INDIAN INSTITUTE OF TECHNOLOGY MADRAS Chennai 600 036



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Prof.Ranjit Kumar Nanada

Ref: PHY/Nanda/2022/Audio System

Dated: 06.12.2022

Limited Tender No: PHY/Nanda/2022/Audio System

GEM NAR ID: GEM/GARPTS/01122022/6E4TCJFODFH6

Due Date: 13.12.2022, 4:00pm

Pre-Bid meeting: - NA.

Technical Bid opening meeting on Due Date: 14.12.2022, 3:00pm

Dear Sir/Madam,

On behalf of the Indian Institute of Technology Madras, offers are invited for the supply of "Audio System" conforming to the specifications given in (Annexure - IV).

As per the Government of India Order, only "Class - I Local Suppliers" and "Class - II Local Suppliers" can participate in this tender.

Participation of Non local supplier may be subject to the limitation provided in para 4 (Exemption of Small Purchases) of DPIIT circular No.P-45021/2/2017-PP(BE-II) Dt 16.Sep.2020

Terms and Conditions of Limited Tender

- 1) **Preparation of Bids:** The Limited tenders should be submitted under **Two bid system** (i.e.) Technical-cum-Financial bid.
- 2) Submission of the tender: The tender shall be sent to the below-mentioned addresses either by post or by courier (duly sealed and super scribed on the envelope with the Vendor Email ID, Contact Number, tender reference No and due date & time) so as to reach the following address before the due date and time specified in our Schedule:

Prof. Ranjit Kumar Nanada Department of Physics, IIT Madras, Sardar Patel Road, Chennai - 600 036.

- 3) Opening of the tender: The offer/ bids will be opened by a committee duly constituted for this purpose. The technical bids will be opened first and will be examined by a technical committee which will decide the suitability of the bids as per our specifications and requirements. All bidders will be invited for opening of the technical bids. For opening the financial bid, only technically qualified bidders will be called.
- **4) Price:** The price should be quoted only in INR net per unit (after breakup) and must include all packing, transit insurance and delivery charges to the **Department of Physics.**
 - a. The offer/bid should be exclusive of taxes and duties. The percentage of tax & duties should be clearly indicated separately.

b. For the same tender, either the OEM or the authorized dealer/service provider can only quote. But both of them cannot quote separately for the same tender.

5) Terms of Delivery: -

Supplier will be fully responsible for the safe carriage of goods upto the **Department of Physics**, IIT Madras or a named place, as per PO. The transit Insurance coverage will be in the scope of the supplier. The Installation/Commissioning should be completed as specified in our important conditions.

6) **Delivery Schedule:** - The tenderer should indicate clearly the time required for delivery of the item (subject to the approval of the Executive Committee of IIT-Madras). In case there is any deviation in the delivery schedule, liquidated damages clause will be enforced or penalty for the delayed supply period will be levied.

In the event of **delay or non-supply of materials/execution of Contract** beyond the date of delivery/completion of job, penalty will be levied @1% per week of delay subject to a max of 10% of the value of purchase order and if the delay is more than accepted time frame by IIT M, the PO would be cancelled and liquidated damages will be enforced.

- 7) Catalogue: Original catalogue (not any photocopy) of the quoted model duly signed must accompany the quotation in the Technical-cum-financial bid
- 8) Late offer: The offers received after the due date and time will not be considered
- 9) **Payment**: No Advance payment will be made. However, 90% Payment against Delivery and 10% after installation are agreed to wherever the installation is involved.
- **10**) **Advance Payment:** No advance payment is generally admissible. In case a specific percentage of advance payment is required, the Vendor has to submit a Bank Guarantee from a Scheduled Commercial Bank of India equivalent to the amount of advance payment.
- 11) On-site Installation: The equipment or machinery has to be installed or commissioned by the successful bidder within the number of days (as prescribed by PI's) from the date of receipt of the itemat the site of IIT Madras.
- **12) Warranty/Guarantee:** The offer should clearly specify the warranty or guarantee period for the machinery/equipment.

** Note: PO which involves installation, warranty/guarantee shall be applicable from the date of installation.

- 13) Validity: Validity of Quotation should be not less than 90 days from the due date of tender
- **14) Accept /Reject**: IIT Madras reserves the full right to accept / reject any tender at stage without assigning any reason.
- **15**) **Debarment from Bidding**: In case of breach of Terms & Conditions, Bidder may be suspended from being eligible for bidding in any contract with the IIT Madras up to 2 Years [as per Rule 151(iii) of GFR] from the date of Tender.

