice of default to the Contractor terminate the Contract in whole or in part in circumstances detailed hereunder:

- a) If in the judgement of the Purchaser the Contractor fails to make delivery of Stores within the time specified in the Contract/agreement or within the period for which extension has been granted by the Purchaser to the Contractor.
- b) If in the judgment of the Purchaser the Contractor fails to comply with any of the other provisions of this Contract.

15. In the event the Purchaser terminates the Contract in whole or in part as provided in Clause 14 the Purchaser reserves the right to Purchase, upon such terms and in such a manner as he may deem appropriate, stores similar to that terminated and the Contractor shall be liable to the Purchaser for any additional costs for such similar stores and/or for liquidated damages for delay as defined in Clause 19 until such reasonable time as may be required for the final supply of stores.

15.1 If this Contract is terminated as provided in Clause 14 the Purchaser in addition to any other rights provided in this Article, may require the Contractor to transfer title and deliver to the Purchaser under any of the following clauses in the manner and as directed by the Purchaser:

- a) Any completed stores.
- b) Such partially completed stores, drawing, information and Contract rights (hereinafter called manufacturing material) as the Contractor has specifically produced or acquired for the performance of the Contract as terminated. The Purchaser shall pay to the Contractor the Contract price for completed stores delivered to and accepted by the Purchaser and for manufacturing material delivered and accepted.

15.2 In the event the Purchaser does not terminate the Contract as provided in Clause 14, the Contractor shall continue the performance of the Contract in which case he shall be liable to the Purchaser for liquidated damages for delay as set out in Clause 19 until the stores are accepted.

**16. REPLACEMENT:**

If the stores or any portion thereof is damaged or lost during transit, the Purchaser shall give notice to the Contractor setting forth particulars of such stores damaged or lost during transit. The replacement of such stores shall be effected by the Contractor within a reasonable time to avoid unnecessary delay in the intended usage of the Stores. In case the Purchaser agrees, the price towards replacement items shall be paid by the Purchaser on the basis of original price quoted in the tender or as reasonably worked out from the tender.

**17. REJECTION:**

In the event that any of the stores supplied by the Contractor is found defective in material or workmanship or otherwise not in conformity with the requirements of the Contract specifications, the Purchaser shall either reject the stores or request the



Contractor, in writing, to rectify the same. The Contractor, on receipt of such notification, shall either rectify or replace the defective stores free of cost to the Purchaser. If the Contractor fails to do so, the Purchaser may at his option either:

- a) Replace or rectify such defective stores and recover the extra cost so involved from the Contractor, or
- b) Terminate the Contract for default as provided under Clause 14 above, or
- c) Acquire the defective stores at a reduced price considered equitable under the circumstances. The provision of this article shall not prejudice any other rights of Purchaser's under the Contract including recovery of liquidated damages for delay.

**18. EXTENSION OF TIME:**

If the completion of supply of stores is delayed due to reasons of *force majeure* such as acts of god, acts of public enemy, acts of Government, fires, floods, epidemics, quarantine restriction, strikes, freight embargoes, etc., the Contractor shall give notice within 15 days to the Purchaser in writing of his claim for an extension of time. The Purchaser on receipt of such notice after verification, if necessary, may agree to extend the Contract delivery date as may be reasonable but without prejudice to other terms and conditions of the Contract.

**19. DELAY IN COMPLETION / LIQUIDATED DAMAGES:**

If the Contractor fails to deliver the stores within the time specified in the Contract or any extension thereof, the Purchaser shall recover from the Contractor as liquidated damages a sum of one-half of one percent (0.5%) of the Contract price of the undelivered stores for each calendar week of delay. The total liquidated damages shall not exceed ten percent (10 %) of the Contract price of the portion of stores so delayed. Stores will be deemed to have been delivered only when all their component parts are also delivered. If certain components are not delivered in time, the stores will be considered as delayed until such time as the missing parts are delivered.

**20. GUARANTEE & REPLACEMENT:**

- a) The Contractor shall guarantee that the stores supplied shall comply fully with the specifications laid down for material, workmanship and performance.
- b) For a period of twelve months (or such period as agreed upon by the parties) after the acceptance of the stores, if any defects are discovered therein or any defects therein are found to have developed under proper use arising from faulty materials, design or workmanship, the Contractor shall remedy such defects at his own cost provided he is called upon to do so within a period of 14 months (or such period as specified in Contract) from the date of acceptance thereof by the Purchaser who shall state in writing in what respect the stores or any parts thereof are faulty.
- c) If in the opinion of the Purchaser it becomes necessary to replace or renew any defective stores, such replacements or renewals shall be made by the Contractor free of all costs to the Purchaser provided the notice informing the Contractor of the defect is given by the Purchaser in this regard within the said period of 14



months (or such period as specified in Contract) from the date of acceptance thereof.

- d) Should the Contractor fail to rectify the defects, the Purchaser shall have the right to reject or repair or replace at the cost of the Contractor the whole or any portion of the defective stores.
- e) The decision of the Purchaser, notwithstanding any prior approval or acceptance or inspection thereof on behalf of the Purchaser, as to whether or not the stores supplied by the Contractor are defective or any defects has developed within the said period of 12 months (or such agreed period) or as to whether the nature of the defects requires renewal or replacement shall be final, conclusive and binding on the Contractor.
- f) To fulfill guarantee conditions outlined in Clause 20 (a) to (e) above, the Contractor shall, at the option of the Purchaser, furnish a Bank Guarantee (as prescribed by the Purchaser - Bank Guarantee format enclosed) from a Bank approved by the Purchaser for an amount equivalent to 10% of the value of the Contract along with first shipment documents. On the performance and completion of the Contract in all respects, the Bank Guarantee will be returned to the Contractor without any interest.
- g) All the replacement stores shall also be guaranteed for a period of 12 months from the date of arrival of stores at Purchaser's site.
- h) Even while the 12 months guarantee applies to all stores, in case where a greater period is called for by our specifications, then such a specification shall apply, and in such cases, the period of 14 months referred to in Clause 20 (b) and (c) shall be asked for guarantee period plus two months.**

#### **21 REQUIREMENT OF ADDITIONAL NUMBERS OF THE STORES/SPARE PARTS ORDERED:**

The Contractor shall also undertake the supply of additional number of items covered by the order as considered necessary by the Purchaser at a later date, the actual price to be paid shall be mutually agreed to after negotiations.

#### **22. PACKING:**

- a) The Contractor wherever applicable shall pack and crate all stores for sea / air shipment as applicable in a manner suitable for export to a tropical humid climate, in accordance with internationally accepted export practices and in such a manner so as to protect it from damage and deterioration in transit by road, rail or sea for space qualified stores. The Contractors shall be held responsible for all damages due to improper packing.
- b) The Contractor shall ensure that each box / unit of shipment is legible and properly marked for correct identification. The failure to comply with this requirement shall make the Contractor liable for additional expenses involved.
- c) The Contractor shall notify the Purchaser of the date of shipment from the port of embarkation as well as the expected date of arrival of such shipment at the designated port of arrival.
- d) The Contractor shall give complete shipment information concerning the weight, size, content of each packages, etc.



- e) Transshipment of equipment shall not be permitted except with the written permission of the Purchaser.
- f) Apart from the despatch documents negotiated through Bank, the following documents shall also be airmailed to the Purchaser within 7 days from the date of shipment by sea and within 3 days in case of air-consignments:
  - a) Commercial Bill of Lading / Air Way Bill / Post parcel Receipt.  
(Two non-negotiable copies)
  - b) Invoice (3 copies)
  - c) Packing List (3 copies)
  - d) Test Certificate (3 copies)
  - e) Certificate of Origin.

The Contractor shall also ensure that one copy of the packing list is enclosed in each case.

### **23. ARBITRATION:**

If at any time any question, dispute or difference whatsoever shall arise between the Purchaser and the Contractor upon or in connection with this Contract, either party may forthwith give to the other notice in writing of the existence of such question, dispute or difference and the same shall be referred to the adjudication of two arbitrators, one to be nominated by Purchaser, other by a Contractor and in the event of any difference of opinion, the arbitrators will refer the matter to the umpire. The arbitration shall be conducted in accordance with the rules and procedure for arbitration of the International Chamber of Commerce at Paris. The expenses of the arbitrators and umpire shall be paid as may be determined by them. However, the venue of such arbitration should be in India.

### **24. LANGUAGE AND MEASURES:**

All documents pertaining to the Contract including specification, schedule, notice, correspondence, operating and maintenance instructions, drawings or any other writings shall be written in English language. The metric system of measurement shall be used exclusively in the Contract.

### **25. INDEMNITY:**

The Contractor shall warrant and be deemed to have warranted that all Stores supplied against this Contract are free and clean of infringement of any patent, copyright or trade mark and shall at all times indemnify the Purchaser against all claims which may be made in respect of stores for infringement of any right protected by Patent, Registration of design or Trade Mark, and shall take all risk of accident or damage which may cause a failure of the supply from whatever cause arising and the entire responsibility for the sufficiency of all the means used by him for the fulfilment of the Contract.

### **26. COUNTER TERMS AND CONDITIONS OF SUPPLIERS:**

Where counter terms and conditions/printed or cyclostyled conditions have been offered by the bidder, the same shall not be deemed to have been accepted by the Purchaser unless specific written acceptance thereof is obtained.



**27. SECURITY INTEREST:**

On each item to be delivered under this Contract, including an item of work in progress in respect of which payments have been made in accordance with the terms of the Contract, Purchaser shall have a security interest in such items which shall be deemed to be released only at the time when the applicable deliverable item is finally accepted and delivered to the Purchaser in accordance with the terms of the Contract. Such security interest of the Purchaser shall constitute a prior charge as against any other charge or interest created in respect of such items by any entity.

**28. BANK CHARGES:**

While the Purchaser shall bear the bank charge payable to his Bankers (State Bank of India), the Contractor shall bear the Bank charges payable to his Bankers including the cheques towards advising amendment commissions.

**29. TRAINING:**

The Contractor shall, if required by the Purchaser, provide facilities for the practical training of Purchaser's engineering / technical personnel from India and for their active association on the manufacturing processes throughout the manufacturing period of the Contract / stores. Number of such personnel to be mutually agreed upon.

**30. APPLICABLE LAW:**

The Contract shall be interpreted, construed and governed by the laws of India.

**PACKING INSTRUCTIONS**

1. In tune with the requirement of international plant protection convention of the FAO, UN the following has become mandatory with immediate effect.
2. All packing materials of any kind of plant origin used for packing shall require treatment including heat-kiln treatment at 56 degree centigrade for a minimum of 30 hours of methylbromide fumigation at 48g/cum for 32 hours of chemical impregnation as per international standards.
3. If the consignments are sent without the aforesaid certificate, all demurrages and other charges for treatment etc. will be to the account of the suppliers.
4. This aspect also should be taken care of while submitting the offers.
5. If the packaging material being used for your product does not come under the category "material of plant origin" (i.e. Leaves, grass, wood etc.) Please certify the same in your quote and ignore the above instructions. However, the same should be ascertained at the time of actual shipment if the order is awarded to you.

\*\*\*



**STANDARD TENDER FORM**  
(Seal of the Company)

Tender No.: .....  
Due on: .....  
Ref. No.: .....  
Date: .....

**TENDER FORM**

From: .....  
.....  
.....

To: The Sr. /Purchase & Stores Officer,  
..... (Name of the Centre/Unit)

Dear Sir,

I/We hereby offer to supply the stores detailed below at the price hereunder quoted and agree to hold this offer open till..... I/we shall be bound to supply the stores hereby offered upon the issue of the Purchase Order communicating the acceptance thereof on or before the expiry of the last mentioned date. You are at liberty to accept any one or more of the items of stores tendered for or any portion of any one or more of the items of such stores. I/We, notwithstanding that the offer in this tender has not been accepted in whole, shall be bound to supply to you such items and such items and such portion or portions of one or more of the items as may be specified in the said Purchase Order communicating the acceptance:

Sl. No.	Description	Quantity	Unit	Rate Rs.	Delivery Date

**Note: All the rates should be given both in figures and words**

Place at which delivery will be made	
Date by which the ordered item/s will be supplied	

2. I/We have understood the items of the tender annexed to the invitation to tender and have thoroughly examined the specifications/drawing and/or pattern quoted or referred to herein and am/are fully aware of the nature of the stores required and my/our offer is to supply the stores strictly in accordance with the requirements subject to the terms and conditions stipulated in the enquiry and contained in the Purchase Order communicating the acceptance of this tender either in whole or in part.

Signature of Tenderer

Date: .....

भारत सरकार  
अंतरिक्ष विभाग  
अंतरिक्ष उपयोग केंद्र(इसरो)  
आंबावाडी विस्तार पी.ओ.  
अहमदाबाद - 380 015 (भारत)  
दूरभाष: +91-79-2691 3051/98  
फैक्स नं. : +91-79-2691 5835/02/48



Government of India  
Department of Space  
**SPACE APPLICATIONS CENTRE (ISRO)**  
Ambawadi Vistar P.O.  
Ahmedabad – 380 015 (INDIA)  
Telephone : +91-79 – 2691 3051/98  
Fax No. : +91-79 – 2691 5835 / 02 /48  
Email: publictender@sac.isro.gov.in

निविदा सूचना सं.: सैक/पीटी /08/2016-17  
Tender Notice No.: SAC/PT/08/2016-17

क्र. सं. Sr.No	निविदा नं. Tender No.	संक्षिप्त विवरण Brief Description	नियत तिथि (अपराह्न 3 बजे तक) Due on (Up to 3 pm)
7	AHSE 201600079301	Fabrication of IR Scene Simulator (Two Part)	22/08/2016



GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE  
AHMEDABAD 380 015, INDIA  
PURCHASE & STORES

Ph No: 079-2691 3067  
Fax 079-2691 5848/02/35

Date : 14/07/2016

INVITATION TO TENDER

M/s

000000

Our Ref No : AHSE 2016-000793-01

Tender Due: 15:00 Hrs IST on 22/08/2016

Dear Sirs,

Please submit your sealed quotation , in the Tender Form enclosed here along with the descriptive catalogues / pamphlets / literature ,superscribed with Our Ref.No. and Due Date for the supply of the following items as per the terms & conditions mentioned in Annexure( Form No: As per enclosure. )

S.No.	Description of Items with Specifications	Unit	Quantity
1	Fabrication of IR scene simulator (As per attached specifications)	No.	1

**DELIVERY AT:** SAC-STORES, AHBD.

**MODE OF DESPATCH** BY AIR FRE

**DUTY EXEMPTIONS** We are exempted from payment of customs duty.

**SPECIAL INSTRUCTIONS** Mention validity, warranty, payment terms & delivery terms.

**SPECIFIC TERMS** As per enclosure.

**INSTRUCTIONS TO TENDERERS:**

- Acceptance of Liquidated damages- As per enclosure; - Acceptance of Performance Bank Gurantee-As per enclosure; -EMD(Earnest Money Deposit)- As per clause 3 attached Terms & Conditons
- Please confirm acceptance for submission of Security Deposit for 10% of Purchase Order Value.
- "Quotations shall be submitted by the bidders only by post or by hand in sealed covers. Quotations received by FAX or e-mail shall not be considered as valid offers and will not be accepted for evaluation."
- "In case the bidders propose any other payment terms in deviation with the standard terms mentioned above, it may be noted that applicable cash flow implications will be loaded on the prices quoted for commercial comparison of the offers. If advance payments are insisted by the bidders, interest at the rate of MCLR (Marginal Cost Linked Rate) as notified by State Bank of India from time to time shall be loaded on the prices for price comparison."
- Please note that this is a TWO-PART TENDER. Send your quotation as per attached instructions only. Quotation not conforming to the instructions will be rejected. Fax & email quotations will not be accepted.
- Technical & Commercial Compliance statement confirming compliance with all the point of Tech & Commercial annexures enclosed with the tender document shall be submitted along with the offer. In the absence of the same, your offer shall be summarily rejected
- Special Instruction: Pre-bid conference is scheduled to be held from 25/07/2016 to 29/07/2016 at Bldg. No. 42 at SAC Ahmedabad. Interested vendors may confirm their participation on email address amitvikram@sac.isro.gov.in for pre-bid conference. Person attending the Pre-Bid meeting shall bring proper authorization letter and ID Proof.

  
अनिल एन. वैद्य  
ANIL N. VAIDYA  
क्रय एवं भंडार अधिकारी  
Purchase & Stores Officer



RFP specifications for fabrication of IR Scene simulator



SPACE APPLICATION CENTRE  
INDIAN SPACE RESEARCH ORGANIZATION  
DEPARTMENT OF SPACE  
GOVERNMENT OF INDIA  
AHMEDABAD 380015

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## SECTION I

### 1.1 Introduction

The Space Applications Centre is interested in the procurement of one high quality Newtonian type scene-simulator. The scene simulator required comprises of an on-axis parabolic primary mirror and a tilted fold mirror to bend the beam in the desired direction. The scene-simulator should be thermo-vacuum compatible.

