Request for quote (RFQ) from domestic (India-based) manufacturers

Summary

1.	Tender Number	IAP/CMC/20-21/02
2.	Tender Date	15 March 2021
3.	Item Description	Single Photon Detector Module
4.	Quantity	Four
5.	Tender Type	Two bid system :
		(a) Technical Bid (Part A)
		(b) Commercial Bid (Part B)
6.	Place of tender submission	Dr. C. M. Chandrashekar
		Department of Instrumentation and Applied Physics,
		Indian Institute of Sciences,
		Bengaluru 560012
7.	Last Date & Time for	30 th March 2021, 5:00 PM
	submission of tender	

To whom it may concern

This is a **Request for quote (RFQ) from domestic (India-based) manufacturers only** for procurement of **Single Photon Detector Module** and associated software at the department of **Instrumentation and Applied Physics (IAP)**, Indian Institute of Science, Bangalore.

All interested vendors shall submit a response demonstrating their capabilities to produce the requested equipment to the primary point of contact listed below.

With respect to this tender, the rules laid out by the Government of India in order No. P45021/2/2017-pp-BE-II issued by the Public Procurement Section, Department or Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, dated 4th June 2020 will be followed. As per this order, the government has defined a 'Class-I local supplier' as "a supplier or service provider whose goods, services or work offered for procurement, has local content equal to or more than 50%". A 'Class-II local supplier' is "a supplier or service provider, whose goods, services or works offered for procurement, has local content more than 20% but less than 50%". Only Class-I and Class-II local suppliers are eligible to participate in this open domestic tender. Any "Non-local supplier" i.e. "a supplier or service provider, whose goods, services or works offered for procurement, has local content less than 20%" is ineligible to participate in this tender.

The deadline for submission of proposals is 30th March 2021 by 5:00 PM. Proposals should arrive at the office of Dr. C. M. Chandrashekar, Department of Instrumentation and Applied Physics, Indian Institute of Science, Bangalore, Karnataka 560012, India.

Direct all questions concerning the acquisition to addresses to **Dr. C. M. Chandrashekar** at: <u>chandracm@iisc.ac.in</u>

General Terms and Conditions

- 1. The bid should be submitted in the two-cover system, i.e. technical bid and commercial bid separately in sealed covers. The technical bid should contain all commercial terms and conditions, except the price.
- 2. The technical bid must contain a point-by-point technical compliance document. The technical proposal should contain a compliance table that should describe your compliance in a "yes" or "no" response against each of the items in the table listed in this RFQ. If "no" the second column should state the extent of deviation. The third column should state the reason for the deviation, if any. The fourth column can be used to compare your tool with that of your competitors or provide details as requested in the technical requirement table below.
- 3. In the commercial bid, the price should be inclusive of all discounts.
- 4. The vendor should have qualified technical service personnel for the equipment based in India (preferably in Bangalore).
- 5. The covering letter should clearly state that whether the vendor is a Class-I or Class-II local supplier. Failing this the bid will be automatically rejected.
- 6. The vendor to state the percentage of the local content and provide self-certification that the item offered meets the minimum local content requirement. They should also give details of the location(s) at which the local value addition is made.

- 7. The lead time for the delivery of the equipment should not be more than 3 months from the date of receipt of our purchase order. It should be clearly mentioned in the technical and commercial bids.
- 8. All the quotations must be valid for at least 90 days at the time of submission.
- 9. List of customers and references: The Bidder should have supplied similar equipment in Central Universities preferably in centrally Funded Technical Institutes (IITs, IISC, IISER, NIT). Please provide the details and contact information.
- 10. The Bidder must not be blacklisted/banned/suspended or have a record of any servicerelated dispute with any organization in India or elsewhere. A declaration to this effect should be provided.
- 11. Items in addition to that listed in the technical table that you would like to bring to the attention of the committee, such as data sheets, technical plots etc. can be listed at the end of the compliance table.
- 12. Vendors are encouraged to highlight the advantage of their tools over comparable tools from the competitors.
- 13. If needed, a meeting for any technical clarifications can be scheduled with the undersigned by sending an email.
- 14. The Institute reserves the right to accept or reject any bid, or to annul the bidding process and reject all bids, at any time prior to the award of contract without thereby incurring any liability of the affected bidder or bidders.
- 15. Warranty terms and additional warranty options is a must for all the components. Please specify the service plan like whether the local distributor will address the issue or the parent company.
- 16. Terms and conditions for the annual maintenance contract beyond the warranty period should be mentioned.
- 17. After the award of purchase order, the vendor must provide an Order Acknowledgement within 30 days from the receipt of the Purchase Order.
- 18. Please quote the price of each optional line item, separately.

Technical requirements: Please note that the requirements listed below are only guidelines. It does not disbar bids that do not meet the criteria listed. Vendors are requested to quote for equipment that meet the criteria to the best extent possible and list deviations. Deviations are NOT an automatic reason for disqualification. They will be discussed by the technical committee prior to making an informed decision.

Single Photon Detector Module

Description: Four numbers of single-photon avalanche detectors which operate with optimum performance in the 600-900nm wavelength range to perform single-photon level detection are to be procured. Detectors with high sensitivity, detection efficiency, low dark count and high saturation electron rate are preferred.

Sl. No.	Technical Specification	Value / Range
1.	Wavelength	200 to 1000 nm
2.	Quantum Efficiency	More than 60% at 800 nm
3.	Sensor active area	500 micrometer
4.	Supply Voltage	 India-compatible power plug - 5V (range to be specified)

5.	Dark count rate	100 - 300 counts /second (conditions to be specified)
6.	Timing resolution	200 - 800 picosecond (conditions to be specified)
7.	Optical Input	Fiber-coupled, single-mode fiber (SMF). Option to
		exchange between SMF, MMF or free-space at customer
		site to be included, if available
8.		
9.	Dead time	< 1 microsecond
10.	Output pulse format	TTL/ NIM (pulse width to be specified)
11.	Output pulse duration	< 50 ns (width size to be specified)
12.	Operation temperature	Surrounding - Room temperature. Detector temperature
		- sub-zero - with tuneable option (operation / tuneable
		range to be specified)
13.	Latency between input and output	Any latency between input and output to be specified
14.	Software to control and	Must be included with capabilities for controlling, time-
	process data from the	stamping, histogramming and programming
	detector	
15.	Any cables, connectors or	
	other accessories required	
	to connect the TCSPC to	Must be included
	the single-photon detectors	
15.	Warranty	Minimum of one year

Other requirements:

1.	Compatible operating system(s) for the interface software should be specified. Suitable		
	software drivers available should be specified.		
2.	Please include other options currently available which can be added on in the future.		
3.	Training and installation: Different options for training and installation by service		
	engineer to be listed and quoted.		
4.	The cost of shipping to IISc should be included.		
5.	List of acceptance tests for on-site (vendor) inspection and after installation at IISc.		
6.	A set of basic experiments for performing routine checks of acceptable operation with		
	clear instructions to be provided.		
7.	The payment terms will be specified in the commercial proposal and is subject to		
	negotiations.		
8.	Please provide details of the number of trained personnel in India, number in southern		
	region or in Bangalore who can service the instrument.		

Dr. C. M. Chandrashekar Instrumentation and Applied Physics Indian Institute of Science Bangalore, Karnataka 560012 **chandracm@iisc.ac.in**