श्री चित्रा तिरुनाल आयुर्विज्ञान और प्रौद्योगिकी संस्थान, तिरुवनंतपुरम- 11, केरल
Sree ChitraTirunal Institute for Medical Sciences and Technology, Thiruvananthapuram - 11, Kerala
(भारत सरकार के अधीन राष्ट्रीय महत्व संस्थान)
(An Institute of National Importance under Government of India)
टेलीफॉन नं./Telephone No. 0471-2443152 फाक्स/Fax 0471-24464332550728
ई-मेल/E-mail :sct@sctimst.ac.in वेबसाइट/ Website : www.sctimst.ac.in

E- TENDER NOTICE

Tender No. SCT/H/IMP-IND/P1/2021-22/9 **Dated 21.10.2021**

Online Tender in **TWO BID** system are invited from Foreign Manufacturers/their accredited Indian Agents/Indian Manufacturers/ their Distributors for the supply and installation of the following equipment.

Sl. No.	**Brief Description System**	Quantity	**Earnest Money Deposit**
I	BIPLANE DIGITAL FLAT PANEL CATH LAB	1 No.	In the form of Bid Security Declaration
Pre- Bid Meeting with prospective bidders			
Proposed dates of site visits before the pre-bid meeting 01/11/2021 to 03/11/2021 in consultation with Division of Clinical Engineering and Dept. of Imaging Sciences and Interventional Radiology			
Venue for pre-bid meeting : Lecture Hall-2 of AMCHSS of Sree Chitra Tirunal Institute for Medical Sciences and Technology, Medical College P.O. Thiruvananthapuram – 695011, Kerala			
Last date of submission of pre-bid queries as email to **purchase@sctimst.ac.in** with a copy to **spso@sctimst.ac.in**			**06/11/2021 up to 4 pm**
Date of Pre-bid meeting			
Date of pre-bid meeting			**10/11/2021 at 11.00 am**
Date of Publishing of corrigendum if any after pre-bid meeting			**20/11/2021**
Last date and time of online submission of bids			**10/12/2021up to 5.00 pm**
Last date and time of submission of **Hardcopy of Techno-commercial Bid** with supporting documents **(price bid has to be submitted online only).** ***The tender will stand rejected if the price bid is submitted along with hardcopy of techno-commercial bid***			**14/12/2021 up to 1.00 pm**
Date of tender Opening			**15/12/2021 at 2.30 pm**
Contact Person : Senior Purchase & Stores Officer, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Medical College P.O., Thiruvananthapuram – 695011, Kerala. Ph: 0471-2524 445/ 145 /225 / 425			

Interested bidders are advised to download the complete Tender Enquiry document from the websites www.sctimst.ac.in orwww.eprocure.gov.in/cppp or www.tenderwizard.com/SCTIMST under "Tender Free View" link for complete details.

Vendors should obtain the USER ID and PASSWORD from www.tenderwizard.com/SCTIMST by clicking on "Enrolment/REGISTER ME" link in the homepage. The vendor registration fees has to be paid to KEONICS for Rs 2000/- plus tax. Using the e-payment link provided at the time of registration, and the mode of payment are Credit Card, Debit Card and internet banking. Vendor Registration is valid for ONE Year.

For further details on e-Tender participation, please contact KEONICS Help Desk on

- Telephone: 080-49352000/9746428200 Mr. Vijay (Kerala Executive)
- Email:sridevi.m@etenderwizard.com, harishkumar.kb@etenderwizard.com, ambasa@etenderwizard.com twhelpdesk908@gmail.com

All bids should be accompanied by **BID SECURITY DECLARATION CERTIFICATE (Annexure-4).** Original Bid Security Declaration should be enclosed with technical bid..

Integrity Pact Agreement will form part and parcel of this tender. It is mandatory to enclose the Integrity Pact Agreement (APPENDIX-A) along with the tender

Independent External Monitors

- Sri.Sharda Prasad, IPS (Rtd). Ph: 8800484522, eamil: spy1809@gmail.com
- Sri. Sanjeev Behari, IRS (Rtd). Ph: 9869199464 email: saloni_behari@yahoo.co.in

All pages of Integrity Pact Agreement are to be returned by the bidder along with the bid duly signed by the same signatory who is duly authorized to sign the bid and to make binding – commitments on behalf of his company. Any bid not accompanied by Integrity Pact duly signed by the bidder shall be considered to be a non-responsive bid and shall be rejected straightaway.

Clarifications, if any with regard to tender documents may be communicated /sought well in advance before the closing date of the tender.

The Director of the Institute reserves the right to accept the offer by individual items and reject all or any of the tenders or in whole or part without assigning any reason thereof and does not bind itself to accept lowest quotations.

Bidders may simulate online bid submission (technical & financial) at least one week in advance of the bid submission deadline. No clarifications/troubleshooting regarding any problems being faced during bid submission online shall be entertained in the last week of bid submission.

Important Note: Tenders not accompanied with Bid Security Declaration Certificate shall automatically stand rejected.