Hence forward following definitions apply unless mentioned otherwise:

- SAC: Space Applications Centre
- Scene-simulator assembly: Primary and fold mirror bonded in its mounts, this sub assembly mounted and integrated in scene simulator structure.

This document provides technical specifications of 720 mm aperture Newtonian telescope assembled in its structure.

### 1.2 Scope

The scope of this contract includes:

1. Design and fabrication of 720 mm diameter on-axis parabolic primary mirror and diameter 285 mm fold mirror.
2. Design and fabrication of mechanical mounts of the primary and fold mirror, scene-simulator structure and a suitable integrated base plate for mounting a target in the image plane of the scene simulator.
3. Opto-mechanical design analysis of the optics in mount and in assembled condition.
4. Design Analysis for gravity loads
5. Stress free bonding of parabolic primary mirror and the fold mirror.
6. Stress free assembly of mirrors in the structure and their alignment.
7. Demonstration of performance of the scene simulator assembly as made in this contract.

### 1.3 Supplier's capability

The supplier should have expertise in designing, realization and testing of 700 mm class precision mirrors (surface figure  $\sim \lambda / 50$  RMS) with its mount and collimators for lab /thermo vacuum use. The supplier should have facility to carry out tests as per the specifications (refer Table 2.1).

### 1.4 Supplier's Responsibility

The supplier shall be responsible for demonstrating the satisfactory performance as required by the applicable specifications and worldwide adopted standards. It is supplier's responsibility to submit a schedule of activities and to inform about the monthly developments and also at every milestone as identified in this contract.

### 1.5 Applicable documents

The latest version of the following documents (including but not limited to) form a part of the specifications.

Table 1.1: List of applicable documents

S.I. No	Document No	Description
1.	MIL - 0-- 13830 A	General specifications covering the manufacture\assembly and inspection of ...
2.	MIL - 0 - 16898	Optical elements packaging

3.	MIL-PRF-13830_B	General specification governing the manufacturing, assembly, and inspection of Optical Components for.
4.	ISO 10110-8:2010 Optics and photonics	Preparation of drawings for optical elements and systems -- Part 8: Surface texture; roughness and waviness

## SECTION II

### 2.1 Specifications of Mirrors

This section gives the detailed optical specifications of

- Primary mirror (M1)
- Fold Mirror (M2)

The specifications of the mirrors M1& M2 are given in Table 2.1 and Table 2.2.

**Table 2.1: Optical specifications of parabolic primary mirror.**

S.I. No.	Parameter	Specification	Comment
1.	Material	Low thermal expansion material (CTE $\leq 0 \pm 0.05E-6$ /K)	Schott Zerodur™ to be used
2.	Surface profile	Concave parabolic.	
3.	Radius of curvature (mm)	9000 $\pm$ 10.0	
4.	Conic Constant	-1 $\pm$ 0.0001	
5.	Primary mirror centre to image plane separation (mm)	4500 $\pm$ 5.0	
6.	Surface figure (after bonding / mounting) (for $\lambda = 633$ nm)	Better than $\lambda/8$ PTV Better than $\lambda/50$ RMS	
7.	Clear aperture (mm)	$\geq 710.00$	
8.	Physical diameter (mm)	720.00	
9.	Edge thickness (mm) Centre thickness (mm)	Typical	To be given by supplier for an optimised design
10.	REFLECTANCE @ Normal incident angle Enhanced Al Coating with protective overcoat on the entire active area.	Average $\geq 90\%$ (0.4-1.0 microns) Average $\geq 97\%$ (3 to 15 microns)	
11.	<ul style="list-style-type: none"> <li>• Circularity at the edges</li> <li>• Mounting surface finish</li> </ul>	<ul style="list-style-type: none"> <li>• Within 20 microns;</li> <li>• Shall be finished to 303 emery</li> </ul>	
12.	Parallelism between the mechanical and optical axes of the mirror (arc seconds)	within 20	
13.	Rear surface (for $\lambda = 633$ nm)	Better than $2\lambda$	
14.	Scratch/dig	60/40	
15.	Surface roughness over clear aperture (angstrom)	Better than 20	
16.	Chamfering	Sharp edges of the mirror shall be	

		chamfered to less than 1 mm	
17.	Pinholes in the coating	There should be no pinholes visible in the coating when it is backlit	
18.	Mass of the mirror	Typical	To be given by supplier for an optimised design

**Table 2.2: Optical specifications of fold mirror.**

S.I. No.	Parameter	Specification	Comment
1.	Substrate	Low thermal expansion material (CTE $\leq 0 \pm 0.05E-6 /K$ )	Schott Zerodur™ to be used
2.	Surface profile	Flat	
3.	Shape of the mirror	Circular	
4.	Physical diameter (Outer) (mm)	285.00	
5.	Clear aperture (mm)	$\geq 280.0$	
6.	Surface figure (after bonding/ mounting) (for $\lambda = 633$ nm)	Better than $\lambda/8$ PTV Better than $\lambda/50$ RMS	
7.	Centre thickness (mm)	30 (open tolerance)	To be determined by supplier for optimised design.
8.	<ul style="list-style-type: none"> <li>• Circularity at the edges (microns)</li> <li>• Mounting surface finish</li> </ul>	$\leq 20$ shall be finished to 303 emery	
9.	Parallelism between the mechanical and optical axes of the mirror (arc seconds)	Better than 20	
10.	Rear Surface (for $\lambda = 633$ nm)	$\leq 2\lambda$	
11.	Chamfering	Sharp edges of the mirror shall be chamfered to less than 2 mm	
12.	Scratch/dig	60/40	
13.	Surface roughness (Angstrom)	$\leq 20$	
14.	REFLECTANCE @ Normal incident angle Enhanced Al Coating with protective overcoat on the entire active area.	Average $\geq 90\%$ (0.4-1.0 microns) Average $\geq 97\%$ (3 to 15 microns)	
15.	Pinholes in the coating	There should be no pinholes visible in the coating when it is backlit.	
16.	Mass of the Mirror	Typical	To be supplied by the supplier for optimized design.

**2.2 Other mandatory requirements**

- Centre of gravity (CG) of the mirrors M1 and M2 is to coincide with the optical axis within a circle of 0.5 mm diameter. The CG plane shall coincide with the MFD (mirror fixation device) bonding plane within  $\pm 0.5$  mm
- Suitable alignment references (two lines of 200  $\mu$ m thickness or smaller) shall be drawn on the rear surface of the mirror. The intersection of these two lines should define the mechanical center.
- High quality and defect-free SCHOTT ZERODUR glass-ceramic shall be used for fabrication of the mirrors. The physical/ mechanical/ thermal properties of the material batch to be used shall be sent to SAC for information.
- Proper stress relieving shall be carried out on Zerodur blanks during and after the fabrication process so that the surface figure does not change over a period of time.
- The manufacturer shall ensure that mounting of the components as well as the structure of the scene simulator does not induce any stresses and result in change of surface figure on removal of the component from the fabrication/test fixtures. The manufacturer shall devise suitable test methods to demonstrate this aspect.

**2.3 Specification for the integrated scene-simulator assembly**

The components shall be matched to give the specified performance as mentioned in Table 2.3. It is supplier's responsibility to demonstrate the integrated optical system performance.

**TABLE 2.3: Optical and mechanical specifications of the scene-simulator system**

S.I. No	Parameters	Specifications	Comment
1.	Location of aperture stop	Primary Mirror	
2.	Effective focal length (mm)	4500 $\pm$ 5	
3.	F/number	6.25	
4.	Field of view (degree)	0.2 (circular)	
5.	Minimum Design MTF at 632.8 nm at 20 lp/mm On axis 0.04° off axis	0.88 0.83	Supplier to verify with design analysis.
6.	System wave front error (in nm)	Better than 40	
7.	Primary mirror to fold separation (mm)	2800 $\pm$ 5	
8.	Fold Mirror to image plane separation	1700	
9.	Separation of image plane and scene simulator structure. (mm)	250 +/- 25 mm	
10.	Angle of fold mirror (degree)	20 (Typical)	

11.	Material for the structure	Aluminum alloy/Invar	To be given by supplier for optimized design
12.	Structure Diameter mm	1200 (Typical)	To be given by supplier for optimized design
13.	Weight (Kg) for the structure		To be given by the supplier for optimized design.
14.	Vacuum compatibility (torr)	10E-5 or better	
15.	Paint /surface treatment for the structure	Vacuum compatible non specular paint/ surface treatment should be used	
16.	Working Temperature Range (degree C)	22 ± 5	

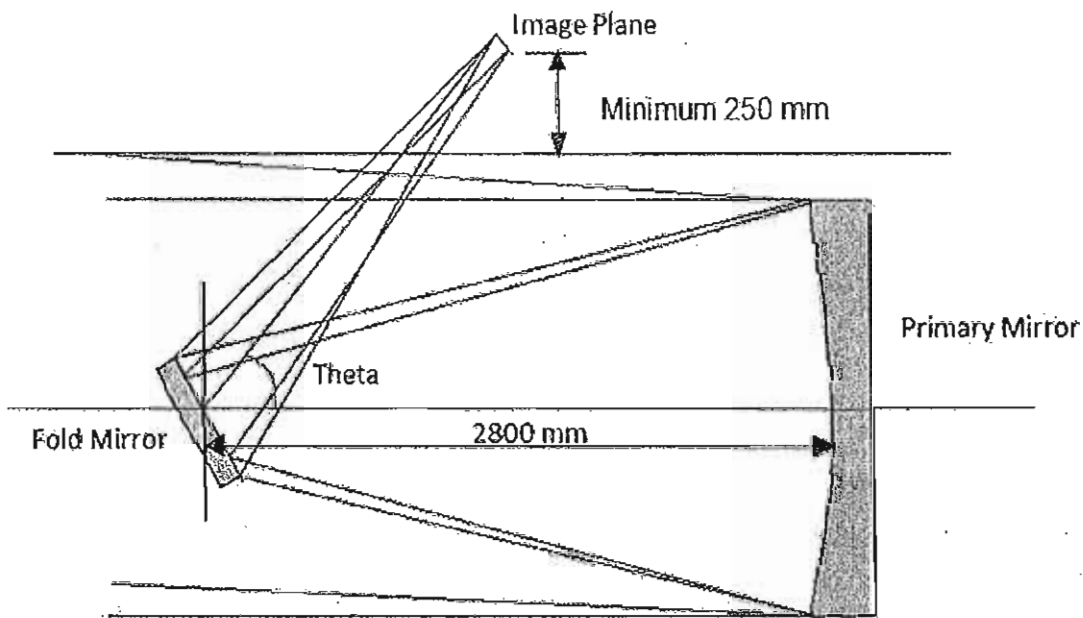


Figure 2.1: Schematic diagram (top view) of Newtonian type scene-simulator

**2.4 Other mandatory requirements for the scene-simulator structure**

- The scene-simulator structure, location of the Mirror Fixation Devices (MFDs) has to be given by the supplier for an optimized design. The supplier should submit the design to SAC for review and approval. The scene-simulator structure must have a side-stand or similar arrangement (such that image plane is typically 250 mm away from scene simulator structure) so that a micro-positioner along with a target can be used to locate the image plane (refer Figure 2.1)).
- The spider arms for holding fold mirror shall be optimized to have a minimum obscuration. The structure should be rugged and stable enough to withstand any misalignments due to handling and transportation.
- Structure should have provisions so that it can be handled with crane.
- It should have M6 free holes at the base so that it can be locked to a platform or vibration isolation table.



### SECTION III

This section gives the test conditions, test procedures, test matrix/test plan, inspection rights and documents to be supplied for fabrication and testing the Newtonian scene simulator.

#### 3.1 Performance compliance requirements

To check the performance compliance, measurements shall be carried out at

- Mirror level (under ambient lab temperature)
- At Two mirror scene simulator level (under ambient lab temperature)

The parameters to be measured at component level and integrated scene simulator level are given in Table 3.1 and Table 3.2 for compliance and acceptance. The supplier shall submit the method and procedure of all the tests for the measurement of parameters as per specifications including accuracy and repeatability of the measurement.

**TABLE 3.1**  
**Performance compliance matrix at component level**

S. No.	Parameter	STAGE / LEVEL	Remarks
1	Material Properties	Procurement	Data to be provided to SAC
2	Thermal cycling for stress relieving	Before coating	For M1& M2
3	Stress study	Before & After fabrication	For M1& M2 (Polaris cope data)
4	Radius of curvature	Before coating	For M1
5	Conic constant	Before coating	For M1
6	All Physical Dimensions	Before coating	For M1& M2
7	Marking references	Before coating	For M1& M2
8	Surface Quality ( Scratch / dig)	Before & After coating	For M1& M2
9	Surface Roughness	Before coating	For M1& M2
10	Surface figure	Before coating	For M1& M2 ,Interferogram data to be provided
11	Mass	Before coating	For M1& M2
12	Reflectance	After coating	On Witness samples
13	Wave front error	After assembly and alignment at integrated system level	Interferogram data to be provided

**TABLE 3.2: Performance compliance matrix at integrated level**

S. No	Parameter
1	WFE at 0 ° and $\pm 0.2^\circ$ (with through focus)
2	Effective Focal Length
3	Off-axis distance of image plane from optical axis (Image plane coordinates)
4	Separation between Primary and fold mirror

### **3.2 Inspection Rights**

SAC reserves the right to participate in or monitor any of the tests and inspections scheduled in this document. The contractor shall submit a schedule of activities and documentations including the major milestones like critical design review (CDR), qualification tests, acceptance tests, etc. at least seven weeks in advance to make arrangements for SAC's participation prior to shipment.

### **3.3 Documentations to be supplied**

- Material selection criteria details and properties.
- Certificates for vacuum compatibility for materials used : Surface treatment ,paint, adhesive.
- Material acceptance report in case of procurement from other source.
- Theoretical analysis results / reports for gravity effects.
- Mount design and analysis details.
- Performance evaluation of test set up and calibration details.
- Stress analysis details and results.
- Final results / reports.
- Interferogram of the optical components before and after mounting.
- Handling and storage details with instructions
- Packaging, transportation & insurance details and instructions.

## **SECTION IV**

This section gives the information to be submitted to SAC about design details, sensitivity analysis, test and evaluation plan and project plan to be followed by the supplier. The detailed requirements are given in Para 4.1. This section also gives the list of deliverables, schedule, handling and transportation instructions and information regarding installation at SAC.

### **4.1 Required Information**

1. Data / Design data pertaining to compliance to all the specifications and requirements.
2. Details of analysis and processes substantiating the ability to meet all the specifications and requirements.
3. Design sensitivity of fabrication and assembly tolerances.
4. Information on past experience for similar type of systems (aperture ~ 700 mm class of mirrors/telescope) realized.

The required information shall also contain but not limited to the following information:

- a) List of materials proposed to be used.
- b) Thermal and mechanical design details.
- c) Non-compliance, if any, of the specifications and alternatives.
- d) Engineering drawings with dimensions and weight of the proposed design.
- e) Inspection and acceptance criteria to be followed
- f) Broad "test and evaluation plan" giving the test facilities and instruments proposed to be used during the acceptance tests.
- g) Project plan envisaging all matters relating to the performance of all phases of the contract. The plan shall also include major milestone and identify all hardware and other deliverables specified in the contract.

### **4.2 Materials**

The manufacturer shall use vacuum compatible materials and components. Materials used shall be stable under atmospheric and high vacuum environment (10E-5 torr). The Coating materials used, shall be space qualified with TML <1 %, RML < 0.1 % and VCM < 0.1 %, when subjected to 125 degree C and 10-5 torr pressure for a duration of 24 hrs. Thermo-vacuum compatibility of paint /surface treatment and glue that is planned to be used is to be provided.

Additional information (optional): The following material properties wherever applicable shall be provided:

- Co-efficient of thermal expansion.
- Thermal conductivity.
- Density.
- Poisson's ratio.
- Modulus of rigidity.
- Modulus of elasticity.
- Yield strength.
- Micro-yield strength.
- Ultimate tensile strength.

