

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE
INDIAN INSTITUTE OF SPACE SCIENCE AND TECHNOLOGY (IIST)
THIRUVANANTHAPURAM**

**Tender for Upgradation of Laser Diagnostics System in Flame
Diagnostics Lab - Part 1: Tunable Dye Laser**

Bids to be submitted online

Tender No.: IIST/PURCHASE AND STORES/IN202400039301 dated 04-07-2024

A. Tender Details

Tender No : **IIST/PURCHASE AND STORES/IN202400039301**

Tender Date : **04-07-2024**

Tender Classification: **GOODS**

Purchase Entity : **PURCHASE AND STORES**

Centre : **INDIAN INSTITUTE OF SPACE SCIENCE AND TECHNOLOGY (IIST)**

Upgradation of Laser Diagnostics System in Flame Diagnostics Lab - Part 1: Tunable Dye Laser

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A.1 Tender Schedule

Bid Submission Start Date : **04-07-2024 13:00**

Bid Clarification Due Date : **15-07-2024 11:00**

Bid Submission Due Date : **20-08-2024 14:00**

Bid Opening Date : **20-08-2024 14:15**

Price Bid Opening Date : **03-09-2024 14:00**

B. Tender Attachments

NA

Instructions To Vendors

1. Instruction to Tenderers along with Terms and Conditions

1. This is an E Tender. Hence Postal/Fax/Email tenders will not be accepted. Quotation/Open Authorization shall be submitted online [only] complying the specified schedule with technical specifications, including pamphlets and catalogues.
2. This is a TWO-PART tender i.e. Techno-Commercial Bid (Part-I) and Price Bid (Part-II) shall be submitted separately. All technical and commercial terms and conditions shall be furnished in the Techno-Commercial Bid while price shall be indicated only in the Price Bid. Uploading price details anywhere else other than the price-bid shall lead to unconditional rejection of the tender. Please make note of the same. Tenderers are advised NOT TO UPLOAD any documents revealing the price of the main equipment, accessories, spares or AMC in technical & Commercial bid. They are however, requested to upload UNPRICED BIDS (i.e. Price details masked) showing appropriate breakup of components of main equipment, individual accessories and spares as desired.
3. Foreign vendors are permitted to quote. The FOB/FCA Value, the C& F value for import by Sea Freight/ Air Freight upto and for shall be clearly indicated in the quote.
4. Technical Bids will be opened at the scheduled due date & time. No further intimation will be sent in this regard. The schedule for price bid opening shown is only indicative. Price bids will only be opened in the case of parties who have been techno-commercially accepted, the details of which will be communicated at a later stage.
5. The vendor have to compulsorily submit the compliance statement online otherwise their offer will not be considered for further evaluation. Before entering the compliance statement, vendors are advised to refer the detailed specification provided.
6. The Technical Specification/ Drawing/ Product Catalogues/ Works Carried by vendor/ Make offered etc. as a single PDF file without any financial details has to be uploaded online mode by the vendor.
7. Last minute clarification on tenders will not be entertained.
8. If any bidder submits forged / false document along with the tender, offer of such vendors will be summarily rejected and such bidders will be blacklisted for all future tenders.