Sd/-

DIRECTOR

श्री चित्रा तिरुनाल आयुर्विज्ञान और प्रौद्योगिकी संस्थान, तिरुवनंतपुरम- 11, केरल
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TERMS & CONDITIONS

1. The tender(s) must be submitted as per the below terms and conditions and should be free from corrections/erasures. In case there is any unavoidable correction(s), it should be properly attested. If not the tender(s) will not be considered. Further, tender(s) written in pencil will not be considered.

2. (a) The bidder should declare whether they are a manufacturer, accredited Agents, or sole representative (indicating the name of Principal) on the top of the Bid.
   (b) In case of agents quoting in offshore procurements, on behalf of their principal manufacturer(s), one agent cannot represent two manufacturers or quote on their behalf in particular tender. One manufacturer can authorize only one agent / dealer. Only one bid, either from principal manufacturer directly or through one Indian agent on his behalf or Indian / foreign agent on behalf of principal manufacturer shall be entertained.
   (c) Agency Commission, if any should be payable to Indian agent at the rate prescribed by the foreign tenderers as per quote.

3. All offers should be accompanied with detailed specifications, relevant documents as elaborated in Annexure 1 & 2.
4. Bids should be accompanied with illustrated catalogue, brand, model number, make, literature, write up where ever applicable.

5. In case the items coming under the provisions of Drugs & Cosmetics Act & Rules, the following should be submitted :

   a) For imported items : Central Drugs Controller Certificate from Central Drugs Standard Control Organization, New Delhi.
   b) For indigenously manufactured items : Certificate issued by State Drugs Controller

6. The documents to be furnished in both the bids are given in Annexure-2. Technical bid will be opened and evaluated first. Price bid of technically qualified bidders will be opened on prior intimation. The lowest offer will be arrived on adding basic cost, GST applicable, incidentals (if any). Negotiation will be conducted with the lowest qualified tenderer only, if required.

7. This Institute reserves the right to accept the offer by individual items and reject any or all tenders without assigning any reason thereof and does not bind itself to accept lowest quotations.

8. The prices quoted should be EX-WORKS/ FOB / CIF in foreign currency by Ocean Freight/Air Freight or FOR Trivandrum for delivery at our Institute in INR, if the tenderer prefers to quote in INR. (This clause is applicable as per the mode of quote). If the price quoted is CIF, break up of price for freight and insurance to be indicated separately.

Rates quoted should not be revised till the supplies are completed and the rate shall be valid for 180 days from the date of opening of bid.

9. For imported goods if supplied directly from abroad, prices shall be quoted in any freely convertible currency say US Dollar, Euro, GBP, Yen and etc. As regards price(s) for allied services, if any required with the goods, the same shall be quoted in Indian Rupees only, if such services are to be performed/undertaken in India. Commission for Indian Agent, if any and if payable shall be indicated in the space provided for in the Price Schedule and will be payable in Indian Rupees only after satisfactory supply, installation and acceptance of the goods.

10. In case of no quotes against a particular item in the tender(s), this should be clearly mentioned along with reasons. The prices quoted should not be revised till the supplies are completed. The rates should be quoted in words and figures. Incase of difference in quote(s) written in figure and words arise, the amount written in words will be treated as quoted rate. Rates quoted should be free delivery at destination including all charges otherwise the tender is likely to be rejected. Prices quoted for free delivery at destination will be given preference. If there is no indication regarding the FOR, in the tender, then it will be considered as FOR destinations. Price quoted should be net and valid for a minimum period of six months from the date of opening of the tender. GST applicable should be mentioned separately in support of HSN code. If no indication regarding GST is recorded in the tender the GST will be considered as included in the quote(s).

11. (i) If an Indian Agent is participating on behalf of a foreign manufacturer then the foreign principal's proforma invoice indicating the commission payable to the Indian agent, nature of after sales service to be rendered by the Indian agent shall be furnished.
(ii) Copy of the agency agreement with the foreign manufacturer and the precise relationship between them and their mutual interest in the business.
(iii) The enlistment of the Indian Agent with Director General of Supplies & Disposables under the compulsory registration scheme of Ministry of Finance.

12. The bidder should be a manufacturer or its authorized agent (an agent should submit Manufacturer Authorization as per prescribed format) to quote and enter into a contractual obligation. (Annexure-3)

13. The bidder should have successfully executed at least 02 (two) separate orders, of the similar equipment/goods meeting major parameters of technical specification, in last 05(five) years from the date of Tender Opening, in any Hospital in India.

14. The bidders/firms identifying as MSME and/or start-up firms are exempted from fulfilling criteria at point no.12 stated above. However, this does not exempt any bidder/firm/manufacturer from fulfilling the quality requirements.

15. The Bidder shall give an affidavit as under:

"We hereby certify that if at any time, information furnished by us is proved to be false or incorrect, we are liable for any action as deemed fit by the purchaser.

The manufacturer (bidder)/Indian Agent shall furnish Satisfactory Performance Certificate in respect of above, along with the tender.

16. The purchaser reserves the right to ask for a free demonstration of the quoted equipment at a pre-determined place acceptable to the purchaser for technical acceptability as per the tender specifications, before the opening of the Price Schedule.

