

#### (Institute of National Importance), Hosur Road, Bengaluru – 560 029

26995023/5913/5923 Website: http://www.nimhans.ac.in/tender

Fax: 080-26571563/26564830/2121/6811 E-mail: aaos@nimhans.ac.in



Fax. 000-203/1303/2030-030/2121/0011 E-mail. aa05@minid

NIMHANS/2020-21/IND761 22/12/2020

#### **TENDER NOTIFICATION**

# (Through Karnataka e-procurement portal only)

The Director, NIMHANS invites tender from eligible tenderers through the Karnataka Government E-Procurement portal for supply of following equipment.

Sl. No.	Name of the Item	Quantity	EMD
1.	Integrated Multi-Channel Neural Interface System	01	Rs 2,60,000/-

## **Tender Schedule**

Downloading	of	Tender documents	from	website	From 22.12.2020 Onwards
https://eproc.kar	nataka.g	gov.in/eportal/index.se	<u>am</u>		
Last date for tend	08.1.2021 upto 11:00 AM				
Tender submissio	12.1.2021 upto 11:00 AM				
Technical bid will	13.1.2021 at 11:00 AM				

Sd/-, Director

## **TENDER DOCUMENT**

## **Terms and conditions**

- The bid documents for the above items should be addressed to "The Director, National Institute
  of Mental Health & Neuro Sciences, Post Box No. 2900, Hosur Road, Bengaluru 560 029,
  Karnataka, India" and should uploaded in E Procurement portal only on or before the due date.
- 2. The tender bid should be valid for **120 days** from the due date (Tender submission last date) NIMHANS, Bengaluru will not take any responsibility for any technical issues.
- 3. Earnest Money Deposit (EMD):
  - **a.** The (EMD) shall be denominated in Indian Rupees and should be paid in the e-procurement portal as per the facility provided.
  - **b.** The EMD shall not bear any interest and will be refunded to
    - i. successful tenderer on receipt of Agreement and Bank Guarantee.
    - **ii.** unsuccessful tenderer upon finalization of tender bid and award of tender to successful bidder.
    - iii. All the tenderers if the tendered item is cancelled or retendered.
    - iv. EMD amount is exempted, if there enclose valid NSIC/MSME Certificate.
- **4.** The tender documents and all correspondence's relating to the bid should be in **English language only.**



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- 5. Technical bid should comprise of (uploaded copy of documents should be self-attested, stamped and better quality preferably .pdf format)
  - a. Brochure/Catalogue and Data sheet of the equipment.
  - **b.** Technical Compliance Statement as per the specification sheet from point A to E to be enclosed as per the Annexure-1.
  - **c.** Proprietary certificate from the manufacturer mentioning the unique technology or feature/s mentioned apart from the brand name (If applicable).
  - **d.** Pre requirements required at the installation site (Before submitting the bid, the tenderer should make pre-visit to the installation site and indicate the requirement along with the price bid wherever necessary)
  - **e.** Delivery Period of the item to be supplied and Time required for installation from the date of purchase order has to be indicated.
  - **f.** List of Institutes where the equipment has been supplied with copy of purchase orders.
  - g. Copy of GST, PAN, TIN document
  - **h.** Whether tenderer is manufacturer / accredited agent / sole representative, indicate details of principals name & address. The offers of tenderer who are not manufacturer or direct authorized agent will be summarily rejected. Sub- distributors will not be accepted.
  - i. Non blacklisting certification that the firm has not been blacklisted in the past by any government/Private institution and certification for No Vigilance/CBI case pending against the firm/supplier by making an affidavit on non judicial stamp paper of Rs 100/-.
  - j. Declaration towards acceptance of all terms and conditions should also be provided.

# 6. Financial Bid should comprise of-

- a. Price quoted should be for DAP (INR or foreign currency) only i.e. NIMHANS Door Delivery Price inclusive of main equipment cost, each article wise/spares rates, taxes, other Government levies, Customs duty, any local agency commission, transportation, delivery of the equipment to the Institute premises, installation and commissioning etc. with a detailed break up mentioning manufacturers name, License number and name of the brand/make. Tender bids without price bid/quotation will be rejected.
- **b.** Detailed breakup of the cost should be provided under icon "Action column" by clicking the % symbol which will be mentioned as Added statutory components like Base Value of the equipment quoted, GST percentage, etc.