9. In order to avail of the benefits extended to by Govt. of India to the Micro and Small Sectors, please submit attested copy of the valid Entrepreneur Memorandum Part-II signed by the General Manager, District Industries Centre / Udyog Adhar / NSIC Registration Certification along with your offer. Micro and Small Vendors are not exempted from the submission of Security Deposit.
10. Our standard delivery term is FOR, IIST. In case any vendor offers delivery term of Ex-works, Packing and Forwarding charges if any should be indicated separately either as a percentage of the quoted rate or as a Lumpsum amount.
11. Our standard payment term is 100% within 30 days for indigenous orders and 100% TT within 30 days Sight Draft for foreign orders
12. Please upload the Technical Details / Catalogue / Data Sheets (wherever applicable)
13. As far as possible the shipments should be dispatched through our designated freight forwarder
14. Security Deposit : - Wherever the offer value is Rs. 5.00 Lakhs or above, the successful tenderer should submit Security Deposit @3 % of the order value by way of Bank Guarantee / FD Receipt. The Bank Guarantee shall be obtained from any Scheduled Bank on Rs.200/- Non Judicial Stamp Paper and should be valid beyond 2 months from the completion of all contractual obligations.
15. The offer should be valid for a period of minimum 180 days [for Two Part Tender] from the date of Tender opening.
16. The other attached forms are our standard terms and conditions, which are to be complied with. If any conflict arise between the specific terms and standard terms, then in those cases, the specific terms will prevail over the standard terms.
17. Wherever samples are required to be submitted along with the quotation, offer without sample will not be considered.
18. ARBITRATION - In the event of any dispute/s, difference/s or claim/s arising out of or relating to the interpretation and application of the Contract, such dispute/s or difference/s or claim/s shall be settled amicably by mutual consultations of the good Offices of the respective Parties and recognizing their mutual interests attempt to reach a solution satisfactory to both the parties. If such a resolution is not possible, within 30 days from the date of receipt of written notice of the existence of such dispute/s, then the unresolved dispute/s or difference/s or claim/s shall be referred to the Sole Arbitrator appointed by the Parties by mutual consent in accordance with the rules and procedures of Arbitration and Conciliation Act 1996 as amended from time to time. The arbitration shall be conducted in Bengaluru in the Arbitration and Conciliation Centre Bengaluru (Domestic and International) as per its rules and regulations. The expenses for the Arbitration shall be shared equally or as may be

determined by the Arbitrator. The considered and written decision of the Arbitrator shall be final and binding between the Parties. The applicable language for Arbitration shall be in English only. Work under the Contract shall be continued by the CONTRACTOR during the pendency of arbitration proceedings, without prejudice to a final adjustment in accordance with the decision of the Arbitrator unless otherwise directed in writing by the DEPARTMENT or unless the matter is such that the works cannot be possibly continued until the decision (whether final or interim) of the Arbitrator is obtained.

19. Liquidated damages: The delivery period quoted by you and stipulated in the Purchase Order shall be deemed to be the essence of the order and delivery must be completed not later than the dates specified therein as otherwise IIST shall have the right to recover a sum @ 0.5% of the order value per week/part of a week or 0.5% of the value of the stores for which the delivery is delayed for each week of delay, as the case may be, subject to a maximum of 10% of the order value.

20. Any bidder from a country which shares a land border with India will be eligible to bid in this tender, only if the bidder is registered with the Competent Authority. Competent Authority for the purpose of registration shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT).

21. All Tax invoices issued by suppliers/Service providers on or after July 01, 2017 shall invariably bear their GST Registration No.(GSTIN) applicable GST rates and HSN Code. In the absence of which, the invoices shall not be processed for payment.- In case of Indigenous Suppliers

22. Any false declaration and non-compliance of the above would be a ground for immediate rejection of offer or termination of the contract and further legal action in accordance with the laws

23. Warranty: Warranty (No. of Years) should be clearly indicated in the quotation. Warranty will be from the date of installation

24. Performance Bank Guarantee: You shall furnish performance Bank Guarantee in Rs.200/-non judicial stamp paper from a Nationalized/Scheduled Bank Equivalent to 3% of the order value which shall be valid beyond 2 months from the expiry of warranty/guarantee period.

25. If you are unable to submit offer, the same may be communicated to us before the due date.

26. IIST has a right to cancel the tender without assigning any reason etc.

27. We would like to have more than one source of supply and the final orders will be given accordingly to the qualified bidders

28. The other attached forms are our standard terms and conditions, which are to be complied with. If any conflict arise between the specific terms and standard terms, then in those cases, the specific

terms will prevail over the standard terms.