17. Samples must be submitted wherever specified along with the tender. Samples must be carefully packed, sealed and labeled clearly with tender number, subject and sender's name for easy identification. Rejected samples will be returned at your cost if insisted.

18. While quoting the rates for Equipment, the following are mandatory:

(a) *Warranty*: Minimum 3 years from the date of installation and successful commissioning of the system.

(b) ***Comprehensive Maintenance Contract (CMC***) : Maximum 5% of order value in INR value + Applicable GST after Warranty Period (Escalation of 5% will be applicable once in three years). Cost of the CMC on equipment procured outside India will be arrived in accordance to the exchange rate applicable at the time of release of payment against the Purchase order.

(c) ***Annual Maintenance Contract (AMC) Labour***: Maximum 2.5% of order value in INR value + Applicable GST after Warranty period (Escalation of 5% will be applicable once in three years). Cost of the AMC on equipment procured outside India will be arrived in accordance to the exchange rate applicable at the time of release of payment against the Purchase order.

(d) ***List of essential spares***: If the equipment contains any essential spares and consumables, the price should be frozen for minimum 3 years after warranty period. The price list should be attached along with the price bid.

(e) ***Installation and Commissioning***: Supplier should undertake installation, commissioning and demonstration at our facility free of charge

(f) If the item involve software's, tenderer should obtain software license in the name of "Director, SCTIMST" and the paper license / email license to be transferred to the name of Institute.

19. For all supplies / contract above rupees one lakh, the successful tenderer should furnish a performance guarantee / security deposit @ 3 percent of purchase order value excluding GST against the item with warranty and without warranty in the form of Fixed Deposit or Bank Guarantee from a nationalised /scheduled bank having a validity period of 60 days beyond the completion of all contractual obligations of the supplier.

20. Selected bidder shall have to confirm the purchase order within seven days from the date of receipt of purchase order otherwise the purchase order will deemed to be accepted by vendor. In case the selected bidder notices any mistake in the contents of the order, he/they must bring the same to the notice of the Institute and seek clarifications. However, Selected bidder will have to bear the responsibility for failure to take this action.

21. The tenderer shall submit the pre-requisite information like Civil works/ Electrical works, Air Conditioning etc. within 2 weeks from the date of receipt of order or Establishment of letter of credit as the case may be.

22. All supplies are subject to inspection and approval before acceptance. Manufacturer/ supplier warranty certificates and manufacturer/Government approved lab test certificate shall be furnished along with the supply, wherever applicable. In case of non-acceptance, the materials should be taken back with in seven days of intimation with the risk of supplier and the rejected items should be replaced within ten days from the date of non-acceptance.

23. Delivery period required for supplying the material should be invariably specified in the bid. The consignment should be delivered at Main Store, SCTIMST, Trivandrum between 9:00 AM to 4 PM during the working days.

24. Customs Duty, GST rate, packing , forwarding, transportation cost etc., if payable should be mentioned in the tender separately. Any exemptions on above may be mentioned.

25. This Institute reserves the right to modify the quantity specified in this tender.

26. Mode of payment should be indicated. The acceptable payment modes are following:

A. For foreign currency:

(1) 70% against negotiation of documents through irrevocable Letter of Credit. 30% against successful installation and commissioning. (As a pre-condition to open LC, the successful tenderer should furnish Performance Guarantee / Security Deposit @3% of the total assignment value (purchase value) in the form of Fixed Deposit or Bank Guarantee from the nationalised/scheduled bank which would be valid for a period of 60 days beyond the completion of all contractual obligations of the supplier including warranty)

(2) Wire Transfer will be applicable only after the receipt of the items, Bank Guarantee and original documents such as Invoice, Certificate of Origin, Air Way Bill, Insurance etc.

B. For INR:

(1) Electronic Transfer (NEFT) within 30 days of satisfactory installation and commissioning of system.

(3) Proforma invoice in triplicate should mention whether Ex-Works / FOB / CIP (Trivandrum), For CIP (Trivandrum) rates for Air freight & Ocean Freight should be separately indicated
(4) All bank charges outside India are levied to the beneficiary's account.

27. In the case of import purchase, following should be provided for negotiation of documents.
    1. Airway bill / Bill of Lading
    2. Certificate of country of Origin of the goods to be given by the seller OR a recognized Chamber of Commerce.
    3. Detailed Packing list
    4. Detailed Item wise original Invoice
    5. Insurance certificate
    6. Manufacturer's Guarantee and Inspection certificate.
    7. Inspection certificate by SGS/Lloyd/Bureau Veritas/TUV etc.

28. Copy of Technical / Service manual should be provided along with the equipment free of cost.

29. Installation & commissioning and Training: Tenderer should undertake installation, commissioning and demonstration of equipment at our facility, free cost. Training also should be provided free of cost.

30. **Penalty clause:**

(I) **Delay in Delivery**:

(i) If the delivery of purchased goods is not effected on due date as specified in the purchase order, the Director, SCTIMST will have the right to impose penalty at 0.5 percent per week subject to a maximum of 10 percent of order value.

(ii) If the deliveries are not effected as per schedule and due to that account, Institute is forced to buy the material at the risk and cost of the defaulting supplier from elsewhere, the cost towards loss or damage sustained thereby will be recovered from the defaulting supplier.