# Note: Price quoted will be Inclusive of taxes for DAP.

- c. The tenderer should also provide the quote for regular servicing/maintenance duly mentioning the number of visits per annum for the AMC & CMC period after the warranty period is over. AMC & CMC should be quoted in INR only.
- i. If the tenderer is quoting in Indian Rupees (INR) for items NOT MANUFACTURING IN INDIA (NMIC), the CUSTOM DUTY EXEMPTION CERTIFICATE WILL NOT BE ISSUED BY THE INSTITUTE. The Rate quoted should be inclusive of Custom duty & other incidental charges, the break of the cost should be provided under icon "Action column".
- 7. Successful tenderer decision will be made on the basis of total cost of the equipment (Inclusive of all miscellaneous charges as mentioned in Clause 6a).



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8. The cost of the "Integrated Multi-Channel Neural Interface System" will be freezed for 1 Year from the date of purchase order; however Institute reserves the right to procure/reject the purchase of equipment with the successful tenderer on repeat order basis within 1 year from the date of purchase order.

9. The tender bids (technical and price bid) should be typewritten; every correction in the tender should be initialed along with seal by the tenderer, failing which the tender will be rejected. All pages of the bid submitted must be signed along with seal and sequentially numbered by the tenderer.

# 10. Evaluation of Bids:-

The technical bid of the tenderer will be evaluated to determine whether

- **a.** They are complete with respect to specifications.
- **b.** They are free from computational errors.
- c. The requisite documents have been submitted and properly signed.

# 11. Tender Opening:

- a. The Technical bids will be unlocked through E procurement portal in the Committee Room, Adjacent to Registrar Chamber, NIMHANS, Bengaluru on the date specified in tender.
- **b.** The Financial bid of the technically qualified tenderer/s only will be opened on a notified date.
- 12. Equipment and its accessories should be covered with minimum warranty period of 5 years for normal or regular wear & tear from the date of complete installation (Ready to use in all respects). In case of software's, the validity of the license key should be clearly mentioned and should have user define provision with option to switch over from one system to other system of the same kind within the validity period.

# 13. Software Updates:

The selected firm for the supply of tendered item should provide free updates of software up to 5 years from the date of complete installation.

- **14.** Supply of spares should be guaranteed for a minimum period of 10 years from the date of supply or from the date of cessation of production of the model for 10 years, whichever is later, at the rates prevailing against payment.
- 15. Any modification or revision of bids after submission will not be entertained under any circumstances. Conditions such as "subject to the availability of stocks", supplies will be made as and when supplies received from the principles etc., will not be considered under any circumstances.
- 16. A tenderer having once given a tender bid shall not withdraw it after its acceptance/opening and if does, the EMD paid by the tenderer will be forfeited and the tenderer is liable to make good the loss sustained.
- 17. If required, the tenderer should demonstrate the quoted model of the equipment at the institute during the technical evaluation, failing which their bid/offer shall be rejected. The tenderer will be intimated that they should get ready for demonstration. No request for extending time for demonstration will be entertained. Failure to demonstrate, their offer will be rejected.



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**18.** The tenderer should supply the circuit diagram and instruction manual of the tendered equipment/s at the time of supply of the equipment.

- 19. Necessary training / instructions on operation of the system should be given by the qualified engineers of the tenderer firm to NIMHANS technical staff/s at free of cost after completion of the installation.
- 20. The successful tenderer should immediately submit an acceptance letter duly signed and sealed for the rate/s and offers agreed by both the parties to the Head of the Institution within reasonable time on receipt of the Purchase Order (Agreement Specimen will be enclosed with Purchase order & Stamp duty to be paid by the tenderer). The successful tenderer should also furnish a Bank guarantee only from a Nationalized bank to the extent of 10% of the total purchase order value, valid for 60 days beyond the completion of the warranty period of the equipment, no split period bank guarantee will be entertained. In the event of the successful tenderer failed to supply the item/execute the agreement/submit the Bank Guarantee the EMD deposited by them shall stands forfeited.