16) Disputes and Jurisdiction:

Settlement of Disputes: Any dispute, controversy or claim arising out of or in connection with this PO including any question regarding its existence, validity, breach or termination, shall in the first instance be attempted to be resolved amicably by both the Parties. If attempts for such amicable resolution fails or no decision is reached within 30 days whichever is earlier, then such disputes shall be settled by arbitration in accordance with the Arbitration and Conciliation Act, 1996. Unless the Parties agree on a sole arbitrator, within 30 days from the receipt of a written request by one Party from the other Party to so agree, the arbitral panel shall comprise of three arbitrators. In that event, the supplier will nominate one arbitrator and the competent authority will nominate arbitrator and Presiding Arbitrator of the arbitral tribunal. The arbitration proceeding shall be carried out in English language. The cost of arbitration and fees of the arbitrator(s) shall be shared equally by the Parties. The seat of arbitration shall be at Department of Physics, IIT Madras, Chennai.

- a. **The Applicable Law:** The Purchase Order shall be construed, interpreted and governed by the Laws of India. Court at Chennai shall have exclusive jurisdiction subject to the arbitration clause.
- b. Any legal disputes arising out of any breach of contact pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Chennai in Tamil Nadu.
- 17) All Amendments, time extension, clarifications etc., will be uploaded in the website only and will not be published in newspapers. Bidders should regularly visit the above website to keep themselvesupdated. No extension in the bid due date/ time shall be considered on account of delay in receipt of any document by mail.
- **18) Risk Purchase Clause**: In the event of failure of supply of the item/equipment within the stipulated delivery schedule, the purchaser has all the right to purchase the item/equipment from other sources on the total risk of the supplier under risk purchase clause.

19) Eligibility Criteria:

- > As per the Government of India Order, only "Class I Local Suppliers" and "Class II Local Suppliers" can participate in this tender.
- > Bidder should confirm their acceptance that they comply with the provisions with report to "Guidelines for eligibility of a bidder from a country which shares a land border with India as detailed at Annexure-IV. The bidder should submit Certificate for "Bidder from/ Not from Country sharing Land border with India & Registration of Bidder with Competent Authority" as per Order of DoE F.No.6/18/2019-PPD dated 23.07.2020 as mentioned.

20) Selection of Successful bidder and Award of Order.

The order will be awarded to the technically qualified bidder as per the condition in para 3A of DIPP, MoCI Order No. 45021/2/2017-pp (BE II) dated 16th September 2020 & P- 45021/102/2019-BE-II-Part(1) (E-50310) Dt.4th March 2021 and any subsequent modifications/Amendments, and latestorders if any.

21) Preference to "class I Local Suppliers": In case of value of goods/works exceeding Rs 5 lakh (inclusive of taxes) preference will be given to "class I local suppliers" (subject to class -I localsupplier's quoted price falling within the margin of purchase preference) as per public procurement (preference to Make in India) order 2017 .O.M No P- 45021/2/2017 – pp(BE - 11) dt 04/06/2020 subject to the conditions that the "Class I Local Supplier" should agree to supply goods / provide service at L1 rate and furnish a certificate with the bid document that the goods/service provided by them consists local content equal to or more than 50%...

- > 'Class I local supplier' means a supplier or service provider whose goods, services or works offered for procurement consists of local content equal to or more than 50% as defined under the above said order. Declaration to be provided as per Annexure-I per item/service/work.
- > 'Class II local supplier' means a supplier or service provider whose goods, services or works offered for procurement consists of local content equal to 20% but less than 50% as defined under the above said order Declaration to be provided as per Annexure-I per item/service/work.
- 'Margin of purchase preference': The margin of purchase preference shall be 20%. The Definition of the margin of purchase preference is defined in the Govt. of India Order No: P-45021/12/2017-PP(BE-II) Dt.4th June, 2020) Order 2017. As per the Government of India Order "Margin of Purchase Preference" means the maximum extent to which the price quoted by a "Class-I local supplier" may be above the L1 for the purpose of purchase preference.

** Note: Local content percentage to be calculated in accordance with the definition provided at clause 2 of revised public procurement preference to Make in India Policy vide GoI Order no. P-45021/2/2017-PP (B.E.-II) dated 15.06.2017 (subsequently revised vide orders dated 28.05.2018, 29.05.2019and 04.06.2020)MOCI order No. 45021/2/2017-PP (BE II) Dt.16th September 2020 & P- 45021/102/2019-BE- II-Part(1) (E-50310) Dt.4th March 2021

Price Bid Opening: - The technically qualified bid will be opened on **14.12.2022 3:00pm** at the **Department of Physics,** IIT Madras.