(II) **Performance (during Warranty period)**

Supplier should ensure uninterrupted service delivery of the equipment or product during the warranty period. In this regard following conditions also may be noted:

a) In case of failure of equipment or its components, breakdown call has to be attended within 48 hours of intimation.
b) The defect should be rectified within two days after the call is attended, failing which replacement or standby equipment should be provided for uninterrupted services.

c) In case of non-adherence to clause (a) or (b) above, downtime penalty will be realised a sum equivalent either the repairing charges met by the Institute to set right the equipment or 0.1 percent per day of cost of the equipment, whichever is higher, from the date of report of breakdown by way of deductions from SD/Performance Bank Guarantee.

d) The time spent on the repair work will be added to the warranty period of the equipment.

(III) **Performance (during CMC/AMC period)**:

i) Uptime means 95 percent of total days in a year during which the equipment remains functional.

ii) Down time means any shortage in achieving the up-time

iii) Down time penalty will be levied as per following terms and condition:

a) In the case of CMC, it shall be the responsibility of the service provider to set right the equipment and avoid down time. Down time penalty will be imposed @ 0.5 percent of contract value per day from the service provider.

b) In case auxiliary units/components attached to the main equipment undergoes failure and the main equipment provides uninterrupted services, down time penalty will be imposed @ 0.1 percent of contract value per day per auxiliary unit from the service provider.

c) Service provider should ensure rectification of defect of equipment within a reasonable period in the case of Labour Annual Maintenance Contract. In case break down is not attended within 48 hours of intimation, down time penalty will be imposed @ 0.5 percent per day of contract value from the service provider.

31. **Liquidated Damages:**

If the supplier fails to deliver or install/commission any or all of the goods or fails to perform the services within the time frame(s) incorporated in the Purchase Order, the Purchaser shall, without prejudice to other rights and remedies available to the Purchaser under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to 0.5% per week of delay or part thereof on delayed supply of goods, installation, commissioning and/or services until actual delivery or performance subject to a maximum of 10% of the contract price. Once the maximum is reached Purchaser may consider termination of the contract .

If any delay by the supplier in maintaining its contractual obligations towards delivery of goods and performance of services shall render the supplier liable to any or all of the following sanctions:

(i) Imposition of liquidated damages,
(ii) Forfeiture of its Performance Security and
(iii) Termination of the Contract for default

.

32. **Recovery Clause**: All losses liquidated or otherwise due to the violation of terms and conditions of the purchase order or defective documentation will be to the supplier/agent's account.

33. In case the quote is not according to the above terms and conditions, the same will be summarily rejected. Further, false certification in the compliance statement and misrepresentation of facts may attract blacklisting of tenderer.

34. All correspondence after tender submission will be by e-mail only and the companies should provide their valid e-mail Id and should keep it updated.

35. The bidder submitting the tender would be deemed to have considered and accepted all the terms and conditions.

36. The Purchaser reserves the right to give the price preference to small-scale sectors etc. and purchase preference to central public sector undertakings as per the instruction in vogue while evaluating, comparing and ranking the responsive tenders.

i.In exercise of powers conferred in Section 11 of the Micro, Small and Medium Enterprises Development (MSMED) Act 2006, the Government has notified a new Public Procurement Policy for Micro & Small Enterprises effective from 1st April 2012. The policy mandates that 25% of procurement of annual requirement of goods and services by all Central Ministries /Public Sector Undertakings will be from the micro and small enterprises. The Government has also earmarked a sub-target of 4% procurement of goods & services from MSEs owned by SC/ST entrepreneurs out of above said 25% quantity.

ii. In accordance with the above said notification, the participating Micro and Small Enterprises (MSEs) in a tender, quoting price within the band of L 1+15% would also be allowed to supply a portion of the requirement by bringing down their price to the L 1 price, in a situation where L 1 price is from someone other than an MSE. Such MSEs would be allowed to supply up to 25% of the total tendered value. In case there are more than one such eligible MSE, the 25% supply will be shared equally. Out of 25% of the quantity earmarked for supply from MSEs, 4% quantity is earmarked for procurement from MSEs owned by SC/ST entrepreneurs. However, in the event of failure of such MSEs to participate in the tender process or meet the tender requirements and the L 1 price, the 4% quantity earmarked for MSEs owned by SC/ST entrepreneurs will be met from other participating MSEs.

iii. The MSEs fulfilling the prescribed eligibility criteria and participating in the tender shall enclose with their tender a copy of their valid registration certificate with District Industries Centers or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or any other body specified by Ministry of Micro and Small enterprises in support of their being an MSE, failing which their tender will be liable to be ignored.

iv. Special provision for Micro and Small Enterprise owned by women. Out of the total annual procurement from Micro and Small Enterprises, 3% from within the 25% target shall be earmarked for procurement from Micro and Small Enterprise owned by women.

Note: "If the bidder is a MSME, it shall declare in the bid document the Udyog Aadhar Memorandum Number issued to it under the MSMED Act, 2006. If a MSME bidder do not furnish the UAM Number along with bid documents, such MSME unit will not be eligible for the benefits available under Public Procurement Policy for MSEs Order 2012."