### 4.3 Coating

Coating processes to be adopted shall be thermo-vacuum compatible and suitable for large sized mirrors. If the processes are already qualified for a similar coating specification requirement, the details of the coating and heritage shall be provided. For revalidation of the coating, tests on witness samples as per applicable MIL STD/documents to be carried out and results shall be provided. Two witness samples each of 2-inch diameters shall be coated with each mirror during coating. The witness samples shall be subjected to the following qualification tests:

- Adhesion & Abrasion
- Storage (Hot & Cold)
- Humidity
- Thermal cycling & Thermal shock
- Thermal vacuum

The acceptance and rejection criteria of coating shall be as per the surface quality specifications mentioned in MIL-O-13830A and MIL-O-13508C. Special care shall be taken to ensure uniformity of the mirror coating. An analysis on the uniformity of coating over the full aperture shall be provided. Impact of thickness variation, if any, shall also be included. The coating should not show any visible pinholes when viewed against a bright light source.

### 4.4 Deliverables

One set of deliverables consists of:

**Table 4.1: List of deliverable by supplier to SAC**

S.I.No	Deliverable	Quantity
1.	Scene simulator system (Structure + primary mirror +fold mirror + plate for mounting Target)	01 (One)
2.	Soft cover	02 (Two)
3.	Witness samples	2 pieces of 2 inch diameter with each coating batch with tests carried out as per Section 4.3
		2 additional untested witness

		samples coated in the same lot
4.	Contamination control samples	2 pieces of 2 inch diameter (one to accompany the primary mirror and one to accompany fold mirror)
5.	All documents and test reports.	01 set

Any specific component or set up specifically procured/developed for this project shall also be delivered to SAC. The list of such items shall be submitted to SAC at the earliest. All the documents required as per details given in section IV.

#### 4.5 Delivery Schedule and milestones

The supplier shall draw up the schedule for design, procurement, manufacturing and performance tests to commensurate with the delivery schedule as mentioned in Table 4.2.

**Table 4.2: Milestone and delivery schedule**

S No.	Milestone	Description	Time schedule
1	Preliminary design review	Design analysis as per Section IV, paragraph 4.1; Design data pertaining to compliance to all the specifications and requirements.	T0 +2 months
2	Critical design review	Delivery of factory test results including material properties, clear aperture, scratch/dig, surface figure interferometry, stress study and scene-simulator structure features verification per Section II & III .Test reports.	T0 + 10 months
3	Final shipment and installation	Delivery of scene-simulator system (Structure + primary mirror +fold mirror + plate for mounting Target) & deliverables as per Table 4.1	T0 +12 months

T0 = Date of establishment of LC.

#### 4.6 Installation and warranty

It is supplier's responsibility to show the performance at the individual level and integrated level of the system at supplier's location. Components should not show any visible sign of damage, like chipping of mirrors, damaged mounts or mechanical structure.

**Table 4.3: Table listing installation and warranty details**

S.I. NO	Parameter	Specification
1.	Installation	Assembly and installation of the scene simulator at SAC. Supplier to provide the minimum specification parameters that can be demonstrated at user's site.(mandatory)
2.	Warranty	One year from the date of installation at SAC. (mandatory)

#### 4.7 Packaging and Transportation

- Each optical component shall be packed carefully in order to protect it from damage during transit. Specific care has to be taken to protect the reflective coating on the mirrors. The complete assembly shall be packed in an appropriate transportation container which shall be resistant to mechanical shocks, vibration, humidity and dust during storage, handling and transportation.
- Contamination control provision also shall be provided. The documentation shall be enclosed in the shipping package.
- The supplier should provide storage and handling instructions for the equipment.

### Annexure 1

#### GUIDELINES FOR QUOTATION

1. The supplier should clearly mention the compliance/noncompliance (point by point compliance) to every section of the document. In case of the non-compliance to any section, the non-compliance should be explained clearly. Alterations if any shall be proposed and explained. Compliance to each section /parameter/specifications should be provided in tabular format with appropriate numbers.
2. The supplier should submit the write-up highlighting their expertise in the design and development of the similar equipment, the available facilities and the test details.
3. The technical and commercial quotations should be provided in separate sealed covers.
4. A pre bid meeting will be held to clarify any concerns bidders may have with respect to the scope of work and other details of the requirement.

#### Specification compliance matrix

**Table A.1: Section wise compliance table for Scene simulator**

Sl. No.	Section	Value	Comment	Compliance/ non-compliance	Remark
1.	1.1Introduction				
2.	1.2Scope				
3.	1.3Supplier's capability				
4.	1.4Suppliers Responsibility				
5.	1.5Applicable documents				
6.	2.1 Specifications of Mirrors and scene-simulator structure.				
7.	2.2 Other mandatory requirements.				
8.	2.3 Specification for the integrated scene-simulator assembly.				
9.	2.4 Other mandatory requirements for the scene-simulator structure.				
10.	3.1 Performance compliance requirements				

11.	3.2 Documentations to be supplied				
12.	4.1 Required Information				
13.	4.2 Materials				
14.	4.3 Coating				
15.	4.4 Deliverables				
16.	4.5 Delivery Schedule and milestones				
17.	4.6 Installation and warranty				
18.	4.7 Packaging and Transportation				

**Table A.2: Compliance table**

Sl. No.	Section	Comment	Compliance/ non-compliance	Remark
1.	Table 1.1: List of applicable documents.			
2.	Table 2.1: Optical specifications of parabolic primary mirror.			
3.	Table 2.2: Optical specifications of fold mirror.			
4.	Table 2.3: Optical and mechanical specifications of the scene-simulator system.			
5.	Table 3.1: Performance compliance matrix at component level.			
6.	Table 3.2: Performance compliance matrix at integrated level.			
7.	Table 4.1: List of deliverable by supplier to SAC.			
8.	Table 4.2: Milestone and delivery schedule.			
9.	Table 4.3: Table listing installation and warranty details.			

## Instructions for Two Part Tender

We are proposing to invite tenders in two parts viz.

- Part I : Technical and Commercial
- Part II: Price

All tenderers are requested to carefully follow the following instructions before preparing their offer.

### 1) Part I: Technical & Commercial Bid

#### Part - (a) Technical

1. This part should contain detailed specifications of the items quoted by you along with technical literature and leaflets if any.
2. A compliance statement showing the compliance of the item quoted by you with that of item tendered by us should be prepared and enclosed to this.
3. Any other information called for in the tender related technical and specifications can also come in this part.
4. Prices should not be indicated in this cover.

#### Part - (b) Commercial Terms: (Without Prices)

1. The commercial terms applicable for the item quoted by you should be indicated in this part.
2. If any compliance statement is called for the commercial terms / contractual terms and conditions, the same is to be attached in this part.
3. Prices should not be indicated in this part. However a copy of the price bid (without prices) can be enclosed in this part to enable to understand whether all the items required to be quoted by you have been quoted in the price bid. Alternatively a statement is to be made indicating that you have quoted prices for all the items as per the tender and enclosed in the Price Bid as per the format.
4. The Commercial terms such as delivery terms, delivery period, payment terms, Warranty, validity of the offer, installation & commissioning, duties and taxes etc., shall come into this.

Notes:

1. Either Technical Specifications or terms & conditions as above should be very clearly reflected item-wise with reference to the items called for in the tender.
2. Please note that the **PRICE SHOULD NOT BE** indicated in this part.
3. Technical and Commercial part as described above shall be prepared and put it in a sealed cover & super scribed and addressed as follows:

Tender No. :

Due Date :

**PART I : Technical & Commercial Bid**

**The Sr. Head Purchase & Stores  
Space Applications Centre  
Ambawadi Vistar P.O.  
Ahmedabad - 380 015**

From:

**2) Part II: Price Bid**

1. The prices applicable for the items, item-wise in response to the tender shall come into this part.
2. Tenderer shall indicate very clearly item-wise prices with reference to their technical offer.
3. Price part prepared as above shall be enveloped and superscribed as follows:

Tender No. :	
Due Date :	
<b>PART II :</b>	<b>Price Bid</b>
	<b>The Sr. Head Purchase &amp; Stores</b>
	<b>Space Applications Centre</b>
	<b>Ambawadi Vistar P.O.</b>
	<b>Ahmedabad - 380 015</b>
From :	

- 3) The Technical & Commercial envelope (Part I) and Price cover (Part II) prepared as above along with 'Tender fee cover' (if applicable) should be inserted in another envelope and superscribed as follows:**

Tender No. :	
Due Date :	
	<b>Part I &amp; Part II are individually sealed and kept inside:</b>
	<b>(DD towards tender fee also is kept inside)</b>
	<b>The Sr. Head Purchase &amp; Stores</b>
	<b>Space Applications Centre</b>
	<b>Ambawadi Vistar P.O.</b>
	<b>Ahmedabad - 380 015</b>
From:	

**Important Notes:**

1. Being a Two-Part Tender, fax/mail quotations will not be accepted. Please ensure your offers are received by post before due date and time.
2. In case you are going to download the documents from our website and submitting the offer, you are requested to submit the demand draft towards Tender fee in a separate cover along with a covering letter duly superscribing on the cover "Tender fee in respect of Tender No. \_\_\_\_\_".
3. Quotations submitted contrary to above instructions are liable to be rejected.



**Compliance Statement required to be filled and enclosed along with the technical and commercial bid by the vendor.**

Sr. No.	Commercial terms	Compliance/Remarks/Comments by Vendor
1.	Delivery terms (Ex-works, FOB, FCA, etc.)	
	Purchaser is having an air consolidation contract and their freight forwarder will arrange to collect the consignment from your premises/will take the responsibility for onward transmission from the point of delivery as per INCOTERMS 2010. This is applicable for import cases.	
2.	Packing charges (inclusive/exclusive)	
3.	Delivery period (in weeks/months)	
4.	Payment terms: Our standard term is  Sight Draft (import)  Within 30 days from the date of acceptance (indigenous).	
5.	Country of origin To be declared in the invoice.	
6.	Name and address of the Indian Agent.(if any)	
7.	Percentage of agency commission included in the quoted price – payable in Indian Rupees only directly to the Indian Agent.	
8.	Validity of the offer Minimum of 120 days from the date of opening.	
9.	If you are an Indian Agent, please enclose the authorization letter of your Principal and confirm that whether you have enrolled with DGS&D as per rules.	
10.	In a tender, either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.	
11.	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.	
12.	Cost of spares Included in the price bid / not included.	
13.	Will you be able to provide consumables/spares for 10 years?	
14.	Taxes and duties :  Taxes in India to the account of Purchaser. Outside India to Seller's/Contractor's account. Please indicate your Tax Registration Number.  Wherever installation involved, Income Tax @ 2% will be deducted from the bill and a certificate issued.  Installation in India will attract Service Tax @ 12.36%. If required, orders for supply and installation can be issued separately.  Work order will attract work contract tax as per rules. Please confirm whether you have included WCT in your offer.	

	<p>Customs Duty Exemption Certificate (CDEC) will be issued by Purchaser. Hence no CD is to be included in your offer wherever applicable.</p> <p>Please indicate rate of the Sales Tax/VAT applicable.</p> <p>Octroi Duty/Entry Tax exempted. Exemption certificate will be issued, if required.</p> <p>Purchaser is eligible for full Excise Duty exemption. Excise Duty exemption certificate will be issued.</p>	
15.	No Insurance is required at Purchaser's cost.	
16.	<p>For two part bids two separate sealed envelopes are to be sent duly superscripted as follows :</p> <ol style="list-style-type: none"> <li>1. Technical &amp; Commercial Bid</li> <li>2. Price Bid</li> </ol> <p>Please refer instructions.</p>	
17.	<p>Wherever EMD/tender fee is payable Provide the same in the form of crossed Demand Draft in favour of The Accounts Officer, SAC, Ahmedabad along with the bid but in a separate cover or along with technical bid.</p> <p>On the back side of the D.D, please write your company's name.</p>	
18.	Language to be used in all correspondence - English	
19.	Measurements - Metric system to be followed	
20.	Whether prequalification of your facility procedure completed (if applicable).	
21.	<p>Warranty period</p> <p>We need minimum 3 years from the date of acceptance. In case the product has a standard warranty of 1 year, confirm that additional 2 years warranty cost is indicated in the price bid/prices.</p> <p>However the warranty requirement if projected in RFP shall prevail.</p>	
22.	Defective/rejected items if any, are to be replaced free of cost.	
23.	Confirm whether you will be able to provide samples if called for, free of cost.	
24.	Approximate weight (net and gross) of the consignment.	
25.	Instruction/operational manual to be supplied free of cost.	
26.	Supply and installation is subject to Purchaser's acceptance.	
27.	LC extension charges to your account, in case of delay from your side.	
28.	Items from latest production batch only are to be supplied.	
29.	Wherever Export Licence required, payment will be made after getting export licence and after confirmation by the supplier, with a copy of Export Licence.	
30.	<p>Bank Guarantees (from Nationalised/ Scheduled Bank/ Bank approved by Purchaser.</p> <p>Advance payment for the equal value valid till the completion of contract/acceptance, is to be provide by you.</p> <p>Towards issue of "Free Issue Material" by Purchaser for the value of the material issued, is to be provided.</p>	

	<p>The Bill of material for the material used for the Fabrication work and available balance to be prepared by you and countersigned by the User Department is to be sent along with the final bill for arranging the balance/payment.</p> <p>Towards Performance of the Contract and Product for 10% value valid till the expiry of warranty period.</p>	
31.	Security Deposit is to be submitted to SAC by the successful bidder (wherever applicable )on awarding the contract	
32.	Training - free of cost - to be Imparted at Purchaser's site.	
33.	Bank charges wherever applicable shall be paid by Purchaser/Contractor to their respective Bankers.	
34.	Arbitration proceedings Within India as per provisions of Arbitration and Conciliation Act 1996.	
35.	Liquidated Damages @ 0.5% per week for the delayed portion maximum 10% of the contract value.	
36.	Force Majeure conditions applicable?	
37.	<p>Acceptance of Fall clause.</p> <p>"The rates as per the charges of the Contract should not in any event exceed the lowest rates, the supplier charge to any other party or organization. If at any time during the period of contract, the supplier reduce the charges to any other party, then they shall forth-with notify such reduction to Sr. Head, Purchase &amp; Stores, SAC and reduce the contract rates subsequently, from the date of coming into force of such reduction".</p>	
38.	You are requested to indicate the registration number; you have for Sales Tax/Service Tax as the case may be with concerned Government authorities. Also you are requested to provide company registration details wherever applicable along with copy of the company registration certificate. The offers received without the above information will be summarily rejected.	



GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE  
PURCHASE DIVISION

**INSTRUCTIONS TO TENDERERS AND TERMS & CONDITIONS OF TENDER (Foreign)**

1. The Tenderers should submit quotations in sealed envelope, superscribing the Tender No. and due date of opening and complete in all respects with technical specifications, including pamphlets and catalogues. Separate instructions, if any in this regard should be strictly complied with.
2. A Proforma Invoice may also be given which should contain the following information:
  - a) The FOB/FCA value, for import by Sea freight / Air freight up to Ahmedabad and for air parcel post up to Ahmedabad should be separately indicated.
  - b) Agency Commission: The amount of commission included in the price and payable to the Indian Agent of the Contractor shall be paid directly to the Indian Agent by the Purchaser in equivalent Indian Rupees on the basis of an Invoice from him applying T.T. buying rate of exchange ruling on the date of placement of the Purchase Order and which shall not be subject to any further exchange variations. This payment will be released to the Indian Agent after receipt and acceptance the goods in India.
  - c) The Contractor shall invoice only for the net amount payable to him, after deducting the amount of Agency Commission included in the invoice which will be paid to the Indian Agent directly by the Purchaser: However, the Contractor's invoice should separately reflect the amount of commission payable to his Indian Agent.
  - d) The earliest delivery period and country of origin of the Stores.
  - e) Banker's name, address, telephone/fax Nos. & e-Mail ID of the Contractor.
  - f) The approximate net and gross weight and dimensions of packages / cases.
  - g) Recommended spares for satisfactory operation for a minimum period of one year beyond warranty.
  - h) Details of any technical service, if required for erection, assembly, commissioning and demonstration.
3. "Bidders shall submit an amount of **Rs.5,00,000/- (Rupees Five Lakhs only)** with the bid before the date of tender opening as stipulated in tender schedule towards Earnest Money Deposit(EMD)

The EMD shall be submitted in the form of DD/Banker's cheque/Bank Guarantee/Fixed Deposit Receipt (FDR) made in the name of Accounts Officer, Space Applications Centre, and be payable at par at Ahmedabad.

Bids received without EMD shall be treated as invalid and shall not be considered. In case of two-part (multi-part) tenders, EMD must be submitted either in separate sealed cover clearly marked as 'EMD against tender no. \_\_\_\_\_' or with technical bid, so that it should be available at the time of opening of the first part of bid document itself. Tenders not complying with this requirement shall be rejected.