29. Note: SD, LD and PBG clauses are mandatory and offers of the vendors who have not agreed for the above conditions will be excluded from the procurement process. Micro and Small Vendors are not exempted from the submission of Security Deposit. Only Govt Departments/PSUs/PSEs can submit Indemnity Bond instead of Bank Gurantee towards SD/PBG.

30. False declarations will be in breach of code of the integrity for which a bidder or its successor's will not be eligible/debarred for purchase preference from further tenders / pending tenders for two years along with other actions as may be applicable.

31. Works means all works as per Rule 130 of GFR- 2017, and will also include 'turnkey works'. Works includes Engineering, Procurement and Construction (EPC) contracts and services include System Integrator (SI) contracts.

32. Tax and or other duties or levies legally leviable and intended to be claimed should be mentioned in the price bid template. If nothing is mentioned, then it will be presumed that the rate quoted is inclusive of all taxes and duties.

33. In line with Public Procurement (Preference to Make in India), Order 2017 & its amendments issued

by Govt. of India from time to time with a view to support the Indian industries, ISRO/IIST has implemented "Purchase Preference Policy". The "Purchase Preference" is applicable for the "Class-I Local Supplier"

for the goods/ services/ works covered in this tender, subject to the following terms & conditions:-

34. a) The subject item falls under Non-divisible category. b) The offers are sought from all classes of suppliers. Definitions: A supplier or service provider, whose goods, services or works offered for procurement, has local content: i. Equal to or more than 50%: Class-I local supplier. ii. More than 20% but less than 50%: Class-II local supplier. iii. Less than or equal to 20% Non local supplier

35. Local content means the amount of value added in India i.e. indigenous items/services added in the offered products/ services/ works) be the total value of the item offered (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties/IGST as a proportion of the total value excluding net domestic indirect taxes, in percent. The margin of Purchase Preference shall be up to 20%. Margin of purchase preference means the maximum extent to which the price quoted by the Class-I local supplier above the L1 (landed cost).L1 means the lowest technically accepted tender / bid / quotation i.e. lowest landed cost including duties, taxes and freight & Insurance.

36. Purchase Preference Policy:- Goods/Works which are not divisible (ie., required quantity is 1 or as a package) and Services: a) If L1 is from a Class-I local supplier, the contract will be awarded to L1 bidder. b) If L1 is not from a Class-I local supplier, the lowest bidder among the Class-I local supplier will be invited to match the L1 price subject to local suppliers quoted price falling within the margin of purchase preference (i.e. 20%) and the contract shall be awarded to such Class-I local supplier subject to matching the L1 price (inclusive of duties, taxes and freight & insurance). c) In case such lowest eligible Class-I local supplier fails to match the L1 price, the Class-I local supplier with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on, and order/contract shall be awarded accordingly. In case where none of the Class-I local supplier within the margin of purchase preference agree to match the L1 price, then the order/contract shall be awarded to the original L1 Bidder.

37. The Class-I & II local supplier should provide a Self Certification along with technical offer indicating that the item offered meets the minimum local content as called for in the tender and provide the percentage of local content along with details of the location(s) at which the local value addition is made. In case of two bid tenders, it is mandatory to indicate compliance to MLC(minimum Local Content) in technical bid zone

C. Bid Templates

C.1 Technical Bid - Upgradation of Laser Diagnostics System in Flame Diagnostics Lab - Part 1: Tunable Dye Laser

1. LASER SOURCE

Item specifications for LASER SOURCE

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Pump laser wavelength	532 nm, 355 nm	Yes / No / Explain		
2	Repetition Rate	10-15 Hz	Yes / No / Explain		
3	Pump laser energy (max)	500 mJ @ 532 nm, 350 mJ @ 355 nm	Yes / No / Explain		
4	Line width	$\leq 0.08 \text{ cm}^{-1}$	Yes / No / Explain		
5	Tuning range & doubling/mixing crystals	370-750 nm Optical extension inbuilt with the dye laser with high efficiency doubling/mixing crystals to achieve above wavelength. Internal doubling unit with autotracking and BBO from 250 – 350 nm	Yes / No / Explain		
6	Conversion efficiency	> 25 % @ 565 nm	Yes / No / Explain		
7	Min Pulse energy required after frequency conversion units when pumped with 200 mJ @ 532 nm	> 5- 10 mJ (or better) @ 283 nm	Yes / No / Explain		
8	Absolute wavelength accuracy	< 0.025 nm	Yes / No / Explain		
9	Wavelength reproducibility	< 0.0025 nm	Yes / No / Explain		
10	Thermal stability	< 0.001 nm/deg C	Yes / No / Explain		