Preference to Make in India: As per the order issued by Department of Industrial Policy and Promotion (DIPP) vide No. P-45021/2/2017-PP(BE-II) dated 28.05.2018 and the subsequent orders thereof; the purchaser reserves the right to give preference to the local supplier. A copy of this order is enclosed at Annexure-(5) which will form a part of this Tender Enquiry Document (TED) for evaluation and ranking of bids.

37. Dispute clause: Any dispute relating to the enquiry shall be subject to the jurisdiction of the court at Trivandrum only.

Sd/-
DIRECTOR

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ANNEXURE-1

ITEM CODE	ITEM NAME	QUANTITY
EQCATH013T	BIPLANE DIGITAL FLAT PANEL CATH LAB	**1 Nos**

PART - I	
1	**GENERAL**
1.A	Competitive bids are invited for the Biplane flat panel DSA (Digital Subtraction Angiography) system for Neuro diagnostic angiography and interventional work.
1.B	Latest state of art Biplane with flat detector technology Digital Angiography System with DSA, Rotational angiography, 3D Angio, 3D roadmap & CT imaging required for Neurodiagnostic & Interventional procedures. Companies should quote the most technically advanced models with all advanced dose reduction techniques.
1.C	All capabilities detailed in the specification should be integral part of the quotation and none of the essential requirement should be quoted as optional. If the supplier has any additional advance application or technique, the same should be quoted separately. Any item not covered under standard set should be quoted separately.
1.D	The original data sheet must support all the specification quoted by the company. Broad specification of the proposed system is given below. Cost of the item/feature wherever asked should be quoted in the price bid only. Additional relevant technical features suitable for our requirement will be given due weight age. System must be DICOM standard compatible and must be ready to connect with the existing PACS system of the institute and local GE and Philips PACS available in our Cath lab.
1.E	System must be configured for higher performance to optimally deal with mixed caseload of various Neurovasacular procedures. System should be capable of mono or biplane applications. The bidder should produce original technical datasheet. When required additional information should be provided as a separate document referring to the specific section been addressed. Offer should comprise delivery, installation, official release and safety acceptance until hand over the system including the accessories necessary for operation.
1.F	The bidder must be original manufacturer of the equipment or authorized dealer with good track record who has sold, installed and maintained a number of such equipments during last ten years. All standard software and tools needed for routine and regular use must be part of system.
1.G	If at the time of tender form sales and negotiation for equipment, there may be new features added to the system. So the bidders are directed to quote most recently launched system meeting the tender requirement. At the time of negotiation the latest system will be given priority within the constraints of budget allocation. Many advances and new features are regularly getting added in this system. The latest update in the system as per RSNA 2021release must be included. All upgrades and updates should be made available during the warranty period. All updates should be made available during the comprehensive maintenance period. Technical committee may decide inclusion of new features and may evaluate fresh in case exact specification is not matching as per tender specification. Technical committee will take appropriate decision.
1.H	The bidder shall submit certification from the manufacturer which must show that the product is brand new, and should include the year of introduction of the model, country of manufacturer, and standards compliance.
1.I	The bidder should quote for removing the existing GE Innova 3131 DSA lab (EQCATH0002-1, Stock no. 170/554) under buyback and install the new system in the existing place.
PART - II	
2	**SYSTEM CONFIGURATION**

2.A	Biplane Digital Flat Panel Cath Lab
2.B	Patient Positioning X-Ray Table
2.C	X-ray system complete with Generator, Flat panel detector, X-Ray tube & control for Biplane system
2.D	TV monitors - at least 50" diagonal LCD- TFT monitor
2.E	In the event of no multiple power supplies in the large monitor, the bidder shall supply two 19 inch backup monitors.
2.F	Image Processing Unit and Image Data Storage
2.G	Control Console and Display Unit for C-Arm
2.H	Pressure Injector for Neuro Angio
2.I	On-Line UPS System (Backup Time at Least 20 min)
2.J	Lead Aprons, Thyroid Guards & Lead Spectacles
3	**POWER SUPPLY**
3.A	The system shall operate on a three-phase 400v ± 10%, 50hz mains power supply.
3.B	The system should have automatic voltage compensation and protection against power surges.
4	**C-ARM SYSTEM**
4.A	Frontal Positioner Specifications
4.A.1	A motorized floor mounted C-arm and the base of the stand or the L arm can be rotated to allow a three-sided motorized patient approach shall be left, right and head with full body coverage. Additional space for head end access is desirable.
4.A.2	The display should include C-arm position in all axes, table height, and the side of the imaging system and required table side controls, touch screen for table side operations.
4.A.3	The LAO/RAO range shall be at least $\pm 90^0$ or above and CRA/CAU shall be at least $\pm 45^0$.
4.A.4	Angulation / C-Arm sliding speed minimum 8^0/Sec.
4.A.5	Gantry depth should be specified, and large enough for better groin access.
4.A.6	The system shall be capable of providing not less than 50 programmable positioning for frequently used projections.
4.A.7	The system shall have safety devices to prevent collision of the C-arm with the table and the floor, patient and also between both the planes.
4.A.8	Park position of C-arm for free access to the table from all sides during set-up shall be possible and swivel of C-arm into park position shall be motorized.
4.A.9	Variable focal spot-to-detector distance to be specified
5	**LATERAL PLANE**
5.A	Ceiling mounted lateral plane with specifications similar to frontal plane
5.B	Biplane Angulation speed up to 8°/S or above
6	**PATIENT TABLE**
6.A	Floor mounted patient positioning table made of radiolucent carbon fibreand contoured for all neuroradiological examinations & interventional procedures.
6.B	The tabletop shall have length of 300 cm, width 45 cm
6.C	Shall be able to accept total loads up to 300 kg