The following categories of bidders shall be exempt from paying EMD subject to submission of appropriate documentary evidence with the bid in support thereof(if applicable)



- Vendors already registered / empanelled with SAC as authorized vendors.
- Overseas bidders submitting offers directly without involving an Indian Representative.
- Central PSUs/PSEs and autonomous bodies
- Micro and Small Enterprises
- Khadi and Village Industries Commission
- National Small Industries Corporation
- Any other establishments specifically exempted from paying EMD by an order of the Government of India.

The EMD of bidders who withdraw their bid during the tender evaluation process shall be forfeited. EMD of unsuccessful bidders shall be refunded without interest after the tender has been awarded, within 30 days of the award of the tender.

EMD of successful tenderer may be retained and converted to Security Deposit, if applicable.”

4. The FOB/FCA prices quoted should be inclusive of all taxes, levies, duties arising in the tenderer's country.
5. The offer should be valid for a minimum period of 90 days or longer if called for from the due date of opening of the tender.
6. Samples, if called for, should be sent free of all charges.
7. Late and delayed tenders will not be considered. Quotations by fax must be followed by detailed offers.
8. Offers made by Indian Agents on behalf of their Principals, should be supported by the proforma invoice of their Principals.
  - a) In a tender either the Indian Agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.
  - b) 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.
9. We are exempted from Customs/Excise Duties.
10. The details of Import Licence will be furnished in the Purchase Order.
11. The authority of person signing the tender, if called for, shall be produced.
12. Instructions / Operation Manual containing all assembly details including wiring diagrams should be sent wherever necessary in duplicate. All documents / correspondence should be in English language only.



13. The Purchaser reserves the right to accept or reject the lowest or any offer in whole or part without assigning any reason.
14. It is expressly agreed that the acceptance of the Stores Contracted for is subject to final approval in writing by the Purchaser.
15. a) Part shipment is not allowed unless specifically agreed to by us.  
b) As far as possible stores should be despatched by Indian Flag Vessels / Air India through an Agency nominated by us.
16. Inspection / Test Certificate should be provided for the goods after testing it thoroughly at the Contractor's works. If any Inspection by Lloyds or any other testing agency is considered necessary, it shall be arranged by Contractor.
17. Where erection or assembly or commissioning is a part of the Contract, it should be done immediately on notification. The Contractor shall be responsible for any loss/damage sustained due to delay in fulfilling this responsibility.
18. For items having shelf life, those with maximum shelf life should be supplied if order is placed.
19. No request for extension for due date for submission of tenders will be entertained.
20. Unsigned quotations will be rejected.
21. In case, the vendors are falling under the category of MSME, registered under NSIC and would like to avail exemptions, their quotations should be accompanied with necessary registration certificate with declaration to consider their offer. Quotation received without such declaration and valid registration certificate will not be considered for exemptions under Public Procurement Policy.
22. "In case the bidders propose any other payment terms in deviation with the standard terms mentioned above, it may be noted that applicable cash flow implications will be loaded on the prices quoted for commercial comparison of the offers. If advance payments are insisted by the bidders, Interest at the rate of MCLR (Marginal Cost Linked Rate) as notified by State Bank of India from time to time shall be loaded on the prices for price comparison."

## **TERMS AND CONDITIONS**

### **1. DEFINITIONS:**

- (a) The term 'Purchaser' shall mean the President of India or his successors or assignees.
- (b) The term 'Contractor' shall mean, the person, firm or company with whom or with which the order for the supply of stores is placed and shall be deemed to include the Contractor's Successors, representatives, heirs, executors and administrators unless excluded by the Contract.
- (c) The term 'Purchase Order' shall mean the communication signed on behalf of the Purchaser by duly authorised officer intimating the acceptance on behalf of the Purchaser on the terms and conditions mentioned or referred to in the said communication accepting the Tender or offer of the Contractor for supply of stores, plant, machinery or equipment or part thereof.
- (d) The term 'Stores' shall mean what the Contractor agrees to supply under the Contract as specified in the Purchase Order.



## **2. PRICES:**

Tenders offering firm prices will be preferred. Where a price variation clause is insisted upon by tenderer, quotations with a reasonable ceiling should be submitted. Such offers should invariably be supported by the base price taken into account at the time of tendering and also the formula for any such variations. However, such clauses will be subject to final acceptance by Purchaser.

## **3. TERMS OF PAYMENT:**

3.1 Being a Department of the Government of India, the normal terms of payment are by Sight Draft. However other terms of payment like establishment of Letter of Credit may be considered by the Purchaser on such terms and conditions as may be agreed upon.

3.2 The Sight Draft / Letter of Credit will be operative on presentation of the under mentioned documents:

- a) Original Bill of Lading / Airway Bill
- b) Commercially certified invoices in triplicate, describing the stores delivered, quantity, unit rate and their total value. The invoice should indicate discounts, and Agency Commission if any separately.
- c) Packing List showing individual dimensions and weight of packages.
- d) Country of Origin Certificate in duplicate.
- e) Test Certificate.
- f) Declaration by the Seller that the contents in each case are not less than those entered in the invoices and the quality of the Stores are guaranteed as per the specifications asked for by the Purchaser.
- g) Warrantee and guarantee Certificate/s vide Clause 20 herein below

## **4. IMPORT LICENCE:**

Reference to Import License No. & date and Contract number & date shall be prominently indicated in all the documents vide Para 3.2.

## **5. DEMURRAGE:**

Supplier shall bear demurrage charges, if any, incurred by the Purchaser due to delayed presentation of shipping documents as prescribed in Para 3.2 to the bankers beyond a reasonable time (say within 10-12 days) from the date of bill of lading for sea consignments and within 3-4 days from the date of Air Way Bill for air consignments.

## **6. ADDRESS OF INDIAN AGENT:**

.....

## **7. GUARANTEED TIME OF DELIVERY:**

The time for and the date of delivery stipulated in the Purchase Order shall be deemed to be the essence of the Contract. Delivery must be completed within the date specified therein.



**8. INSPECTION AND ACCEPTANCE TESTS:**

- 8.1 The Purchaser's representatives shall also be entitled at all reasonable times during manufacture to inspect, examine and test on the Contractor's premises the material and workmanship of all stores to be supplied under the Contract and if part of the said stores is being manufactured on other premises, the Contractor shall obtain for the Purchaser's representative permission to inspect, examine and test as if the equipment were being manufactured on the Contractor's premises. Such inspection, examination and testing shall not release the Contractor from the obligations under this Contract.
- 8.2 For tests on the premises of the Contractor or of any of his sub-Contractors, the Contractor shall provide free of cost assistance, labour, material, electricity, fuel and instruments as may be required or as may be reasonably needed by the Purchaser's representative to carry out the tests efficiently.
- 8.3 When the stores have passed the specified test, the Purchaser's representative shall furnish a certificate to the effect in writing to the Contractor. The Contractor shall provide copies of the test/s certificates to the Purchaser as may be required.

**9. MODE OF DESPATCH:**

Generally, stores should be despatched through Indian Flagged Vessel / Air India or through any other Agency nominated by the Purchaser. A copy of the invoice and packing list should invariably be kept inside each of the packages.

**10. PORT OF ENTRY:**

FOR AIR SHIPMENTS: AHMEDABAD (Via Mumbai, if required)  
FOR SEA SHIPMENTS: NHAVASHEVA/Mumbai Seaport

**11. CONSIGNEE:**

Sr. Purchase & Stores Officer,  
Central Stores,  
Space Applications Centre (SAC),  
Ahmedabad

**12. SHIPPING MARKS:**

The mark on the shipping documents such as invoice, bill of lading and on the packages should be as follow:

PURCHASE ORDER NO. ....  
DATED .....

GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE

Destination: ..... &  
Port of Entry: .....

**13. INSURANCE OF THE STORES:**





The necessity or otherwise of insurance will be as indicated in the Purchase Order.

**14. CONTRACTOR'S DEFAULT LIABILITY:**

14.1 The Purchaser may upon written notice of default to the Contractor terminate the Contract in whole or in part in circumstances detailed hereunder:

- a) If in the judgement of the Purchaser the Contractor fails to make delivery of Stores within the time specified in the Contract/agreement or within the period for which extension has been granted by the Purchaser to the Contractor.
- b) If in the judgment of the Purchaser the Contractor fails to comply with any of the other provisions of this Contract.

15. In the event the Purchaser terminates the Contract in whole or in part as provided in Clause 14 the Purchaser reserves the right to Purchase, upon such terms and in such a manner as he may deem appropriate, stores similar to that terminated and the Contractor shall be liable to the Purchaser for any additional costs for such similar stores and/or for liquidated damages for delay as defined in Clause 19 until such reasonable time as may be required for the final supply of stores.

15.1 If this Contract is terminated as provided in Clause 14 the Purchaser in addition to any other rights provided in this Article, may require the Contractor to transfer title and deliver to the Purchaser under any of the following clauses in the manner and as directed by the Purchaser:

- a) Any completed stores.
- b) Such partially completed stores, drawing, information and Contract rights (hereinafter called manufacturing material) as the Contractor has specifically produced or acquired for the performance of the Contract as terminated. The Purchaser shall pay to the Contractor the Contract price for completed stores delivered to and accepted by the Purchaser and for manufacturing material delivered and accepted.

15.2 In the event the Purchaser does not terminate the Contract as provided in Clause 14, the Contractor shall continue the performance of the Contract in which case he shall be liable to the Purchaser for liquidated damages for delay as set out in Clause 19 until the stores are accepted.

**16. REPLACEMENT:**

If the stores or any portion thereof is damaged or lost during transit, the Purchaser shall give notice to the Contractor setting forth particulars of such stores damaged or lost during transit. The replacement of such stores shall be effected by the Contractor within a reasonable time to avoid unnecessary delay in the intended usage of the Stores. In case the Purchaser agrees, the price towards replacement items shall be paid by the Purchaser on the basis of original price quoted in the tender or as reasonably worked out from the tender.

**17. REJECTION:**

In the event that any of the stores supplied by the Contractor is found defective in material or workmanship or otherwise not in conformity with the requirements of the Contract specifications, the Purchaser shall either reject the stores or request the



Contractor, in writing, to rectify the same. The Contractor, on receipt of such notification, shall either rectify or replace the defective stores free of cost to the Purchaser. If the Contractor fails to do so, the Purchaser may at his option either:

- a) Replace or rectify such defective stores and recover the extra cost so involved from the Contractor, or
- b) Terminate the Contract for default as provided under Clause 14 above, or
- c) Acquire the defective stores at a reduced price considered equitable under the circumstances. The provision of this article shall not prejudice any other rights of Purchaser's under the Contract including recovery of liquidated damages for delay.

**18. EXTENSION OF TIME:**

If the completion of supply of stores is delayed due to reasons of *force majeure* such as acts of god, acts of public enemy, acts of Government, fires, floods, epidemics, quarantine restriction, strikes, freight embargoes, etc., the Contractor shall give notice within 15 days to the Purchaser in writing of his claim for an extension of time. The Purchaser on receipt of such notice after verification, if necessary, may agree to extend the Contract delivery date as may be reasonable but without prejudice to other terms and conditions of the Contract.

**19. DELAY IN COMPLETION / LIQUIDATED DAMAGES:**

If the Contractor fails to deliver the stores within the time specified in the Contract or any extension thereof, the Purchaser shall recover from the Contractor as liquidated damages a sum of one-half of one percent (0.5%) of the Contract price of the undelivered stores for each calendar week of delay. The total liquidated damages shall not exceed ten percent (10 %) of the Contract price of the portion of stores so delayed. Stores will be deemed to have been delivered only when all their component parts are also delivered. If certain components are not delivered in time, the stores will be considered as delayed until such time as the missing parts are delivered.

**20. GUARANTEE & REPLACEMENT:**

- a) The Contractor shall guarantee that the stores supplied shall comply fully with the specifications laid down for material, workmanship and performance.
- b) For a period of twelve months (or such period as agreed upon by the parties) after the acceptance of the stores, if any defects are discovered therein or any defects therein are found to have developed under proper use arising from faulty materials, design or workmanship, the Contractor shall remedy such defects at his own cost provided he is called upon to do so within a period of 14 months (or such period as specified in Contract) from the date of acceptance thereof by the Purchaser who shall state in writing in what respect the stores or any parts thereof are faulty.
- c) If in the opinion of the Purchaser it becomes necessary to replace or renew any defective stores, such replacements or renewals shall be made by the Contractor free of all costs to the Purchaser provided the notice informing the Contractor of the defect is given by the Purchaser in this regard within the said period of 14



months (or such period as specified in Contract) from the date of acceptance thereof.

- d) Should the Contractor fail to rectify the defects, the Purchaser shall have the right to reject or repair or replace at the cost of the Contractor the whole or any portion of the defective stores.
- e) The decision of the Purchaser, notwithstanding any prior approval or acceptance or inspection thereof on behalf of the Purchaser, as to whether or not the stores supplied by the Contractor are defective or any defects has developed within the said period of 12 months (or such agreed period) or as to whether the nature of the defects requires renewal or replacement shall be final, conclusive and binding on the Contractor.
- f) To fulfill guarantee conditions outlined in Clause 20 (a) to (e) above, the Contractor shall, at the option of the Purchaser, furnish a Bank Guarantee (as prescribed by the Purchaser - Bank Guarantee format enclosed) from a Bank approved by the Purchaser for an amount equivalent to 10% of the value of the Contract along with first shipment documents. On the performance and completion of the Contract in all respects, the Bank Guarantee will be returned to the Contractor without any interest.
- g) All the replacement stores shall also be guaranteed for a period of 12 months from the date of arrival of stores at Purchaser's site.
- h) Even while the 12 months guarantee applies to all stores, in case where a greater period is called for by our specifications, then such a specification shall apply, and in such cases, the period of 14 months referred to in Clause 20 (b) and (c) shall be asked for guarantee period plus two months.**

#### **21 REQUIREMENT OF ADDITIONAL NUMBERS OF THE STORES/SPARE PARTS ORDERED:**

The Contractor shall also undertake the supply of additional number of items covered by the order as considered necessary by the Purchaser at a later date, the actual price to be paid shall be mutually agreed to after negotiations.

#### **22. PACKING:**

- a) The Contractor wherever applicable shall pack and crate all stores for sea / air shipment as applicable in a manner suitable for export to a tropical humid climate, in accordance with internationally accepted export practices and in such a manner so as to protect it from damage and deterioration in transit by road, rail or sea for space qualified stores. The Contractors shall be held responsible for all damages due to improper packing.
- b) The Contractor shall ensure that each box / unit of shipment is legible and properly marked for correct identification. The failure to comply with this requirement shall make the Contractor liable for additional expenses involved.
- c) The Contractor shall notify the Purchaser of the date of shipment from the port of embarkation as well as the expected date of arrival of such shipment at the designated port of arrival.
- d) The Contractor shall give complete shipment information concerning the weight, size, content of each packages, etc.



- e) Transshipment of equipment shall not be permitted except with the written permission of the Purchaser.
- f) Apart from the despatch documents negotiated through Bank, the following documents shall also be airmailed to the Purchaser within 7 days from the date of shipment by sea and within 3 days in case of air-consignments:
  - a) Commercial Bill of Lading / Air Way Bill / Post parcel Receipt.  
(Two non-negotiable copies)
  - b) Invoice (3 copies)
  - c) Packing List (3 copies)
  - d) Test Certificate (3 copies)
  - e) Certificate of Origin.

The Contractor shall also ensure that one copy of the packing list is enclosed in each case.

**23. ARBITRATION:**

If at any time any question, dispute or difference whatsoever shall arise between the Purchaser and the Contractor upon or in connection with this Contract, either party may forthwith give to the other notice in writing of the existence of such question, dispute or difference and the same shall be referred to the adjudication of two arbitrators, one to be nominated by Purchaser, other by a Contractor and in the event of any difference of opinion, the arbitrators will refer the matter to the umpire. The arbitration shall be conducted in accordance with the rules and procedure for arbitration of the International Chamber of Commerce at Paris. The expenses of the arbitrators and umpire shall be paid as may be determined by them. However, the venue of such arbitration should be in India.

**24. LANGUAGE AND MEASURES:**

All documents pertaining to the Contract including specification, schedule, notice, correspondence, operating and maintenance instructions, drawings or any other writings shall be written in English language. The metric system of measurement shall be used exclusively in the Contract.

**25. INDEMNITY:**

The Contractor shall warrant and be deemed to have warranted that all Stores supplied against this Contract are free and clean of infringement of any patent, copyright or trade mark and shall at all times indemnify the Purchaser against all claims which may be made in respect of stores for infringement of any right protected by Patent, Registration of design or Trade Mark, and shall take all risk of accident or damage which may cause a failure of the supply from whatever cause arising and the entire responsibility for the sufficiency of all the means used by him for the fulfilment of the Contract.