# 21. Payment terms:

Payment will be made only after good working condition of the equipment certified by the end user. **NO ADVANCE PAYMENT WILL BE ENTERTAINED.** 

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# **22.** Uptime Guarantee:

Penalty Clause for non-functioning of equipment in term of hardship to the patients and financial loss to institute: 95% up time of 365 days (24 hours a day) that is from the day of successful handing over of the whole complex. The company takes the responsibility for the functioning of all the components and equipment, including the third party items supplied and included in the project. The total downtime annually for any reason/involvement of any of the components cannot exceed 5% (all inclusive). Subsequently if downtime exceeds 5% of 365 days, 1% of PO Value will be levied as penalty for every 24 hours of downtime until 7 days from the day of breakdown. If downtime exceeds 7 days the penalty will be 2% of PO Value from the date on which the equipment broke down beyond 5% permissible downtime. In addition to this, warranty period will be extended at double the rate of the downtime period.

- 23. If, at any time, during the said period, the supplier reduce the said prices of such Materials/Equipment or sales such Materials/Equipment to any other person/organization/ Institution at a price lower than the chargeable, the company shall forthwith notify such reduction or sale to the Director, NIMHANS and the price payable for the Materials supplied after the date of coming into force of such reduction or sale shall stand correspondingly reduced.
- 24. The losses to NIMHANS, Bengaluru, if any incurred on account of purchase made elsewhere by failure, neglect or refusal on the part of the tenderer to supply according to the terms of agreement will be recovered from them. If any article or things supplied by the tenderer have been partially or wholly used or consumed in the hospital and they are subsequently found to be in bad condition, unsound, inferior in quality or description, not in accordance with samples or otherwise faulty or unit for use, the wholesome of the contract price or price of such articles or things will be recovered from the tenderer. The tenderer will not be entitled for any payment



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whatsoever, for such articles for infringements of the stipulation of the conditions or for justifiable reasons the contract may be terminated by the Director and the tenderer shall be liable for losses sustained by the NIMHANS on the consequences of the termination which may be recovered from the EMD/Bank Guarantee or from their invoices due to them. In the event of such amount being insufficient, the balance will be recovered personally from the tenderer.

- **25.** Any corrections/changes in the tender will be uploaded as corrigendum in the NIMHANS and E procurement websites only.
- 26. If the tender last/opening date falls on any general/government/institute holiday(s), then the successive dates will be postponed by equivalent days of holiday(s), however the time remains unchanged.
- 27. The Director reserves the right of ordering/not ordering/cancelling/increase or decrease the quantity and to reject any or all tender quotations without assigning any reason. The decision of the Director, NIMHANS, Bengaluru, shall be final in all the controversies that may arise in the matter. Any dispute arising out of this will be subject to the jurisdiction of the Court in Bengaluru.
- 28. Failure to adhere any of the above terms and conditions the bid(s) may be rejected and EMD may be forfeited.
- **29.** None of the terms and conditions of the supplier shall be applicable to the purchase contemplated hereunder, irrespective of it being attached to any documents to be provided to NIMHANS. Such exercise shall have no meaning and binding effect unless the same is accepted by NIMHANS in writing.

Sd/-, NIMHANS



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## **DECLARATION**

(TO BE GIVEN BY THE TENDERER)

Name of the Equipment: <u>Integrated Multi-Channel Neural Interface System</u>

Name of the company:

To

The Director,
National Institute of Mental Health & Neurosciences
(Institute of National Importance)
Post Box No. 2900,
Hosur Road, Bengaluru – 560 029

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Dear Sir,

- 1. I/We hereby submit my/our tender for the ......
- 2. I/We have made requisite payment against EMD as per the tender document vide reference No. & date ......, else my tender bid may be rejected.
- 3. I/We have gone through all terms and conditions of the tender documents before submitting the same.
- 4. I/We hereby agree to all the terms and conditions, stipulated by the NIMHANS, in this connection including delivery, warranty, penalty etc. Quotations for each group are being submitted and shall be considered on their face value.
- 5. I/We undertake to sign the contract/agreement, if required, within reasonable time from the date of issue of the letter of acceptance, failing which our/my security money deposited may be forfeited and our/my name may be removed from the list of suppliers at the NIMHANS, Bengaluru.