6.D	The longitudinal movement of the tabletop shall be at least 100 cm and the transverse movement shall be not less than 15 cm.
6.E	Fluoroscopic coverage of the table should be 150 cm or above
6.F	Table height shall be electrically adjusted in the range of 75 cm to 100cm above floor level by means of a foot switch and a controller.
6.G	Rotation of the table top shall be in the range of 90 degree pivot on either side in addition to 6 way floating movements.
6.H	All standard accessories to be included:
6.H.1	Accessory clamps
6.H.2	Cerebral filters
6.H.3	Head fixing aids
6.H.4	Upper body cushion
6.H.5	Arm supports
6.H.6	Drip stand
6.H.7	Peripheral filter set
6.H.8	Catheterization arm support
6.H.9	Ratchet compressor
6.H.10	Foot support
6.H.11	Chin support
6.I	Table and gantry movement should be able to operate from the control room and examination room as well
7	**X-RAY GENERATOR AND CONTROL CONSOLE -BIPLANE SYSTEM**
7.A	X-Ray generator shall be a microprocessor-controlled, high-frequency, with automatic dose rate control for radiography and fluoroscopy, which is fully integrated into system control.
7.B	It shall be capable of performing continuous fluoroscopy and pulse fluoroscopy. Delay time between lateral and frontal plane x-ray exposure when they work simultaneously should be mentioned
7.C	The generator output power & other necessary parameters shall be in accordance with followings details
7.C.1	X-Ray generator 100 KW
7.C.2	Voltage range is 50 - 125 KV
7.C.3	Maximum current 1000 ma at 80 KV
7.C.4	Fluoroscopy mode 60 - 120 KVp
7.D	There shall not be a limitation for prolonged interventional procedures extending four hours or more in duration.
7.E	It should have automatic exposure control device for radiographic fluoroscopy and Angio mode.
7.F	It should have digital display for KVP &maS.
7.G	Anatomical programming radiography should be possible.

7.H	It should have over loading protection.
7.I	It should have the facility for pulsed fluoroscopy at variable rates for reducing the X-Ray dose to the patient during intervention procedure.
7.J	System should have the latest dose reduction technology
8	**X-RAY TUBE FOR BIPLANE SYSTEM**
8.A	Both planes should be provided with rotating anode high speed tubes. X-Ray tube should have minimum two focal spots. Nominal focal spot size should be 1mm or less for the large focus & 0.5 mm or Less for the small focus. An intermediate focus may be included.
8.B	The small focal spot shall provide at least 15kw and the large focal spot at least 65kw output for extended runs.
8.C	The anode heat storage capacity of the tube shall be not less than 3MHU. X ray tube cooling should be available for uninterrupted operationfor more than 6 hours.
8.D	Anode angle should be specified
8.E	Three levels of adaptive pre-filtration for reduction of skin dose shall be provided
8.F	Leakage radiation shall conform to international standards. Filtration and leakage radiation dose shall be indicated in the bid.
8.G	There shall not be a limitation for prolonged interventional procedures extending up to four hours or more in duration.
8.H	Specify the technology available for radiation exposure reduction
8.I	Automatic/programmable spectral filtration mechanism for eliminating soft radiations without any need for manual filter insertions
8.J	Cooling system - efficient cooling to ensure continuous operation for 6-8 hrs
8.K	Anode heat cooling rate should be specified in W/min
9	**COLLIMATOR**
9.A	The collimator shall have rectangular or iris collimation with wedge filters.
9.B	There shall be automatic adaptive copper pre-filtration for dose reduction. Additional filters with multiple leaves should be provided & it should be possible to position these filters & collimator leaves without live fluoroscopy.
9.C	The collimator shall have integrated dose measurement chamber in order to display skin dose on the live monitors in the lab.
10	**FLAT PANEL DETECTOR**
10.A	A high resolution digital flat panel detector of diagonal size 40 cm or above shall be provided. Both frontal and lateral plane flat detectors should have identical in panel size, fields of view, spatial resolution, detector pixel size and DQE
10.B	The digital output of the flat detector is a 1024*1024 matrix or better at 14 bit depth.
10.C	The spatial resolution shall be 3 lp/mm. Available FOV/Zoom fields (should be the same for both planes)
10.D	Detector pixels shall be not more than 200 microns for the frontal and lateral planes
10.E	Acquisition speed of the detector panel shall be 30 frames/sec or more.
10.F	DQE of frontal and lateral plane should be 75% or above
11	**TV MONITORS**