**26. COUNTER TERMS AND CONDITIONS OF SUPPLIERS:**

Where counter terms and conditions/printed or cyclostyled conditions have been offered by the bidder, the same shall not be deemed to have been accepted by the Purchaser unless specific written acceptance thereof is obtained.



**27. SECURITY INTEREST:**

On each item to be delivered under this Contract, including an item of work in progress in respect of which payments have been made in accordance with the terms of the Contract, Purchaser shall have a security interest in such items which shall be deemed to be released only at the time when the applicable deliverable item is finally accepted and delivered to the Purchaser in accordance with the terms of the Contract. Such security interest of the Purchaser shall constitute a prior charge as against any other charge or interest created in respect of such items by any entity.

**28. BANK CHARGES:**

While the Purchaser shall bear the bank charge payable to his Bankers (State Bank of India), the Contractor shall bear the Bank charges payable to his Bankers including the cheques towards advising amendment commissions.

**29. TRAINING:**

The Contractor shall, if required by the Purchaser, provide facilities for the practical training of Purchaser's engineering / technical personnel from India and for their active association on the manufacturing processes throughout the manufacturing period of the Contract / stores. Number of such personnel to be mutually agreed upon.

**30. APPLICABLE LAW:**

The Contract shall be interpreted, construed and governed by the laws of India.

**PACKING INSTRUCTIONS**

1. In tune with the requirement of international plant protection convention of the FAO, UN the following has become mandatory with immediate effect.
2. All packing materials of any kind of plant origin used for packing shall require treatment including heat-kiln treatment at 56 degree centigrade for a minimum of 30 hours of methylbromide fumigation at 48g/cum for 32 hours of chemical impregnation as per international standards.
3. If the consignments are sent without the aforesaid certificate, all demurrages and other charges for treatment etc. will be to the account of the suppliers.
4. This aspect also should be taken care of while submitting the offers.
5. If the packaging material being used for your product does not come under the category "material of plant origin" (i.e. Leaves, grass, wood etc.) Please certify the same in your quote and ignore the above instructions. However, the same should be ascertained at the time of actual shipment if the order is awarded to you.

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**STANDARD TENDER FORM**  
(Seal of the Company)

Tender No.: .....  
Due on: .....  
Ref. No.: .....  
Date: .....

**TENDER FORM**

From: .....  
.....  
.....

To: The Sr. /Purchase & Stores Officer,  
..... (Name of the Centre/Unit)  
.....

Dear Sir,

I/We hereby offer to supply the stores detailed below at the price hereunder quoted and agree to hold this offer open till..... I/we shall be bound to supply the stores hereby offered upon the issue of the Purchase Order communicating the acceptance thereof on or before the expiry of the last mentioned date. You are at liberty to accept any one or more of the items of stores tendered for or any portion of any one or more of the items of such stores. I/We, notwithstanding that the offer in this tender has not been accepted in whole, shall be bound to supply to you such items and such items and such portion or portions of one or more of the items as may be specified in the said Purchase Order communicating the acceptance:

Sl. No.	Description	Quantity	Unit	Rate Rs.	Delivery Date

**Note: All the rates should be given both in figures and words**

Place at which delivery will be made	
Date by which the ordered item/s will be supplied	

2. I/We have understood the items of the tender annexed to the invitation to tender and have thoroughly examined the specifications/drawing and/or pattern quoted or referred to herein and am/are fully aware of the nature of the stores required and my/our offer is to supply the stores strictly in accordance with the requirements subject to the terms and conditions stipulated in the enquiry and contained in the Purchase Order communicating the acceptance of this tender either in whole or in part.

Signature of Tenderer

Date: .....

भारत सरकार  
अंतरिक्ष विभाग  
अंतरिक्ष उपयोग केंद्र(इसरो)  
आंबावाडी विस्तार पी.ओ.  
अहमदाबाद - 380 015 (भारत)  
दूरभाष: +91-79-2691 3051/98  
फैक्स नं. : +91-79-2691 5835/02/48



Government of India  
Department of Space  
**SPACE APPLICATIONS CENTRE (ISRO)**  
Ambawadi Vistar P.O.  
Ahmedabad – 380 015 (INDIA)  
Telephone : +91-79 – 2691 3051/98  
Fax No. : +91-79 – 2691 5835 / 02 /48  
Email: publictender@sac.isro.gov.in

निविदा सूचना सं.: सैक/पीटी /08/2016-17  
Tender Notice No.: SAC/PT/08/2016-17

क्र. सं. Sr.No	निविदा नं. Tender No.	संक्षिप्त विवरण Brief Description	नियत तिथि (अपराह्न 3 बजे तक) Due on (Up to 3 pm)
8	AHSE 201600066701	Mentor Graphics PVS & Extract Software (Single Part)	22/08/2016

GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE  
AHMEDABAD 380 015, INDIA  
PURCHASE & STORES

Ph No: 079-2691 3067  
Fax 079-2691 5848/02/35

Date :14/07/2016

INVITATION TO TENDER

M/s

000000

Our Ref No : AHSE 2016-000667-01

Tender Due: 15:00 Hrs ISTon 22/08/2016

Opening : 15:00 Hrs ISTon 22/08/2016

Dear Sirs,

Please submit your sealed quotation , in the Tender Form enclosed here along with the descriptive catalogues / pamphlets /literature ,superscribed with Our Ref.No. and Due Date for the supply of the following items as per the terms & conditions mentioned in Annexure( Form No: As per Enclosure )

S.No.	Description of Items with Specifications	Unit	Quantity
1	Mentor Grapics PVS & Extract Sofftware. Detail Specification given in Attached Sheet.	No.	1

DELIVERY AT: SAC STORES

MODE OF DESPATCH ON SITE

DUTY EXEMPTIONS We are exempted from the payment of Custom & Excise Duty.

SPECIAL INSTRUCTIONS NIL

SPECIFIC TERMS As per Enclosure

**INSTRUCTIONS TO TENDERERS:**

1) Please furnish compliance to all the points of technical specifications and Commercial Compliance Statement along with your quote.



ANIL N VAIDYA  
PUR & STORES OFFICER

For and on behalf of the President of India  
The Purchaser



## Tender Specifications

Sr No	Tool Name / Features	Specification	Tools Brief
1	Mentor Graphics Calibre PVS (physical verification & synthesis) station SW	Calibre nmLVS-H Op SW	The Layout Versus Schematic (LVS) is the class of electronic design automation (EDA) verification software that determines whether a particular integrated circuit layout corresponds to the original schematic or circuit diagram of the design. Successful Design rule check (DRC) ensures that the layout conforms to the rules designed/required for faultless fabrication. Typical errors encountered during LVS include Shorts, Opens, Component Mismatches, Missing Components, Parameter Mismatches.
		Calibre nmLVS Ap SW	Layout Vs Schematic Checker – Flat design option. Flat design option enables user to design and edit to the lowest level of abstraction
		Calibre nmDRC Ap SW	Design Rules are a series of parameters provided by semiconductor manufacturers that enable the designer to verify the correctness of a mask set. Design rules are specific to a particular semiconductor manufacturing process. A design rule set specifies certain geometric and connectivity restrictions to ensure sufficient margins to account for variability in semiconductor manufacturing processes, so as to ensure that most of the parts work correctly. The main objective of design rule checking (DRC) is to achieve a high overall yield and reliability for the design. If design rules are violated the design may not be functional.
		Calibre nmDRC-H Op SW	Design Rule Checker – Hierarchical design option
		Calibre Interactive Ap SW	Integration with Cadence Virtuoso for Interactive Commanding. Calibre Interactive is the invocation GUI for Calibre DRC, LVS and xRC tools for physical verification and parasitic extraction.
		Calibre RVE/QDB-H Ap SW	Results Viewing Environment. It also has the capabilities to connect results from all Calibre tools back into the design or layout viewing environments for quick design closure.

2	Calibre xL Op SW		Inductance Extraction of the Analog Circuits. Calibre® xL enables full-chip, fast, and accurate extraction of frequency dependent loop inductance and loop resistance, and automatically accounts for return path change with frequency.
3	Calibre xRC Ap SW		RC Extraction of the Analog Circuits Calibre® xRC™ is a robust parasitic extraction tool that delivers accurate parasitic data for comprehensive and accurate post-layout analysis and simulation. Calibre xRC is able to extract interconnect parasitic hierarchically.
4	Calibre Real time		Real time Design Rule checker, Calibre® RealTime enables on-demand Calibre signoff design rule checking (DRC) for custom and analog/mixed-signal design flows, improving both design speed and the quality of results by providing immediate feedback on design rule violations and recommended rule compliance.
5	License	One, Perpetual, Floating	
6	Delivery Time	2 months from receiving the Purchase Order	
7	AMC	Vendor shall quote for comprehensive 1 year AMC support along with the Quoted tool price.	Vendor shall also provide price quote for additional 3 and 5 years of AMC.
	Training	Three Phase training: Basic, Intermediate & Advanced Training. (10 persons) Each Slot Training shall be at least last for 40 hours.	<ul style="list-style-type: none"> <li>• Each Phase will have three slots covering DRC, LVS and Parasitic Extraction.</li> <li>• Training should cover the advance features of each tool being Purchased</li> <li>• Training shall happen in SAC</li> <li>• Training shall be provided by Senior Experts at Mentor graphics.</li> <li>• Schedule for the training will be finalized mutually.</li> </ul>



**1 GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE  
PURCHASE DIVISION**

Tele No: 079-2691 3067 / Fax No: 079-2691 5848/02/35 / E-Mail ID: psoc@sac.isro.gov.in

**TENDER TERMS & CONDITIONS**

**INSTRUCTIONS TO TENDERERS**

1. Tenders should be sent in sealed envelopes super scribing the relevant tender No, and the due date of opening. Only one tender should be sent in each envelope. Unsigned bids shall be rejected.
2. Late tenders and delayed tenders will not be considered. Unsigned bids shall be rejected.
3. **Bidders shall submit an amount of ₹ 5,00,000/- with the bid / before the date of tender opening as stipulated in tender documents towards Earnest Money Deposit (EMD).**

The EMD shall be submitted in the form of DD/Banker's cheque/Bank Guarantee/Fixed Deposit Receipt (FDR) made in the name of Accounts Officer, Space Applications Centre, and be payable at par at Ahmedabad.

Bids received without EMD shall be treated as invalid and shall not be considered. In case of two-part (multi-part) tenders, EMD must be submitted either in separate sealed cover clearly marked as 'EMD against tender no. \_\_\_\_\_' or with technical bid, so that it should be available at the time of opening of the first part of bid documents itself. Tenders not complying with this requirement shall be rejected.

The following categories of bidders shall be exempted from paying EMD subject to submission of appropriate documentary evidence with the bid in support thereof (if applicable).

- ❖ Vendors already registered / empanelled with SAC as authorized vendors.
- ❖ Overseas bidders submitting offers directly without involving an Indian representative.
- ❖ Central PSUs/PSEs and autonomous bodies
- ❖ Micro and small Enterprises
- ❖ Khadi and Village Industries Commission
- ❖ National Small Industries Corporation
- ❖ Any other establishments specifically exempted from paying EMD by an order of the Government of India.

4. The EMD of bidders who withdraw their bid during the tender evaluation process shall be forfeited. EMD of unsuccessful bidders shall be refunded without interest after the tender has been awarded, within 30 days of the award of the tender.
5. Sales Tax and/or other duties/levies legally leviable and intended to be claimed should be distinctly shown separately in the tender.
6. As a Government of India Department, this office is exempted from payment of Octroi and similar local levies. Tenderers shall ensure that necessary Exemption Certificates are obtained by them from the Purchase Officer concerned to avoid any payment of such levies.
7. a) Your quotation should be valid for at least 90 days from the date of opening of the tender.  
b) Prices are required to be quoted according to the units indicated in the annexed tender form. When quotations are given in terms of units other than those specified in the tender form, relationship between the two sets of units must be furnished.
8. Preference will be given to those tenders offering supplies from ready stocks and on the basis of FOR destination/delivery at site.
9. (a) All available technical literature, catalogues and other data in support of the specifications and details of the items should be furnished along with the offer.  
(b) Samples, if called for, should be submitted free of all charges by the tenderer and the Purchaser shall not be responsible for any loss or damage thereof due to any reason whatsoever. In the event of non-acceptance of tender, the tenderer will have to remove the samples at his own expense.  
(c) Approximate net and gross weight of the items offered shall be indicated in your offer. If dimensional details are available the same should also be indicated in your offer.  
(d) **Specifications:** Stores offered should strictly conform to our specifications. Deviations, if any, should be clearly indicated by the tenderer in his quotation. The tenderer should also indicate the Make/Type number of the stores offered and provide catalogues, technical literature and samples, wherever necessary, along with the quotations. Test Certificates, wherever necessary, should be forwarded along with supplies. Wherever options have been called for in our specifications, the tenderer should address all such options. Wherever specifically mentioned by us, the tenderer could suggest changes to specifications with appropriate response for the same.

10. The Purchaser shall be under no obligation to accept the lowest or any tender and reserves the right of acceptance of the whole or any part of the tender or portions of the quantity offered and the tenderers shall supply the same at the rates quoted.
11. Corrections, if any, must be attested. All amounts shall be indicated both in words as well as in figures. Where there is difference between amount quoted in words and figures, amount quoted in words shall prevail.
12. The tenderer should supply along with his tender, the name of his bankers as well as the latest Income-Tax clearance certificate duly countersigned by the Income-Tax Officer of the Circle concerned under the seal of his office, if required by the Purchaser.
13. The Purchaser reserves the right to place order on the successful tenderer for additional quantity up to 25% of the quantity offered by them at the rates quoted.
14. The authority of the person signing the tender, if called for, should be produced.
15. We are exempted from the payment of Central Excise & Custom Duties vide notifications issued by Govt. of India.
16. In case, the vendors are falling under the category of MSME, registered under NSIC and would like to avail exemptions, their quotations should be accompanied with necessary registration certificate with declaration to consider their offer. Quotation received without such declaration and valid registration certificate will not be considered for exemptions under Public Procurement Policy.
17. No request for extension for due date for submission of tenders will be entertained.
18. **Quotations shall be submitted by the bidders only by post or by hand in sealed covers. Quotations received by Fax or email shall not be considered as valid offers and shall not be considered for evaluation.**

## TERMS & CONDITIONS

### 1. DEFINITIONS:

- (a) The term 'Purchaser' shall mean the President of India or his successors or assigns.
- (b) The term 'Contractor' shall mean, the person, firm or company with whom or with which the order for the supply of stores is placed and shall be deemed to include the Contractor's successors, representative, heirs, executors and administrators unless excluded by the Contract.
- (c) The term 'Stores' shall mean what the Contractor agrees to supply under the Contract as specified in the Purchase Order including erection of plants & machinery and subsequent testing, should such a condition is included in the Purchase Order.
- (d) The term 'Purchase Order' shall mean the communication signed on behalf of the Purchaser by an Officer duly authorised intimating the acceptance on behalf of the Purchaser on the terms and conditions mentioned or referred to in the said communication accepting the tender or offer of the Contractor for supply of stores or plant, machinery or equipment or part thereof.

**2. PRICES:** Tender offering firm prices will be preferred. Where a price variation clause is insisted upon by a tenderer, quotation with a reasonable ceiling should be submitted. Such offers should invariably be supported by the base price taken into account at the time of tendering and also the formula for any such variation/s.

**3. SECURITY DEPOSIT:** On acceptance of the tender, the Contractor shall, at the option of the Purchaser and within the period specified by him, deposit with him, in cash or in any other form as the Purchaser may determine, security deposit not exceeding ten percent of the value of the Contract as the Purchaser shall specify. If the Contractor is called upon by the Purchaser to deposit, 'Security' and the Contractor fails to provide the security within the period specified, such failure shall constitute a breach of the Contract, and the Purchaser shall be entitled to make other arrangements for the re-purchase of the stores Contracted at the risk of the Contractor in terms of Sub-Clause (ii) and (iii) of clause 10(b) hereof and/or to recover from the Contractor, damages arising from such cancellation.

### 4. GUARANTEE & REPLACEMENT:

- (a) The Contractor shall guarantee that the stores supplied shall comply fully with the specifications laid down, for material, workmanship and performance.
- (b) For a period of twelve months after the acceptance of the stores, if any defects are discovered therein or any defects therein found to have developed under proper use, arising from faulty stores design or workmanship, the Contractor shall remedy such defects at his own cost provided he is called upon to do so within a period of 14 months from the date of acceptance thereof by the Purchaser who shall state in writing in what respect the stores or any part thereof are faulty.
- (c) If, in the opinion of the Purchaser, it becomes necessary to replace or renew any defective stores such replacement or renewal shall be made by the Contractor free of all costs to the Purchaser, provided the

notice informing the Contractor of the defect is given by the Purchaser in this regard within the said period of 14 months from the date of acceptance thereof.