For Site Visit: Bidders will be allowed to visit the dept for site seeing from 06.12.2022 to 08.12.2022 @ 10.00 am to 4.00 pm to the Physics Dept, IIT Madras, Chennai – 600 036, Contact No. 044-22575860/4850/5858.

Acknowledgement: - It is hereby acknowledged that the tenderer has gone through all the conditions mentioned above and agrees to abide by them.

SIGNATURE OF TENDERER ALONG WITH SEAL OF THE COMPANY WITH DATE

Yours sincerely,

Prof. Ranjit Kumar Nanda, Department of Physics IIT Madras, Sardar Patel Road, Chennai - 600 036

FORMAT FOR AFFIDAVIT OF SELF-CERTIFICATION UNDER PREFERENCE TO MAKE IN INDIA – PER ITEM

ender Reference Nun nme of the item / Serv		
ime of the item / Ser	ice:	
Date: I/We	S/o, D/o, W/o,	Resident of
Hereby solemnly affin	m and declare as under:	
India) Policy vide Gol orders dated 28.05.20	pide by the terms and conditions of the Public Proceedings of the Public Proceedings of the Public Proceedings of the Public Proceedings of the Public Procedure of the Public	06.2017 (subsequently revised vide 45021/2/2017-PP (BE II) Dt.16th
	for all inputs which constitute the said item/servor the correctness of the claims made therein.	vice/work has been verified by me
I/We_thatLocal Co	[name of the supplier] hereby content is equal to or more than 50% and come und	
that Local C	ontent is equal to 20% but less than 50% and com	onfirm in respect of quoted items ne under "Class-II Local Supplier"
I/Wethat Local C	[name of the manufacturer] hereby confiontent is less than 20% come under 'Non – Local	irm in respect of quoted items I Supplier' category
local content in	e location (s) at which the local value addition is a percentage Percentage of Local content	• •
For and on behalf of.	(Name of firm	n/entity)
	(To be duly authorized by the Board of Directors) ation and Contact No.>	
from statutory auditor	arement for a value in excess of Rs. 10 Crores, the or cost auditor of the company (in the case of coing chartered accountant (in respect of suppliers	ompanies) or from a practicing cost

This letter should be on the letterhead of the quoting firm and should be signed by a competent authority. Non-submission of this will lead to Disqualification of bids.

percentage of local content.]

TENDER CHECKLIST – Mandatory to be filled and sent (inside the Main Bid Cover) along with Bidding Document.

	1.	Technical – cum - Financial Bid	
	2.	Completed and Signed Form of Tender . The Form of Tender document shall be signed by a person legally authorized.	
	3.	Completed Technical Compliance Statement.	
are	4.	Evidence of similar contracts completed/Product supplied in case if the details uested in Annexure - IV	
	5.	Certification of Class I / Class II Local supplier to be submitted (as a Part of technical bid) per item / service / work (Annexure – I)	
	6.	Land Border (Annexure – III)	
of (Authorized agent certificate from OEM is mandatory if Indian agent/Indian office M is participating in this tender on behalf of OEM.(As per Annexure – V)	
are the	ask	ove documents should be provided for a contractor's bid to be valid. Bidders ted to supply and tick off the required information. Failure to provide any of ted documents may result in the bid being considered non-compliant and d.	

Signature of the Bidder

Annexure - III

(To be give	en on the letter head of the bidder)
No	Dated:
	<u>CERTIFICATE</u>
	(Bidders from India)
I have read the clause regarding restric a land border with India and hereby cer	ctions on procurement from a bidder of a country which shares rtify that I am not from such a country.
OF	R (whichever is applicable)
(Bidders from Cour	ntry which shares a land border with India)
a land border with India and hereby ce has been registered with the Competer	ctions on procurement from a bidder of a country which shares rtify that I from (Name of Country) and nt Authority. I also certify that I fulfil all the requirements in this (Copy/ evidence of valid registration by the Competent Authority
Place: Date:	Signature of the Tenderer Name & Address of the Tenderer with Office Stamp

Annexure – IV

TECHNICAL SPECIFICATION

Audio System

Wall Speakerphone (1 No.)