11.A	Examination room - large area flat screen display of at least 50" for biplane systems in the examination room, installed on a ceiling-mounted, longitudinally mobile, swivelling, rotating, and height adjustable display suspension system with a normal working range. It should be able to connect more than 10 external/internal video input digital/analogue signals.
11.B	Examination room - Display monitors should show the images in the following format for each planes - simultaneous display of live flouro, live road map, stored image. In addition to this, continuous active display of images from workstation and patient monitoring physiological parameters should be possible.
11.C	Examination room - A live and reference 19 inch of diagonal size monitor should be provided for each planes a backup during the failure of 50-inch large area monitor
11.D	Console room - 19 inch or more diagonal size, medical grade monitors, 4 in number, for live flouro and roadmap images for each planes (2+2)
11.E	Console room - 19 inch or more diagonal size TFT colour monitors, for the display of patient physiological parameters
11.F	Console room - Two 19 inch or more diagonal size, medical grade colour monitor for 3D workstation
11.G	For each monitors following specifications should be mentioned - Display technology type (LCD, LED,IPS etc), Length, breadth and diagonal size of the viewing area, display format (4x3 or 16:9 or 16:10), native resolution, refresh rate, total megapixel, viewing angle, brightness in Cd/m2, Contrast ratio, Ingress Protection standard.
11.H	Suitable monitor / display device for continuous display of parameters of the tube, radiation dose, c-arm positions & orientation should be provided.
11.I	Facility for remote viewing of live images
12	**DIGITAL IMAGE SYSTEM**
12.A	System shall have a fully digital image processing for improved detailed visualization of small structures.
12.B	Availability of image analysis software both in examination room and console room.
12.C	System shall be capable of virtual collimation of the shutters and wedges in the last image to reduce the x-ray dose.
12.D	Grab function to allow storage and archiving of both a fluro image.
12.E	Lower and upper body protection shield shall be provided.
12.F	Digital pulsed fluoroscopy at variable pulse frequencies from 1 to 30f/s shall be available preferably with real time and motion detection.
12.G	Facility to use the reference image as a roadmap by super imposing of fluro image on the reference image shall also be provided.
12.H	It shall have the capacity to acquire digital online subtracted images in 1024x1024 matrix, 14 bit depth, with standard acquisition speed of 0.5 to 7.5 frames or speed per second. Segmental DSA with capability to set variable frame rates is preferred.
12.I	It shall have a minimum image storage capacity of 50,000 images in 1024 x 1024 matrixes.
12.J	System shall be DICOM compatible and PACS connectivity shall exist.
12.K	Archiving of all the patient images on a CD/ DVD shall be provided.
12.l	The digital system shall have high resolution subtracted fluoroscopy (simultaneous & random). It shall be possible to display subtracted and native images simultaneously alongside the reference image in the examination room.
12.M	Automatic pixel shift during road mapping shall be available
12.N	Access to all series /images shall be fast and possible from the control room as well as the examination room.

12.O	System shall have integrated 3D rotational angiography, 3D roadmap application wherein the rotational tool for creating 3D view for lesion assessment
12.P	It should be capable of digital radiography acquisition at variable rate of 0.5 to 30 frames per second as well as manual acquisition
12.Q	System shall have advanced image processing technique for real time enhancement, real time harmonization, real time noise reduction and dose correction algorithms.
12.R	System shall be able to eliminate motion artifacts.
12.S	All dose saving features and image quality improvement should be provided as standard.
12.T	Artificial intelligence powered digital imaging chain is desirable.
12. U	**3D Rotational Angiography**
12.U.1	Acquisition mode: shall be possible for any body part to provide 3D impression of arteries and complex vasculature.
12.U.2	Digital rotation angiography at a speed of 30°/sec or more shall be available in 1k matrix or more
12.U.3	Facility for dynamic display of subtracted images in 1024 matrix should be available.
12.U.4	It should be possible to trigger digital rotational angiography runs to reduce the radiation dose & improve image quality.
12.U.5	Method of 3D RA to be specified (thresholding or subtraction 3D RA)
12.U.6	Processed 3D RA images should be available without any delay. Image reconstruction should be fast & automatic. Typical image reconstruction & display time to be specified.
12.U.7	All image manipulation and post processing should be possible from the examination room also.
12.U.8	At least five 3D RA position can be saved for later retrieval and automatic C arm positioning.
12.U.9	C arm movement and 3D RA change in position should be synchronous
12.U.10	3D road mapping facility should be possible with both planes' frontal and lateral
12.U.11	The digital system should have high resolution live 3D-roadmapping to reduce contrast and time, should allow overlay of real-time 2D fluoro images, CT images (Acquired in Cath) on the 3D vessel image to see the advancement of the guide wire, catheter and coils on the 3D volume in real time. Roadmap should have pre-sets application wise (Abdomen, Peripheral &Neuro). Should also be able to select the Procedures like Navigation, Coil, stent, Glue, Particle in the Roadmap to visualize different materials.
12.U.12	Acquisition mode: shall be possible for any body part to provide 3D impression of arteries and complex vasculature.
12.V	**3D CT Imaging**
12.V.1	System shall be capable of generating 3D CT image with good contrast resolution for brain parenchyma.
12.V.2	Image reconstruction should be fast & automatic. Typical image reconstruction & display time to be specified.
12.V.3	CT option to visualize soft tissue shall be available. The CT 3D volume can be viewed in control room and examination room as well.
12.V.4	Image reconstruction shall be fast at 1k matrix. and automatic.
12.V.5	It shall be possible to post process CT images (set slice thickness, distance & angle measurements etc.) both in control room & the examination room.
12.V.6	It shall be possible to fuse the 3D CT data with 3D angio to combine high resolution vessel information with soft tissue information.
12.V.7	It shall be possible for different density structures such as bone, contrast filled vessels, stents, clips & coils to be identified separately in image real time.
12.V.8	Fully automatic Metal artifact reduction
12.V.9	Motion Freeze to improve scan quality by correcting respiratory movements
12.V.10	The system should be capable of giving 3D image and CT image from the same acquisition with capability to