- (d) Should the Contractor fail to rectify the defects, the Purchaser shall have the right to reject or repair or replace at the cost of the Contractor the whole or any portion of the defective stores.
- (e) The decision of the Purchaser notwithstanding any prior approval or acceptance or inspection thereof on behalf of the Purchaser, as to whether or not the stores supplied by the Contractor are defective or any defect has developed within the said period of 12 months or as to whether the nature of the defects requires renewal or replacement, shall be final, conclusive and binding on the Contractor.
- (f) To fulfil guarantee conditions outlined in clause 4 (a) to (e) above, the Contractor shall, at the option of the Purchaser, furnish a Bank Guarantee (as prescribed by the Purchaser) from a Bank approved by the Purchaser for an amount equivalent to 10% of the value of the Contract along with first shipment documents. On the performance and completion of the Contract in all respects, the Bank Guarantee will be returned to the Contractor without any interest.
- (g) All the replacement stores shall also be guaranteed for a period of 12 months from the date of arrival of the stores at Purchaser's site.
- (h) Even while the 12 months guarantee applies to all stores, in case where a greater period is called for by our specifications then such a specification shall apply in such cases the period of 14 months referred to in para 4 (b) & (c) shall be the 'asked for' guarantee period plus two months.

**5. PACKING FORWARDING & INSURANCE:** The Contractor will be held responsible for the stores being sufficiently and properly packed for transport by rail, road, sea or air to withstand transit hazards and ensure safe arrival at the destination. The packing and marking of packages shall be done by and at the expense of the Contractor. The Purchaser will not pay separately for transit insurance, all risks in transit being exclusively of the Contractor and the Purchaser shall pay only for such stores as are actually received in good condition in accordance with the Contract.

**6. DESPATCH:** The Contractor is responsible for obtaining a clear receipt from the Transport Authorities specifying the goods despatched. The consignment should be despatched with clear Railway Receipt/Lorry Receipt. If sent in any other mode, it shall be at the risk of the Contractor. Purchaser will take no responsibility for short deliveries or wrong supply of goods when the same are booked on 'said to contain' basis. Purchaser shall pay for only such stores as are actually received by them in accordance with the Contract.

**7. TEST CERTIFICATE:** Wherever required, test certificates should be sent along with the despatch documents.

**8. ACCEPTANCE OF STORES:**

- (a) The stores shall be tendered by the Contractor for inspection at such places as may be specified by the Purchaser at the Contractor's own risk, expense and cost.
- (b) It is expressly agreed that the acceptance of the stores Contracted for, is subject to final approval by the Purchaser, whose decision shall be final.
- (c) If, in the opinion of the Purchaser, all or any of the stores do not meet the performance or quality requirements specified in the Purchase Order, they may be either rejected or accepted at a price to be fixed by the Purchaser and his decision as to rejection and the prices to be fixed shall be final and binding on the Contractor.
- (d) If the whole or any parts of the stores supplied are rejected in accordance with Clause No. 8 (c) above, the Purchaser shall be at liberty, with or without notice to the Contractor, to purchase in the open market at the expense of the Contractor stores meeting the necessary performance and quality Contracted for in place of those rejected, provided that either the purchase, or the agreement to purchase, from another supplier is made within six months from the date of rejection of the stores as aforesaid.

**9. REJECTED STORES:** Rejected stores will remain at destination at the Contractor's risk and responsibility. If instructions for their disposal are not received from the Contractor within a period of 14 days from the date of receipt of the advice of rejection, the Purchaser or his representative has, at his discretion, the right to scrap or sell or consign the rejected stores to Contractor's address at the Contractor's entire risk and expense, freight being payable by the Contractor at actuals.

**10. DELIVERY:**

- (a) The time for and the date of delivery of the stores stipulated in the Purchase Order shall be deemed to be the essence of the Contract and delivery must be completed on or before the specified dates.
- (b) Should the Contractor fail to deliver the stores or any consignment thereof within the period prescribed for such delivery, the Purchaser shall be entitled at his option either:

- (i) to recover from the Contractor as agreed liquidated damages and not by way of penalty, a sum of 0.5% per week of the price of any stores which the Contractor has failed to deliver as aforesaid or during which the delivery of such store may be in arrears subject to a minimum of 10%, or
- (ii) to purchase from elsewhere, without notice to the Contractor on the account and at the risk of the Contractor, the stores not delivered or others of a similar description (where others exactly complying with the particulars, are not, in the opinion of the Purchaser, readily procurable, such opinion being final) without cancelling the Contract in respect of the consignment (s) not yet due for delivery, or
- (iii) to cancel the Contract or a portion thereof and if so desired to purchase or authorise the purchase of stores not so delivered or others of a similar description (where others exactly if complying with the particulars are not, in the opinion of the Purchaser, readily procurable, such opinion final) at the risk and cost of the Contractor. In the event of action being taken under sub-clause (ii) & (iii) of clause 10 (b) above, the Contractor shall be liable for any loss which the Purchaser may sustain on that account, provided that the re-purchase or if there is an agreement to repurchase then such agreement is made within six months from the date of such failure. But the Contractor shall not be entitled to any gain on such re-purchase made against default. The manner and method of such re-purchase shall be at the discretion of the Purchaser, whose decision shall be final. It shall not be necessary for the Purchaser to serve a notice of such re-purchase on the defaulting Contractor. This right shall be without prejudice to the right of the Purchaser to recover damages for breach of Contract by the Contractor.

**11. EXTENSION OF TIME:** As soon as it is apparent that the Contract dates cannot be adhered to, an application shall be sent by the Contractor to the Purchaser. If failure, on the part of the Contractor, to deliver the stores in proper time shall have arisen from any cause which the Purchaser may admit as reasonable ground for an extension of the time (and his decision shall be final) he may allow such additional time as he considers it to be justified by circumstances, of the case without prejudice to the Purchaser's right to recover liquidated damages under clause 10 thereof.

**12. ERECTION OF PLANT & MACHINERY:** Wherever erection of a plant or machinery is the responsibility of the Contractor as per the terms of the Contract and in case the Contractor fails to carry out the erection as and when called upon to do so within the period specified by the Purchaser, the Purchaser shall have the right to get the erection done through any source of his choice. In such an event, the Contractor shall be liable to bear any additional expenditure that the Purchaser is liable to incur towards erection. The Contractor shall, however, not be entitled to any gain due to such an action by the Purchaser.

**13. PAYMENT:** Contractor's bill will be passed for payment only after the stores have been received, inspected and accepted by the Purchaser.

**14. MODE OF PAYMENT:** Normally payment will be made for the accepted stores within 30 days from the date of receipt of the materials.

**15. RECOVERY OF SUM DUE:** Whenever any claim for the payment of, whether liquidated or not, money arising out of or under this Contract against the Contractor, the Purchaser shall be entitled to recover such sum by appropriating in part or whole, the security deposited by the Contractor, if a security is taken against the Contract. In the event of the security being insufficient or if no security has been taken from the Contractor, then the balance or the total sum recoverable as the case may be, shall be deducted from any sum then due or which at any time thereafter may become due to the Contractor under this or any other Contract with the Purchaser. Should this sum be not sufficient to cover the full amount recoverable, the Contractor shall pay to the Purchaser on demand the remaining balance due. Similarly, if the Purchaser has or makes any claim, whether liquidated or not, against the Contractor under any other Contract with the Purchaser, the payment of all moneys payable under the Contract to the Contractor including the security deposit shall be withheld till such claims of the Purchaser are finally adjudicated upon and paid by the Contractor.

**16. INDEMNITY:** The Contractor shall warrant and be deemed to have warranted that all stores supplied against this Contract are free and clean of infringement of any Patent, Copyright or Trademark, and shall at all times indemnify the Purchaser against all claims which may be made in respect of the stores for infringement of any right protected by Patent Registration of design or Trade mark and shall take all risk of accidents or damage which may cause a failure of the supply from whatever cause arising and the entire responsibility for sufficiency of all means used by him for the fulfilment of the contract.

**17. ARBITRATION:** In the event of any question, dispute or difference arising under these conditions or any conditions contained in the Purchase Order or in connection with this Contract (except as to any matter the decision of which is specially provided for by these conditions), the same shall be referred to the sole arbitration



of the Head of the Purchase office or some other person appointed by him. It will be no objection that the arbitrator is a Government servant that he had to deal with matter to which the Contract relates or that in the course of his duties as Government servant he has expressed views on all or any other matters in dispute or difference. The award of the arbitrator shall be final and binding on the parties of this Contract.

If the arbitrator be the Head of the Centre/Unit –

- (i) In the event of his being transferred or vacating his office by resignation or otherwise, it shall be lawful for his successor-in-office either to proceed with reference himself, or to appoint another person as arbitrator, or
- (ii) In the event of his being unwilling or unable to act for any reason, it shall be lawful for the Head of the Centre/Unit to appoint another person as arbitrator. If the arbitrator be a person appointed by the Head of the Purchase Office – In the event of his dying, neglecting or refusing to act or resigning or being unable to act, for any reason, it shall be lawful for the Head of the Centre/Unit either to proceed with the reference himself or appoint another person as arbitrator in place of the outgoing arbitrator. Subject as aforesaid the Arbitration & Conciliation Act 1996 and the rules thereunder and any statutory modifications thereof for the time being in force shall be deemed to apply to the arbitration proceedings under this Clause. The Arbitrator shall have the power to extend with the consent of the Purchaser and the Contractor the time for making and publishing the award. The venue of arbitration shall be the place as Purchaser in his absolute discretion may determine. Work under the Contract shall, if reasonably possible, continue during arbitration proceedings. In the event of any dispute or difference relating to the interpretation and application for the provisions of the Contracts, such dispute or difference shall be referred by either party to Arbitration of one of the Arbitrations in the Department of Public Enterprises. The Arbitration Act 1996 shall not be applicable to arbitration under this clause. The award of the Arbitrator shall be binding upon the parties to the dispute provided however any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law & Justice, Government of India. The parties to the dispute will share equally, the cost of arbitration as intimated by Arbitrator.

- 18. COUNTER TERMS AND CONDITION OF SUPPLIERS:** Where counter terms and conditions printed or cyclostyled conditions have been offered by the supplier, the same shall not be deemed to have been accepted by the Purchaser, unless specific written acceptance thereof is obtained.
- 19. SECURITY FOR PURCHASE OF MATERIALS:** Successful tenderer will have to furnish in the form of a bank guarantee or any other form as called for by the Purchaser towards adequate security for the materials and properties provided by the Purchaser for the due execution of the Contract.
- 20.** We are exempted from the payment of Central Excise & Custom Duties vide notifications issued by Govt. of India.
- 21.** In case, the vendors are falling under the category of MSME, registered under NSIC and would like to avail exemptions, their quotations should be accompanied with necessary registration certificate with declaration to consider their offer. Quotation received without such declaration and valid registration certificate will not be considered for exemptions under Public Procurement Policy.
- 22. LIQUIDATED DAMAGES:** If the Contractor fail to deliver the stores or within time the period specified in the contract/ purchase order or any extension thereof, the Purchaser shall recover from the contractor as liquidity damages sum of one-half of one percent(0.5 percent) of the contract/ purchase order price of the stores for each calendar week of delay or part thereof. The total liquidated damages shall not exceed ten percent (10%) of the total contract/purchase order price.
- 23. PERFORMANCE BANK GUARANTEE:** To fulfil guarantee conditions, the Contractor shall, at the option of the Purchaser, furnish a Performance Bank Guarantee (as prescribed by the Purchaser) from a Nationalized Bank for an amount equivalent to 10% of the value of the Contract valid till the expiry of warranty period. On the performance and completion of the Contract in all respects, the purchase order will be returned to the Contractor without any interest.
- 24.** In case the bidders propose any other payment terms in deviation with the standard terms mentioned above, it may be noted that applicable cash flow implications will be loaded on the prices quoted for commercial comparison of the offers. If advance payments are insisted by the bidders, interest at the rate of MCLR (Marginal Cost Linked Rate) as notified by State Bank of India from time to time shall be loaded on the prices for price comparison.



## STANDARD TENDER FORM

(Seal of the Company)

Tender No.: .....

Due on: .....

Ref. No.: .....

Date: .....

### TENDER FORM

From: .....  
.....  
.....

To: The Sr. /Purchase & Stores Officer,  
..... (Name of the Centre/Unit)

.....

Dear Sir,

I/We hereby offer to supply the stores detailed below at the price hereunder quoted and agree to hold this offer open till..... I/we shall be bound to supply the stores hereby offered upon the issue of the Purchase Order communicating the acceptance thereof on or before the expiry of the last mentioned date. You are at liberty to accept any one or more of the items of stores tendered for or any portion of any one or more of the items of such stores. I/We, notwithstanding that the offer in this tender has not been accepted in whole, shall be bound to supply to you such items and such items and such portion or portions of one or more of the items as may be specified in the said Purchase Order communicating the acceptance:

Sl. No.	Description	Quantity	Unit	Rate Rs.	Delivery Date

**Note: All the rates should be given both in figures and words**

Place at which delivery will be made	
Date by which the ordered item/s will be supplied	

2. I/We have understood the items of the tender annexed to the invitation to tender and have thoroughly examined the specifications/drawing and/or pattern quoted or referred to herein and am/are fully aware of the nature of the stores required and my/our offer is to supply the stores strictly in accordance with the requirements subject to the terms and conditions stipulated in the enquiry and contained in the Purchase Order communicating the acceptance of this tender either in whole or in part.

Signature of Tenderer

Date: .....

(Seal)



**COMPLIANCE STATEMENT REQUIRED TO BE FILLED AND ENCLOSED  
ALONG WITH THE TECHNICAL AND COMMERCIAL BID BY THE VENDOR.**

Sr. No.	Commercial terms	Compliance
1.	Delivery terms – The items shall be offered on FOR destination basis. If vendors are offering any other terms, please specify the same.	
2.	Packing & Forwarding charges are inclusive or extra. If extra please specify percentage in the price offer.	
3.	Freight charges whether inclusive or extra. If extra Please specify percentage in price offer.	
4.	Delivery period – in weeks/months	
5..	<p>Payment terms :</p> <p>Our standard term is – 100% within 30 days of receipt and acceptance of the items at our site.</p> <p>If advance payments are insisted they can be considered only against submission of bank guarantee for the equivalent amount. Any milestone payments which do not result in receipt of material are considered as advance payments and Bank Guarantees must be submitted for the same for the equivalent value.</p> <p>(Note: Vendor should specify the relevant terms in the opposite column and also in the offer)</p>	
6.	<p>Taxes (VAT/SERVICE TAX): The % of applicable taxes shall be shown separately and should not be included in the price. If no such mention of % in the offer, it will be assumed that they are inclusive and no claim will be entertained later in this regards. TAX REGISTRATION NUMBER MUST BE INDICATED IN THE OFFER.</p>	
7.	<p>Duties:</p> <p>1) We are eligible for Excise duty exemption under notification No.15/2007 and we will provide exemption certificate at appropriate time on the request of the vendor.</p> <p>2) We are eligible for Customs duty exemption as per notification No.21/2002 wherever items are imported by the vendor on High Sea Sales basis. However entire responsibility of customs clearance and delivery at our site is the responsibility of the vendor at his cost.</p> <p>(Vendor should specify the requirement of such certificate in the offer. If no such reference is made in the offer the certificates will not be provided.)</p>	
8.	Validity of the offer should be minimum 90 days from the date of opening.	
9.	Whether Cost of spares are included in the price bid. If so list out such spares in the price bid.	
10.	Will you able to provide consumables/spares for 10 years.	
11.	Wherever installation involved, Income Tax @ 2% will be deducted from the bill and a certificate issued.	
12.	Work order will attract work contract tax as per rules. Please confirm whether you have included WCT in your offer.	
13.	Octroi Duty/Entry Tax exempted. Exemption certificate will be issued, if required.	