NOTE: ALL TERMS & CONDITIONS SUCH AS TAXES/LEVIES ETC, HAS BEEN INDICATED IN THE QUOTATIONS FAILING WHICH IT WILL BE PRESUMED THAT THE RATES ARE INCLUSIVE OF ALL TAXES/LEVIES AND OTHER TERMS AND CONDITIONS ARE ALSO AS PER YOUR REQUIREMENTS.

Yours faithfully,

Signature of Tenderer & seal



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# **CHECK LIST**

# (TO BE FILLED BY THE TENDERER)

1.	Na	me & Address of the Tenderer				
2.		me & address of the manufacturer				
3.		me of the equipment & Model loted				
4.	Va	lidity of the quotation	120	days from the tender submission last date		
	a.	Delivery Period				
5.	<b>b.</b> Warranty Period		5 years			
	c. Installation Period					
			a.	Application Fee submitted		
				EMD submitted		
				Brochure/Catalogue uploaded		
				Technical Compliance Statement		
	AED.		e.	Manufacturer Proprietary certificate Uploaded		
	_	Tender Bid uploaded details		Pre requirements details uploaded		
6.				g. List of users uploaded		
	Tender Bid uploaded details (YES or NO against each item)		h. Copy of GST/PAN/TIN & Bank details Uploaded			
		12	i. Distributor authorization letter uploaded			
		No. of the state o		Non-blacklisting certification uploaded		
				Declaration enclosed		
				I. Equipment Door delivery cost quoted		
				AMC & CMC cost for 5 years post		
			m.	warranty period		
7.	Training will be provided (YES or NO)					
	Whether after sales, service is					
_	a. available in Bengaluru? If yes, quote					
8.	the details					
	١.	What is the arrangement for post				
	b. contract / warranty monitoring of					
	<u> </u>	the equipment				
9.	An	,				
	separately in letter head – YES or NO).					

Signature of Tenderer along with seal



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Department Department of Psychiatry			
	End User Contact Details	EMD	
Name	Shyam Sundar Arumugham	Rs 2,60,000/-	
Designation	Additional Professor of Psychiatry		
Office No.	+91-80-26995353		
Email	a.shyamsundar@gmail.com		

# **Technical specifications for Integrated Multi-Channel Neural Interface System**

Integrated neural interface system capable of electrophysiological recording and stimulation through deep brain stimulation electrodes. It should be supplied with the following:

# 1. Hardware with the following capabilities

- Real-time closed loop stimulation.
- Expansion to record electromyogram, electrocorticogram and single/multi-unit spikes. Expansion up to 512 channels would be preferable.
- Compatible with Indian power supply of 220 V and 50 Hz (should have an optional notch filter at 50 Hz)
- Portable hardware with internal battery backup and memory storage for ambulatory recording would be preferable.
- Can be controlled by a computer either through Ethernet or wifi (preferable).

# 2. Frontends with the following capabilities

- Simultaneous digital scalp electroencephalography recording and recording invasive electrophysiological activity (local field potentials) from at least two deep brain stimulation (DBS) electrodes.
- Capable of both recording and stimulation through DBS electrodes.
- Specialized circuitry for artifact rejection and rapid recording recoveryfollowing stimulation
- Integrated filtering, amplification, and 24-bit digitization for high-fidelitysignal acquisition
- Adapter cables to connect to Medtronic deep brain stimulation electrodes.
- Flexibility to use individual electrodes or EEG cap for simultaneous recording of 32-channel electroencephalography (with at least 2 bipolar channels for EMG/ECG/EOG and auxiliary channels for peripheral signal recording).
- Capacity to receive trigger inputs for ERP recording.
- Hardware and software flexibility to record customized trigger pulses for accurate marking of EEG events.
- Sampling rate of >6000 Hz.
- CMRR 110 dB
- Stimulation voltage through DBS electrodes at least ± 20V, stimulation current of at least ± 10 mA.

## 3. Compatible software with the following capabilities

- Acquire, visualize and sort electrophysiological recordings.
- Software for EEG/ERP acquisition and recording and saving data, esp. in format compatible with MATLAB based tools.