11	Beam divergence	0.5 mrad	Yes / No / Explain		
12	ASE	< 0.5 %	Yes / No / Explain		
13	Polarization	> 98 %	Yes / No / Explain		
14	Dye laser Operation	Provision for computer controlled operation of the dye laser	Yes / No / Explain		
15	Compatibility with existing pump laser (Nd:YAG)	<p>1. Company: Innolas GmbH, Germany Model: SpitLight Compact 400-10 Hz Repetition rate: 10 Hz Pump energies: 200-240 mJ @ 532 nm Beam Diameter: 6 mm Pulse width of 5-7 ns</p> <p>2. Company: Quantel Model: Q-Smart 450 Repetition rate: 10 Hz Pump energies: 200-240 mJ @ 532 nm Beam Diameter: 6.5 mm Pulse width of 5 ns</p>	Yes / No / Explain		
16	Voltage	210 – 250VAC	Yes / No / Explain		
17	Frequency	50-60 Hz	Yes / No / Explain		
18	Power	Single Phase	Yes / No / Explain		
19	Operating temperature	18 to 28 °C without any significant change in performance	Yes / No / Explain		
20	Humidity	Relative humidity in Trivandrum is 60-80%. Laser performance should not get affected by this Relative Humidity	Yes / No / Explain		
21	Delivery period	Less than or equal to 20 weeks after receiving the order	Yes / No / Explain		

22	Warranty terms	Should be clearly mentioned. Cost should be inclusive of first year comprehensive warranty from the date of commissioning. Optional: Cost of Service warranty should also be mentioned for additional 2 years after the completion of first year comprehensive warranty	Yes / No / Explain		
23	Service personnel	Nearest location of the personal who attend service requests should be mentioned	Yes / No / Explain		
24	Spare parts	Spare parts should be available for a period of 10 years	Yes / No / Explain		
25	Additional requirement	Contact address of academic/ research institute/ industry who purchased this product in the last 5 years (within India) should be mentioned along with the email id's and contact numbers. Final decision on purchase of the laser may change based on feedbacks from prior customers	Yes / No / Explain		
26	Optional: Extended warranty and AMC	(a) Extended warranty – 2 yrs after the warranty period; (b) AMC after warranty period The price should be quoted separately	Yes / No / Explain		
27	Optional: Additional dye circulator systems	Price for two additional circulator systems, one for resonator/pre-amplifier and the second one for main amplifier. The price should be quoted separately	Yes / No / Explain		

Document : GeM non-availability

Common Specifications (Applicable for all items)

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	General Spec 1	The dye laser should include an autotracking unit and a wavelength calibration unit.	Yes / No / Explain		
2	General Spec 2	The dyes and the solvent that will be circulated in the dye laser for generating the wavelengths @ 283 nm should be included along with the Dye Laser	Yes / No / Explain		
3	General Spec 3	The dye cells and dye circulators for pre-amplifier and amplifier circuits for the generation of wavelength in the range of 370 nm-750 nm is required.	Yes / No / Explain		
4	General Spec 4	The pump beam alignment sets should be provided	Yes / No / Explain		
5	General Spec 5	Installation, alignment of the dye laser to the existing pump laser and training should be provided on site	Yes / No / Explain		
6	General Spec 6	Appropriate safety goggles (3 Nos) should be included	Yes / No / Explain		
7	General Spec 7	Test report should include energy, wavelength and bandwidth at above mentioned wavelengths and the laser output beam profile.	Yes / No / Explain		
8	General Spec 8	Preparation of bids: The tenders should be submitted under two-bid system (i.e.) technical bid and financial bid	Yes / No / Explain		