14.	No Insurance is required at Purchaser's cost.	
15.	For two part bids two separate sealed envelopes are to be sent duly superscribed as follows : 1. TECHNICAL & COMMERCIAL BID 2. PRICE BID Please refer instructions.	
16.	Wherever EMD/tender fee is payable – provide the same in the form of crossed Demand Draft in favour of The Accounts Officer, SAC, Ahmedabad along with the bid but in a separate cover or along with technical bid. On the back side of the D.D, please write your company's name.	
17.	Language to be used in all correspondence – English	
18.	Measurements – Metric system to be followed	
19.	Warranty period – Minimum 1 year. If our RFP calls for more period than above, the same warranty period should be offered. (Specify the period being offered.)	
20.	Performance Bank Guarantee: 10% of order value valid till warranty/guarantee period.	
21.	Defective/Rejected items if any, are to be replaced free of cost. On receipt of replacements, the defective items will be by vendor or sent to vendor at his cost.	
22.	Confirm whether you will be able to provide samples if called for, free of cost.	
23.	Approximate weight (net and gross) of the consignment.	
24..	Instruction/operational manual to be supplied free of cost.	
25.	Supply and installation is subject to Purchaser's acceptance.	
26.	Wherever supply of free issue material is involved as per RFP, vendor shall submit Bank Guarantee for value of such material	
27.	Security Deposit, if called for shall be submitted to SAC by the successful bidder in the form of bank guarantee or as requested in RFP.	
28.	Training – Free of cost to be imparted at Purchaser's site.	
29.	Bank charges wherever applicable shall be paid by Purchaser/Contractor to their respective Bankers.	
30.	Arbitration proceedings shall be as per provision of Arbitration and Conciliation Act 1996.	
31.	Delivery schedule (please specify the period as indicated in your offer and this period should meet with our RFP requirement, if any).	
32.	Liquidated Damages – In case of delay in delivery of material as per delivery schedule committed by vendor, Liquidated Damages @ 0.5% per week or part thereof on the undelivered portion subject to a maximum of 10% of the contract value.	

भारत सरकार  
अंतरिक्ष विभाग  
अंतरिक्ष उपयोग केंद्र(इसरो)  
आंबावाडी विस्तार पी.ओ.  
अहमदाबाद - 380 015 (भारत)  
दूरभाष: +91-79-2691 3051/98  
फैक्स नं. : +91-79-2691 5835/02/48



Government of India  
Department of Space  
**SPACE APPLICATIONS CENTRE (ISRO)**  
Ambawadi Vistar P.O.  
Ahmedabad – 380 015 (INDIA)  
Telephone : +91-79 – 2691 3051/98  
Fax No. : +91-79 – 2691 5835 / 02 /48  
Email: publictender@sac.isro.gov.in

निविदा सूचना सं.: सैक/पीटी /08/2016-17  
Tender Notice No.: SAC/PT/08/2016-17

क्र. सं. Sr.No	निविदा नं. Tender No.	संक्षिप्त विवरण Brief Description	नियत तिथि (अपराह्न 3 बजे तक) Due on (Up to 3 pm)
9	AHSE 201600066901	Cadence CIS ASIC EDA Tool(Single Part)	24/08/2016

GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE  
AHMEDABAD 380 015, INDIA  
PURCHASE & STORES

Ph No: 079-2691 3067  
Fax 079-2691 5848/02/35

Date :14/07/2016

INVITATION TO TENDER

M/s

000000

Our Ref No : AHSE 2016-000669-01

Tender Due: 15:00 Hrs ISTon 24/08/2016

Opening : 15:00 Hrs ISTon 24/08/2016

Dear Sirs,

Please submit your sealed quotation , in the Tender Form enclosed here along with the descriptive catalogues / pamphlets /literature ,superscribed with Our Ref.No. and Due Date for the supply of the following items as per the terms & conditions mentioned in Annexure( Form No: As per Enclosure )

S.No.	Description of Items with Specifications	Unit	Quantity
1	Cadence CIS ASIC EDA Tool. Detail Specification given in attached sheet.	No.	1

**DELIVERY AT:** SAC STORES

**MODE OF DESPATCH** ON SITE

**DUTY EXEMPTIONS** We are exempted from the payment of Custom & Excise Duty.

**SPECIAL INSTRUCTIONS** NIL

**SPECIFIC TERMS** As per Enclosure

**INSTRUCTIONS TO TENDERERS:**

1) Please furnish compliance to all the points of technical specifications and Commercial Compliance Statement along with your quote.

ANIL N VAIDYA  
PUR & STORES OFFICER

For and on behalf of the President of India  
The Purchaser

## Tender Specifications

Sr No	Tool Name / Features	Specification	Tool Description
1	Cadence Virtuoso Analog Design Environment – GXL	GXL	Analog Design Environment Provides basic platform for testing the circuit during early development, as well as various analysis such as Monte Carlo, Corner, Sensitivity, Reliability & Corner creation from statistical samples etc.
2	Cadence Virtuoso Schematic Editor – XL	XL	Analog Circuit Schematic Preparation tool. It interactively interfaces with cadence ADE, shows simulation results on circuit schematic window for ADE generated results.
3	Cadence Virtuoso Layout Suite – GXL	GXL	Layout Generation tool. It also enables routing, layout optimization, module generation, and analog/mixed-signal floor planning. It supports the physical implementation of analog, custom-digital, and mixed-signal designs at the device, cell, block, and chip level.
4	Cadence Spectre Multi-Mode Simulation	MMSIM with Ultraism, APS & XPS options, Mixed Mode & Digital Simulation options	Analog/Mixed Signal Simulator, Various analysis such as DC, AC, transient, Noise, transfer function, sensitivity, Monte Carlo, parametric analysis etc.
5	Cadence VDI	Including VDI-XL, Synthesis & Place & Route tool ( $\geq 300$ K Instance)	Digital RTL Synthesis & Place & Route tool, complete automatic system for RTL-to-GDSII block implementation
6	Cadence Tempus-L & Voltas-L	Including Power & Timing Signoff Analysis ( $\geq 300$ K Instance)	Timing & Power Analysis tool before signoff Tempus <ul style="list-style-type: none"> <li>• Static timing analysis with delay calculation and signal integrity effects</li> <li>• Noise glitch analysis</li> <li>• Distributed/concurrent multi-mode, multi-corner (MMMC) optimization</li> <li>• Cross-probing of timing paths from timing report to Virtuoso Layout Suite layout editor</li> <li>• Interactive engineering change order (ECO)</li> <li>• SDC lint checks</li> <li>• SDC policy checks, including hierarchical checks</li> <li>• SDC integration</li> </ul> Voltas

			Enables the debugging, verifying, and fixing IC chip power consumption, IR drop, and electro migration (EM) constraints and violations
7	Cadence Quantus QRC	Only Digital RC Extraction ( $\geq 300$ K Instance)	RC Extraction for the Digital Cells, Enables RC extraction at default prototyping stage, extraction at PR level, incremental extraction at sign-off level. Inductance extraction for both GDS and LEF/DEF flows
8	Cadence IES	Including IES-XL, HDL analysis & x Prop Add on	RTL HDL Simulator
9	Cadence Modus	DFT, ATPG ( $\geq 300$ K Instance)	Automatic Test Pattern Generator & Design for Test tool for IES
10	Cadence Conformal	Conformal LEC & CCD	Logic Equivalence Checking with the same types of design. It enables verifying and debugging multi-million-gate designs without using test vectors
11	License	One, Perpetual, Floating	
12	Delivery Time	2 months from receiving the Purchase Order	
13	AMC	Vendor shall quote for comprehensive 1 year AMC support along with the Quoted tool price.	Vendor shall also provide price quote for additional 3 and 5 years of AMC.
14	Training	Three Phase training: Basic, Intermediate & Advanced Training. (for 10 Person) Each Slot Training shall be done for at least 40 hours. Training shall happen in SAC & shall be provided by Senior Experts at Cadence. Schedule will be finalized mutually.	<ul style="list-style-type: none"> <li>• Each Phase Will have three slots covering Schematic &amp; Layout Design, MMSIM Simulation and Package Design.</li> <li>• Training should cover the advance features of each tool being Purchased</li> <li>• Training shall happen in SAC</li> <li>• Training shall be provided by Senior Experts at Cadence Design Inc.</li> <li>• Schedule for the training will be finalized mutually.</li> </ul>



**1 GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SPACE APPLICATIONS CENTRE  
PURCHASE DIVISION**

Tele No: 079-2691 3067 / Fax No: 079-2691 5848/02/35 / E-Mail ID: psoc@sac.isro.gov.in

**TENDER TERMS & CONDITIONS**

**INSTRUCTIONS TO TENDERERS**

1. Tenders should be sent in sealed envelopes super scribing the relevant tender No, and the due date of opening. Only one tender should be sent in each envelope. Unsigned bids shall be rejected.
2. Late tenders and delayed tenders will not be considered. Unsigned bids shall be rejected.
3. **Bidders shall submit an amount of ₹ 5,00,000/- with the bid / before the date of tender opening as stipulated in tender documents towards Earnest Money Deposit (EMD).**

The EMD shall be submitted in the form of DD/Banker's cheque/Bank Guarantee/Fixed Deposit Receipt (FDR) made in the name of Accounts Officer, Space Applications Centre, and be payable at par at Ahmedabad.

Bids received without EMD shall be treated as invalid and shall not be considered. In case of two-part (multi-part) tenders, EMD must be submitted either in separate sealed cover clearly marked as 'EMD against tender no. \_\_\_\_\_' or with technical bid, so that it should be available at the time of opening of the first part of bid documents itself. Tenders not complying with this requirement shall be rejected.

The following categories of bidders shall be exempted from paying EMD subject to submission of appropriate documentary evidence with the bid in support thereof (if applicable).

- ❖ Vendors already registered / empanelled with SAC as authorized vendors.
- ❖ Overseas bidders submitting offers directly without involving an Indian representative.
- ❖ Central PSUs/PSEs and autonomous bodies
- ❖ Micro and small Enterprises
- ❖ Khadi and Village Industries Commission
- ❖ National Small Industries Corporation
- ❖ Any other establishments specifically exempted from paying EMD by an order of the Government of India.

4. The EMD of bidders who withdraw their bid during the tender evaluation process shall be forfeited. EMD of unsuccessful bidders shall be refunded without interest after the tender has been awarded, within 30 days of the award of the tender.
5. Sales Tax and/or other duties/levies legally leviable and intended to be claimed should be distinctly shown separately in the tender.
6. As a Government of India Department, this office is exempted from payment of Octroi and similar local levies. Tenderers shall ensure that necessary Exemption Certificates are obtained by them from the Purchase Officer concerned to avoid any payment of such levies.
7. a) Your quotation should be valid for at least 90 days from the date of opening of the tender.  
b) Prices are required to be quoted according to the units indicated in the annexed tender form. When quotations are given in terms of units other than those specified in the tender form, relationship between the two sets of units must be furnished.
8. Preference will be given to those tenders offering supplies from ready stocks and on the basis of FOR destination/delivery at site.
9. (a) All available technical literature, catalogues and other data in support of the specifications and details of the items should be furnished along with the offer.  
(b) Samples, if called for, should be submitted free of all charges by the tenderer and the Purchaser shall not be responsible for any loss or damage thereof due to any reason whatsoever. In the event of non-acceptance of tender, the tenderer will have to remove the samples at his own expense.  
(c) Approximate net and gross weight of the items offered shall be indicated in your offer. If dimensional details are available the same should also be indicated in your offer.  
(d) **Specifications:** Stores offered should strictly confirm to our specifications. Deviations, if any, should be clearly indicated by the tenderer in his quotation. The tenderer should also indicate the Make/Type number of the stores offered and provide catalogues, technical literature and samples, wherever necessary, along with the quotations. Test Certificates, wherever necessary, should be forwarded along with supplies. Wherever options have been called for in our specifications, the tenderer should address all such options. Wherever specifically mentioned by us, the tenderer could suggest changes to specifications with appropriate response for the same.

10. The Purchaser shall be under no obligation to accept the lowest or any tender and reserves the right of acceptance of the whole or any part of the tender or portions of the quantity offered and the tenderers shall supply the same at the rates quoted.
11. Corrections, if any, must be attested. All amounts shall be indicated both in words as well as in figures. Where there is difference between amount quoted in words and figures, amount quoted in words shall prevail.
12. The tenderer should supply along with his tender, the name of his bankers as well as the latest Income-Tax clearance certificate duly countersigned by the Income-Tax Officer of the Circle concerned under the seal of his office, if required by the Purchaser.
13. The Purchaser reserves the right to place order on the successful tenderer for additional quantity up to 25% of the quantity offered by them at the rates quoted.
14. The authority of the person signing the tender, if called for, should be produced.
15. We are exempted from the payment of Central Excise & Custom Duties vide notifications issued by Govt. of India.
16. In case, the vendors are falling under the category of MSME, registered under NSIC and would like to avail exemptions, their quotations should be accompanied with necessary registration certificate with declaration to consider their offer. Quotation received without such declaration and valid registration certificate will not be considered for exemptions under Public Procurement Policy.
17. No request for extension for due date for submission of tenders will be entertained.
18. **Quotations shall be submitted by the bidders only by post or by hand in sealed covers. Quotations received by Fax or email shall not be considered as valid offers and shall not be considered for evaluation.**

## TERMS & CONDITIONS

### 1. DEFINITIONS:

- (a) The term 'Purchaser' shall mean the President of India or his successors or assigns.
- (b) The term 'Contractor' shall mean, the person, firm or company with whom or with which the order for the supply of stores is placed and shall be deemed to include the Contractor's successors, representative, heirs, executors and administrators unless excluded by the Contract.
- (c) The term 'Stores' shall mean what the Contractor agrees to supply under the Contract as specified in the Purchase Order including erection of plants & machinery and subsequent testing, should such a condition is included in the Purchase Order.
- (d) The term 'Purchase Order' shall mean the communication signed on behalf of the Purchaser by an Officer duly authorised intimating the acceptance on behalf of the Purchaser on the terms and conditions mentioned or referred to in the said communication accepting the tender or offer of the Contractor for supply of stores or plant, machinery or equipment or part thereof.

**2. PRICES:** Tender offering firm prices will be preferred. Where a price variation clause is insisted upon by a tenderer, quotation with a reasonable ceiling should be submitted. Such offers should invariably be supported by the base price taken into account at the time of tendering and also the formula for any such variation/s.

**3. SECURITY DEPOSIT:** On acceptance of the tender, the Contractor shall, at the option of the Purchaser and within the period specified by him, deposit with him, in cash or in any other form as the Purchaser may determine, security deposit not exceeding ten percent of the value of the Contract as the Purchaser shall specify. If the Contractor is called upon by the Purchaser to deposit, 'Security' and the Contractor fails to provide the security within the period specified, such failure shall constitute a breach of the Contract, and the Purchaser shall be entitled to make other arrangements for the re-purchase of the stores Contracted at the risk of the Contractor in terms of Sub-Clause (ii) and (iii) of clause 10(b) hereof and/or to recover from the Contractor, damages arising from such cancellation.

### 4. GUARANTEE & REPLACEMENT:

- (a) The Contractor shall guarantee that the stores supplied shall comply fully with the specifications laid down, for material, workmanship and performance.
- (b) For a period of twelve months after the acceptance of the stores, if any defects are discovered therein or any defects therein found to have developed under proper use, arising from faulty stores design or workmanship, the Contractor shall remedy such defects at his own cost provided he is called upon to do so within a period of 14 months from the date of acceptance thereof by the Purchaser who shall state in writing in what respect the stores or any part thereof are faulty.
- (c) If, in the opinion of the Purchaser, it becomes necessary to replace or renew any defective stores such replacement or renewal shall be made by the Contractor free of all costs to the Purchaser, provided the



notice informing the Contractor of the defect is given by the Purchaser in this regard within the said period of 14 months from the date of acceptance thereof.

- (d) Should the Contractor fail to rectify the defects, the Purchaser shall have the right to reject or repair or replace at the cost of the Contractor the whole or any portion of the defective stores.
- (e) The decision of the Purchaser notwithstanding any prior approval or acceptance or inspection thereof on behalf of the Purchaser, as to whether or not the stores supplied by the Contractor are defective or any defect has developed within the said period of 12 months or as to whether the nature of the defects requires renewal or replacement, shall be final, conclusive and binding on the Contractor.
- (f) To fulfil guarantee conditions outlined in clause 4 (a) to (e) above, the Contractor shall, at the option of the Purchaser, furnish a Bank Guarantee (as prescribed by the Purchaser) from a Bank approved by the Purchaser for an amount equivalent to 10% of the value of the Contract along with first shipment documents. On the performance and completion of the Contract in all respects, the Bank Guarantee will be returned to the Contractor without any interest.
- (g) All the replacement stores shall also be guaranteed for a period of 12 months from the date of arrival of the stores at Purchaser's site.
- (h) Even while the 12 months guarantee applies to all stores, in case where a greater period is called for by our specifications then such a specification shall apply in such cases the period of 14 months referred to in para 4 (b) & (c) shall be the 'asked for' guarantee period plus two months.