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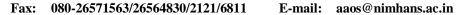
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- Compatible with Microsoft Windows, MacOS and Linux.
- Stream data through either ethernet or Wifi.
- Customizable filters on display streams.
- Continuous impedance measurements.
- Programmatic control of stimulation waveforms and train parameters
- 4. Computer with latest compatible operating system for data acquisition and analysis.
- 5. 32-channel EEG cap set in 10-20 montage.
- 6. Other accessories for EEG acquisition including gel, measuring tape, syringe etc. for acquisition from around 50 subjects to be provided.
- 7. **Note:** The following documents have to be enclosed:
  - a) List of peer-reviewed PubMed indexed original research publications that have used the quoted equipment for recording from DBS electrodes.
  - b) List of users in research institutions in India and abroad
  - c) The bidder must provide the technical compliance report in strict adherence to the format provided in the tender notification. The bidder should provide documents to support the compliance with all the technical specifications as annexures. In addition, the bidder should indicate the exact location of the text in the annexure (for example annexure no., page, paragraph, and lines detail) that provides the necessary documentary support for the respective technical specification. Scrutiny for matching the technical specifications will be based on the documents & details of the text location (as specified above) provided with the technical bid, preferably along with cross-referencing from the product website.
  - **d)** Certification: A copy of Suitable certification of the quoted equipment (i.e. FDA or CE or equivalent certification) for application of equipment in human subjects.



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# <u>Annexure-I</u> <u>Technical Compliance form for Integrated Multi-Channel Neural Interface System</u>

Please mention whether the quoted equipment has the following capabilities:

		Compliance	Remarks
		(yes/no)	(if any)
Α	Hardware		
1	Real-time closed loop stimulation.		
2	Expansion to record electromyogram, electrocorticogram		
	and single/multi-unit spikes. Expansion up to 512 channels		
	would be preferable.		
3	Compatible with Indian power supply of 220 V and 50 Hz		
	(should have an optional notch filter at 50 Hz)		
4	Portable hardware with internal battery backup and		
	memory storage for ambulatory recording would be		
	preferable.		
5	Can be controlled by a computer either through ethernet or		
	wifi (preferable).		
В	Frontend capabilities	T	T
1	Simultaneous digital scalp electroencephalography recording		
	and recording invasive electrophysiological activity (local		
	field potentials) from at least two deep brain stimulation		
	(DBS) electrodes		
2	Capable of both recording and stimulation through DBS		
_	electrodes.		
3	Specialized circuitry for artifact rejection and rapid recording		
_	recovery following stimulation		
4	Integrated filtering, amplification, and 24-bit digitization for		
_	high-fidelity signal acquisition		
5	Adapter cables to connect to Medtronic deep brain		
	stimulation electrodes.		
6	Flexibility to use individual electrodes or EEG cap for		
	simultaneous recording of 32-channel		
	electroencephalography (with at least 2 bipolar channels for		
	EMG/ECG/EOG and auxiliary channels for peripheral signal		
7	recording).		
7	Capacity to receive trigger inputs for ERP recording.		
8	Hardware and software flexibility to record customized		
	trigger pulses for accurate marking of EEG events.		
9	Sampling rate of >6000 Hz.		
10	CMRR 110 dB		
11	Stimulation voltage at least ± 20V, stimulation current of at		
	least ± 10 mA.		
C	Software capabilities		
1	Acquire, visualize and sort electrophysiological recordings.		
2	Software for EEG/ERP acquisition and recording and saving		



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	data, esp. in format compatible with MATLAB based tools.			
3	Compatible with Microsoft Windows, MacOS and Linux.			
4	Stream data through either ethernet or Wifi.			
5	Customizable filters on display streams.			
6	Continuous impedance measurements.			
7	Programmatic control of stimulation waveforms and train			
	parameters			
D	Computer with latest compatible operating system for data			
	acquisition and analysis.			
E	32-channel EEG cap set in 10-20 EEG montage			
F	Other accessories for EEG acquisition including gel,			
	measuring tape, syringe etc. for acquisition from around 50			
	subjects to be provided			

<u>NOTE</u>: Please keep checking the NIMHANS and E-Procurement websites regularly for any further updates.

Sd/-, Director