Connector Type - RJ45 and USB Type B
Power requirements - (PoE+) 802.3 at Type 2
Control Application - Stem Ecosystem Platform

Coverage Angle - 180 degrees Frequency Response - 50Hz to 16Khz

Built in DSP - Automatic Voice level adjustment

100% full duplex, no attenuation in either direction.

Noise Cancellation - >15dB (without pumping noise).

Automatic Noise Cancellation - >40dB with conversion speed of 40dB/sec:

residual echo is suppressed to the environment noise level, preventing artificial ducking of signal, Highend

performance conforms to ITU-T G.168.

Ceiling microphone (3 No.)

Connector Type - RJ45 and USB Type B
Power requirements - (PoE+) 802.3 at Type 2
Control Application - Stem Ecosystem Platform

Beam Width - Narrow (20degrees), Medium (45 degrees),

Wide (60 degrees).

Frequency Response - 50Hz to 16Khz

Built in DSP - Automatic Voice level adjustment

100% full duplex, no attenuation in either direction.

Noise Cancellation - >15dB (without pumping noise).

Automatic Noise Cancellation - >40dB with conversion speed of 40dB/sec:

residual echo is suppressed to the environment noise level, preventing artificial ducking of signal, Highend

performance conforms to ITU-T G.168.

Multidevice audio HUB (1 No.)

Networking & Ports - Ethernet (Supports POE+)

Terminal Block USB Type B Dante VoIP

Dual Wireless Handheld & Laple Microphone (1 No.)

Operating Range - 91m line of sight Available frequencies - 524 – 865 MHz Audio Range - 50 – 15KHz

Audio O/p connector - XLR & ¼" unbalanced Maximum O/p level - 27dBv (XLR,Mic level)

-13dBV (1/4")

Battery Life - upto 13hours

Dynamic Range - 100dB-A weighted

System distortion - 0.5% THD typical

Transmitter RF O/p Power - 10mW typical

Amplifier (1 No.)

Output - 120W@4/8 Ohms

Frequency response - +/-1dB (@1W into 4 or 8 Ohms)

Load Impedance - 2 – 16 Ohms Sensitivity - 1.4Vrms

SNR - Greater than 100dB -1kHz, A weighted

Input Impedance - Balanced 20K ohms/ unbalanced 10K Ohms

Wall Mount Speaker (4 Nos.)

Frequency Range - 70Hz - 23kHz

Power capacity - 200W Continuous program, 100W Continuous Pink

Transformer Taps - 70V: 60W,30W,15W,7.5W

100V: 60W,30W,15W

Sensitivity - 87dB SPL,1W@1m(3.3ft)

Midrange - 130Hz-14Khz Coverage Angle - 100x100 degree

Maximum SPL(@1m) - 113dB continuous peak pink noise

107dB continuous average pink noise

103dB continuous average music or speech

Impedance - 8 Ohms

Drivers - LF: 5.25" polypropylene coated paper with weather

edge surround, 1" voice coil.

HF: 0.75" titanium coated PEI

Safety agency - UL1876

Speaker Cable: (100 Mtrs)

No. of Element - 2

Conducting Material - Copper Size - 1.5SQ.mm

Insulation material - PVC

Microphone Cable: (50 Mtrs)

No. of Element - 2

Conducting Material - Bare Copper Size - 24AWG Insulation material - PVC Outer Jacket - PVC

Outer Shield Material - Bare copper
Non Conducting DCR - 22.80hm/1000ft

OTHER IMPORTANT TERMS AND CONDITIONS

- Authorized agent certificate from OEM is mandatory if Indian agent/Indian office of OEM is participating in this tender on behalf of OEM.
- The bidder or OEM should have supplied at least 5 similar supply to IIT's/NIT's/IISCR's/CSIR Labs or other Govt R& D organizations.
- Purchase Orders or Installation certification along with contact details of end-user need to be submitted as proof of supply. IITM reserves the right to verify the claims within 3 years in similar supply.
- Brand/ Make JBL, SHURE, CLEAR ONE.

OEM CERTIFICATION FORM (In Original Letter Head of OEM)

Tender No: Dated:
We are Original Equipment Manufacturers (OEM) of (Name of the company)
Ms (Name of the vendor) is one of our
Distributors/Dealers/Resellers/Partners (tick one) for the
tender by offering our product model(Name of the product with model number).
is authorized to bid, sell and provide service support warranty for our product as mentioned above.

Name and Signature of the authorized signatory of OEM along with seal of the company with Date