**5. PACKING FORWARDING & INSURANCE:** The Contractor will be held responsible for the stores being sufficiently and properly packed for transport by rail, road, sea or air to withstand transit hazards and ensure safe arrival at the destination. The packing and marking of packages shall be done by and at the expense of the Contractor. The Purchaser will not pay separately for transit insurance, all risks in transit being exclusively of the Contractor and the Purchaser shall pay only for such stores as are actually received in good condition in accordance with the Contract.

**6. DESPATCH:** The Contractor is responsible for obtaining a clear receipt from the Transport Authorities specifying the goods despatched. The consignment should be despatched with clear Railway Receipt/Lorry Receipt. If sent in any other mode, it shall be at the risk of the Contractor. Purchaser will take no responsibility for short deliveries or wrong supply of goods when the same are booked on 'said to contain' basis. Purchaser shall pay for only such stores as are actually received by them in accordance with the Contract.

**7. TEST CERTIFICATE:** Wherever required, test certificates should be sent along with the despatch documents.

**8. ACCEPTANCE OF STORES:**

- (a) The stores shall be tendered by the Contractor for inspection at such places as may be specified by the Purchaser at the Contractor's own risk, expense and cost.
- (b) It is expressly agreed that the acceptance of the stores Contracted for, is subject to final approval by the Purchaser, whose decision shall be final.
- (c) If, in the opinion of the Purchaser, all or any of the stores do not meet the performance or quality requirements specified in the Purchase Order, they may be either rejected or accepted at a price to be fixed by the Purchaser and his decision as to rejection and the prices to be fixed shall be final and binding on the Contractor.
- (d) If the whole or any parts of the stores supplied are rejected in accordance with Clause No. 8 (c) above, the Purchaser shall be at liberty, with or without notice to the Contractor, to purchase in the open market at the expense of the Contractor stores meeting the necessary performance and quality Contracted for in place of those rejected, provided that either the purchase, or the agreement to purchase, from another supplier is made within six months from the date of rejection of the stores as aforesaid.

**9. REJECTED STORES:** Rejected stores will remain at destination at the Contractor's risk and responsibility. If instructions for their disposal are not received from the Contractor within a period of 14 days from the date of receipt of the advice of rejection, the Purchaser or his representative has, at his discretion, the right to scrap or sell or consign the rejected stores to Contractor's address at the Contractor's entire risk and expense, freight being payable by the Contractor at actuals.

**10. DELIVERY:**

- (a) The time for and the date of delivery of the stores stipulated in the Purchase Order shall be deemed to be the essence of the Contract and delivery must be completed on or before the specified dates.
- (b) Should the Contractor fail to deliver the stores or any consignment thereof within the period prescribed for such delivery, the Purchaser shall be entitled at his option either:

- (i) to recover from the Contractor as agreed liquidated damages and not by way of penalty, a sum of 0.5% per week of the price of any stores which the Contractor has failed to deliver as aforesaid or during which the delivery of such store may be in arrears subject to a minimum of 10%, or
- (ii) to purchase from elsewhere, without notice to the Contractor on the account and at the risk of the Contractor, the stores not delivered or others of a similar description (where others exactly complying with the particulars, are not, in the opinion of the Purchaser, readily procurable, such opinion being final) without cancelling the Contract in respect of the consignment (s) not yet due for delivery, or
- (iii) to cancel the Contract or a portion thereof and if so desired to purchase or authorise the purchase of stores not so delivered or others of a similar description (where others exactly if complying with the particulars are not, in the opinion of the Purchaser, readily procurable, such opinion final) at the risk and cost of the Contractor. In the event of action being taken under sub-clause (ii) & (iii) of clause 10 (b) above, the Contractor shall be liable for any loss which the Purchaser may sustain on that account, provided that the re-purchase or if there is an agreement to repurchase then such agreement is made within six months from the date of such failure. But the Contractor shall not be entitled to any gain on such re-purchase made against default. The manner and method of such re-purchase shall be at the discretion of the Purchaser, whose decision shall be final. It shall not be necessary for the Purchaser to serve a notice of such re-purchase on the defaulting Contractor. This right shall be without prejudice to the right of the Purchaser to recover damages for breach of Contract by the Contractor.
- 11. EXTENSION OF TIME:** As soon as it is apparent that the Contract dates cannot be adhered to, an application shall be sent by the Contractor to the Purchaser. If failure, on the part of the Contractor, to deliver the stores in proper time shall have arisen from any cause which the Purchaser may admit as reasonable ground for an extension of the time (and his decision shall be final) he may allow such additional time as he considers it to be justified by circumstances, of the case without prejudice to the Purchaser's right to recover liquidated damages under clause 10 thereof.
- 12. ERECTION OF PLANT & MACHINERY:** Wherever erection of a plant or machinery is the responsibility of the Contractor as per the terms of the Contract and in case the Contractor fails to carry out the erection as and when called upon to do so within the period specified by the Purchaser, the Purchaser shall have the right to get the erection done through any source of his choice. In such an event, the Contractor shall be liable to bear any additional expenditure that the Purchaser is liable to incur towards erection. The Contractor shall, however, not be entitled to any gain due to such an action by the Purchaser.
- 13. PAYMENT:** Contractor's bill will be passed for payment only after the stores have been received, inspected and accepted by the Purchaser.
- 14. MODE OF PAYMENT:** Normally payment will be made for the accepted stores within 30 days from the date of receipt of the materials.
- 15. RECOVERY OF SUM DUE:** Whenever any claim for the payment of, whether liquidated or not, money arising out of or under this Contract against the Contractor, the Purchaser shall be entitled to recover such sum by appropriating in part or whole, the security deposited by the Contractor, if a security is taken against the Contract. In the event of the security being insufficient or if no security has been taken from the Contractor, then the balance or the total sum recoverable as the case may be, shall be deducted from any sum then due or which at any time thereafter may become due to the Contractor under this or any other Contract with the Purchaser. Should this sum be not sufficient to cover the full amount recoverable, the Contractor shall pay to the Purchaser on demand the remaining balance due. Similarly, if the Purchaser has or makes any claim, whether liquidated or not, against the Contractor under any other Contract with the Purchaser, the payment of all moneys payable under the Contract to the Contractor including the security deposit shall be withheld till such claims of the Purchaser are finally adjudicated upon and paid by the Contractor.
- 16. INDEMNITY:** The Contractor shall warrant and be deemed to have warranted that all stores supplied against this Contract are free and clean of infringement of any Patent, Copyright or Trademark, and shall at all times indemnify the Purchaser against all claims which may be made in respect of the stores for infringement of any right protected by Patent Registration of design or Trade mark and shall take all risk of accidents or damage which may cause a failure of the supply from whatever cause arising and the entire responsibility for sufficiency of all means used by him for the fulfilment of the contact.
- 17. ARBITRATION:** In the event of any question, dispute or difference arising under these conditions or any conditions contained in the Purchase Order or in connection with this Contract (except as to any matter the decision of which is specially provided for by these conditions), the same shall be referred to the sole arbitration

of the Head of the Purchase office or some other person appointed by him. It will be no objection that the arbitrator is a Government servant that he had to deal with matter to which the Contract relates or that in the course of his duties as Government servant he has expressed views on all or any other matters in dispute or difference. The award of the arbitrator shall be final and binding on the parties of this Contract.

If the arbitrator be the Head of the Centre/Unit –

- (i) In the event of his being transferred or vacating his office by resignation or otherwise, it shall be lawful for his successor-in-office either to proceed with reference himself, or to appoint another person as arbitrator, or
- (ii) In the event of his being unwilling or unable to act for any reason, it shall be lawful for the Head of the Centre/Unit to appoint another person as arbitrator. If the arbitrator be a person appointed by the Head of the Purchase Office – In the event of his dying, neglecting or refusing to act or resigning or being unable to act, for any reason, it shall be lawful for the Head of the Centre/Unit either to proceed with the reference himself or appoint another person as arbitrator in place of the outgoing arbitrator. Subject as aforesaid the Arbitration & Conciliation Act 1996 and the rules thereunder and any statutory modifications thereof for the time being in force shall be deemed to apply to the arbitration proceedings under this Clause. The Arbitrator shall have the power to extend with the consent of the Purchaser and the Contractor the time for making and publishing the award. The venue of arbitration shall be the place as Purchaser in his absolute discretion may determine. Work under the Contract shall, if reasonably possible, continue during arbitration proceedings. In the event of any dispute or difference relating to the interpretation and application for the provisions of the Contracts, such dispute or difference shall be referred by either party to Arbitration of one of the Arbitrations in the Department of Public Enterprises. The Arbitration Act 1996 shall not be applicable to arbitration under this clause. The award of the Arbitrator shall be binding upon the parties to the dispute provided however any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs. Ministry of Law & Justice, Government of India. The parties to the dispute will share equally, the cost of arbitration as intimated by Arbitrator.

- 18. COUNTER TERMS AND CONDITION OF SUPPLIERS:** Where counter terms and conditions printed or cyclostyled conditions have been offered by the supplier, the same shall not be deemed to have been accepted by the Purchaser, unless specific written acceptance thereof is obtained.
- 19. SECURITY FOR PURCHASE OF MATERIALS:** Successful tenderer will have to furnish in the form of a bank guarantee or any other form as called for by the Purchaser towards adequate security for the materials and properties provided by the Purchaser for the due execution of the Contract.
- 20.** We are exempted from the payment of Central Excise & Custom Duties vide notifications issued by Govt. of India.
- 21.** In case, the vendors are falling under the category of MSME, registered under NSIC and would like to avail exemptions, their quotations should be accompanied with necessary registration certificate with declaration to consider their offer. Quotation received without such declaration and valid registration certificate will not be considered for exemptions under Public Procurement Policy.
- 22. LIQUIDATED DAMAGES:** If the Contractor fail to deliver the stores or within time the period specified in the contract/ purchase order or any extension thereof, the Purchaser shall recover from the contractor as liquidity damages sum of one-half of one percent(0.5 percent) of the contract/ purchase order price of the stores for each calendar week of delay or part thereof. The total liquidated damages shall not exceed ten percent (10%) of the total contract/purchase order price.
- 23. PERFORMANCE BANK GUARANTEE:** To fulfil guarantee conditions, the Contractor shall, at the option of the Purchaser, furnish a Performance Bank Guarantee (as prescribed by the Purchaser) from a Nationalized Bank for an amount equivalent to 10% of the value of the Contract valid till the expiry of warranty period. On the performance and completion of the Contract in all respects, the purchase order will be returned to the Contractor without any interest.
- 24.** In case the bidders propose any other payment terms in deviation with the standard terms mentioned above, it may be noted that applicable cash flow implications will be loaded on the prices quoted for commercial comparison of the offers. If advance payments are insisted by the bidders, interest at the rate of MCLR (Marginal Cost Linked Rate) as notified by State Bank of India from time to time shall be loaded on the prices for price comparison.



**STANDARD TENDER FORM**  
(Seal of the Company)

Tender No.: .....  
Due on: .....  
Ref. No.: .....  
Date: .....

**TENDER FORM**

From: .....  
.....  
.....

To: The Sr. /Purchase & Stores Officer,  
..... (Name of the Centre/Unit)

Dear Sir,

I/We hereby offer to supply the stores detailed below at the price hereunder quoted and agree to hold this offer open till..... I/we shall be bound to supply the stores hereby offered upon the issue of the Purchase Order communicating the acceptance thereof on or before the expiry of the last mentioned date. You are at liberty to accept any one or more of the items of stores tendered for or any portion of any one or more of the items of such stores. I/We, notwithstanding that the offer in this tender has not been accepted in whole, shall be bound to supply to you such items and such items and such portion or portions of one or more of the items as may be specified in the said Purchase Order communicating the acceptance:

Sl. No.	Description	Quantity	Unit	Rate Rs.	Delivery Date

**Note: All the rates should be given both in figures and words**

Place at which delivery will be made	
Date by which the ordered item/s will be supplied	

2. I/We have understood the items of the tender annexed to the invitation to tender and have thoroughly examined the specifications/drawing and/or pattern quoted or referred to herein and am/are fully aware of the nature of the stores required and my/our offer is to supply the stores strictly in accordance with the requirements subject to the terms and conditions stipulated in the enquiry and contained in the Purchase Order communicating the acceptance of this tender either in whole or in part.

Signature of Tenderer

Date: .....

(Seal)

**COMPLIANCE STATEMENT REQUIRED TO BE FILLED AND ENCLOSED  
ALONG WITH THE TECHNICAL AND COMMERCIAL BID BY THE VENDOR.**

Sr. No.	Commercial terms	Compliance
1.	Delivery terms – The items shall be offered on FOR destination basis. If vendors are offering any other terms, please specify the same.	
2.	Packing & Forwarding charges are inclusive or extra. If extra please specify percentage in the price offer.	
3.	Freight charges whether inclusive or extra. If extra Please specify percentage in price offer.	
4.	Delivery period – in weeks/months	
5..	<p>Payment terms :</p> <p>Our standard term is – 100% within 30 days of receipt and acceptance of the items at our site.</p> <p>If advance payments are insisted they can be considered only against submission of bank guarantee for the equivalent amount. Any milestone payments which do not result in receipt of material are considered as advance payments and Bank Guarantees must be submitted for the same for the equivalent value.</p> <p>(Note: Vendor should specify the relevant terms in the opposite column and also in the offer)</p>	
6.	<p>Taxes (VAT/SERVICE TAX): The % of applicable taxes shall be shown separately and should not be included in the price. If no such mention of % in the offer, it will be assumed that they are inclusive and no claim will be entertained later in this regards. TAX REGISTRATION NUMBER MUST BE INDICATED IN THE OFFER.</p>	
7.	<p>Duties:</p> <ol style="list-style-type: none"> <li>1) We are eligible for Excise duty exemption under notification No.15/2007 and we will provide exemption certificate at appropriate time on the request of the vendor.</li> <li>2) We are eligible for Customs duty exemption as per notification No.21/2002 wherever items are imported by the vendor on High Sea Sales basis. However entire responsibility of customs clearance and delivery at our site is the responsibility of the vendor at his cost.</li> </ol> <p>(Vendor should specify the requirement of such certificate in the offer. If no such reference is made in the offer the certificates will not be provided.)</p>	
8.	Validity of the offer should be minimum 90 days from the date of opening.	
9.	Whether Cost of spares are included in the price bid. If so list out such spares in the price bid.	
10.	Will you able to provide consumables/spares for 10 years.	
11.	Wherever installation involved, Income Tax @ 2% will be deducted from the bill and a certificate issued.	
12.	Work order will attract work contract tax as per rules. Please confirm whether you have included WCT in your offer.	
13.	Octroi Duty/Entry Tax exempted. Exemption certificate will be issued, if required.	

14.	No Insurance is required at Purchaser's cost.	
15.	For two part bids two separate sealed envelopes are to be sent duly superscribed as follows : 1. TECHNICAL & COMMERCIAL BID 2. PRICE BID Please refer instructions.	
16.	Wherever EMD/tender fee is payable – provide the same in the form of crossed Demand Draft in favour of The Accounts Officer, SAC, Ahmedabad along with the bid but in a separate cover or along with technical bid. On the back side of the D.D, please write your company's name.	
17.	Language to be used in all correspondence – English	
18.	Measurements – Metric system to be followed	
19.	Warranty period – Minimum 1 year. If our RFP calls for more period than above, the same warranty period should be offered. (Specify the period being offered.)	
20.	Performance Bank Guarantee: 10% of order value valid till warranty/guarantee period.	
21.	Defective/Rejected items if any, are to be replaced free of cost. On receipt of replacements, the defective items will be by vendor or sent to vendor at his cost.	
22.	Confirm whether you will be able to provide samples if called for, free of cost.	
23.	Approximate weight (net and gross) of the consignment.	
24.	Instruction/operational manual to be supplied free of cost.	
25.	Supply and installation is subject to Purchaser's acceptance.	
26.	Wherever supply of free issue material is involved as per RFP, vendor shall submit Bank Guarantee for value of such material	
27.	Security Deposit, if called for shall be submitted to SAC by the successful bidder in the form of bank guarantee or as requested in RFP.	
28.	Training – Free of cost to be imparted at Purchaser's site.	
29.	Bank charges wherever applicable shall be paid by Purchaser/Contractor to their respective Bankers.	
30.	Arbitration proceedings shall be as per provision of Arbitration and Conciliation Act 1996.	
31.	Delivery schedule (please specify the period as indicated in your offer and this period should meet with our RFP requirement, if any).	
32.	Liquidated Damages – In case of delay in delivery of material as per delivery schedule committed by vendor, Liquidated Damages @ 0.5% per week or part thereof on the undelivered portion subject to a maximum of 10% of the contract value.	