Supporting Documents required from Vendor

1. price quote and compliance document (Price Bid Related)

5 additional documents can be uploaded by the vendor

C.2 Commercial Terms / Bid

Sl. No.	Description	Compliance	Vendor Terms
1	Supply and Installation at IIST, as per the Specification	Yes / No / Explain	
2	Foreign vendors are permitted to quote 1. Class -I and Class-II Local suppliers as per make in India policy can participate in the bid. 2. The percentage of local content should be specifically mentioned in the offer, without which will be summarily rejected 3. Preference will be given to class-I Local Supplier and in their absence, L1 will be considered.	Yes / No / Explain	
3	I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered.	Yes / No / Explain	
4	Foreign Principals pro-forma invoice indicating the commission payable to the Indian Agent and nature of after sales service to be rendered by the Indian Agent.	Yes / No / Explain	
5	Copy of Agency agreement with the Foreign Principal, precise relationship between them and their mutual interest in the business.	Yes / No / Explain	
6	The enlistment of the Indian Agent with Director-General of Supplies & Disposals under the Compulsory Registration Scheme of Ministry of Finance.	Yes / No / Explain	
7	P & F charges, if any, please mention percentage.	Yes / No / Explain	
8	Installation Charges, if any	Yes / No / Explain	
9	Freight charges, if any. If yes ,please mention the percentage	Yes / No / Explain	
10	PO ordering address in full with Contact Persons Name, E-mail id, Phone No. [also attach your Quotation in PDF format].	Yes / No / Explain	

11	You should update the address of your Principle/ agent [if applicable] in the new E procurement portal immediately .	Yes / No / Explain	
12	Taxes and other costs, if any. [Please Specify the rates]. Note: All Tax invoices issued by suppliers/service providers on or after July 01, 2017 shall invariably bear their GST registration number (GSTIN) and the applicable GST rates. In the absence of which, the invoices shall not be processed for payment.	Yes / No / Explain	
13	IIST is a Research Institute under the administrative control of Department of Space and is eligible for partial exemption of IGST @ 5% against IGST EXEMPTION CERTIFICATE.	Yes / No / Explain	
14	Warranty [Minimum One year from the date of Installation required.]	Yes / No / Explain	
15	Delivery Terms [Normal delivery terms - FOR Destination (for Indigenous cases) & FOB/ FCA or Ex-works (for Import cases).	Yes / No / Explain	
16	Delivery Period [Please Specify the period, LD Clause applicable]	Yes / No / Explain	
17	Payment [Within 30 days after receipt and acceptance for indigenous/ Sight Draft for import cases].	Yes / No / Explain	
18	Quote Validity: Minimum 90 days [for Single Part Tender]/180 days [for Two Part Tender].	Yes / No / Explain	
19	3% Performance Bank Guarantee valid two months beyond warranty period to be provided.	Yes / No / Explain	
20	Liquidated Damages @ 0.5% per week subject to maximum of 10% of order value is applicable beyond the promised delivery schedule.	Yes / No / Explain	
21	Security Deposit: Successful Tenderer shall submit Security Deposit equivalent to 3% of the order value valid for a period of 60 days beyond the date for completion of the Purchase Order shall be furnished. This security deposit is collected towards the performance of the Contract. The said Security Deposit shall be submitted either in the form of Bank Guarantee or Fixed Deposit receipts from Nationalised/Scheduled Banks.	Yes / No / Explain	
22	Please quote exact GST% as per the latest Govt. Orders.	Yes / No / Explain	

23	Please mention the acceptance of partial/split orders without alteration in the terms and conditions of the quote	Yes / No / Explain	
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C.3 Price Bid

Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	Packing and Forwarding	Remark
1	LASER SOURCE	1.00 Nos.		-			