	toggle between both on the fly, without the need to reload the volume.
12.V.11	All image manipulation and post processing should be possible from the examination room also.
12.V.12	Perfusion imaging for stroke evaluation: It should be possible to generate multiplanar CT like images from the 3D rotational data and also use the data for perfusion imaging. Perfusion software should be provided.
12.V.13	Soft tissue imaging with IV contrast to look beyond the clot
13	**ARCHIVAL SYSTEM**
13.A	Direct digital archival on compact disk (CD _ DVD-recordable) in latest DICOM format.
13.B	Ability to view CD and post process with clinically validated quantification software.
13.C	Ability to export DICOM vascular images onto CD or other image recording medium.
13.D	The system should be fully DICOM ready and fully compliant for connection to PACS system.
13.E	Facility and DICOM print output
13.F	Provide a local storage system/local mini PACS system to store all the image data without any data loss. The storage size should be adequate enough to store all image data to be generated over 10 years. (Procedure load - 75 diagnostic cerebral angiogram and 25 neuro interventions per month)
14	**WORKSTATION**
14.A	A separate dedicated workstation for 3D reconstruction shall be provided with at least 32GB main memory for 3D reconstruction to free the main system for continuation of procedure immediately after 3D construction.
14.B	It shall be possible to recall & view images acquired in the rotational mode (subtracted & un-subtracted) alongside the 3D side images. Review of all images shall be fast, interactive & user friendly.
14.C	Post processing software facilities with real time edge enhancement, re-masking, peak opacification, image inversion, anatomical background display, windowing, electronic shuttering, roaming, zooming and magnifying with text and annotation functions should be provided. All essential post-processing functions should be possible from tableside consoles and from the control room.
14.D	The 3D reconstruction shall be in true 512 matrix or more. All options related to 3D (MIP, SSD, VRT, slicing, measurement tool, volumetry etc.) shall be available.
14.E	The workstation shall have the ability to view CT and MRI images also.
14.F	DSA viewing, subtracting, 3D RA, 3D CT post processing software should be vendor neutral and should be capable viewing and post processing the image data generated by any other manufactures.
14.G	Retrieve and review of any image / any series from the system independent to the ongoing work on the main system.
14.H	Compose & hardcopy images independent of the ongoing work. Split screen function to be provided to facilitate comparison of different sets of images.
14.I	It shall be possible to view dual density objects in one view to differentiate blood vessels from coils, devices in neuro examinations.
14.J	Automatic segmentation of tumour and feeding vessel shall be possible for guidance in embolization procedures.
14.K	The system shall have facilities to import images from CT or MRI images for 3D fusion with automatic alignment of two data sets based on similar structures in the data sets, landmark based registration with convenient landmark editor for point-based registration using anatomical landmarks, side by side visualization of both data sets with correlated pointer and 2D alpha-blending in monochrome or pseudo-colour with adjustable balance between the two superimposed data sets.
14.L	Any assisting software for planning and guiding tool for AVM, aneurysm or similar to be quoted
14.M	2D perfusion should be possible
14.N	Dedicated protocols for stents/ flow divertors /intra saccular devices to view the devices in relation with vessel
14.O	The digital system should have latest version of software for advanced automated vascular analysis and

	quantification including stenosis quantification, virtual stenting, aneurysm analysis and catheter tip shaping with auto-calibration.
14.P	Quote all image enhancement software, not mentioned above
14.Q	Fusion package for spatial alignment and visualization of image data of one patient where image data has been generated at different points in time or by different modalities.
14.R	Live and integrated needle guidance for interventional procedures such as vertebroplasty, kyphoplasty, biopsies, drainages, or radiofrequency ablations
14.S	Workstation should have adequate storage capacity to hold all image data generated over 30 days (75 diagnostic cerebral angiogram and 25 neuro interventions per month). After 30 days data to be transferred to local storage/PACS provided.
14.T	The workstation should have the ability to view and post process all the image data (including 3D image data) already existing with the GE Advantage windows system. Demonstration of this capability is mandatory.
14.U	The complete digital system along with workstation should be networked and connected to a DICOM compatible laser camera and it should be possible to hardcopy from the system as well as the 3D workstation. The system should be DICOM enabled and ready at the time of installation for all DICOM requirements of the institution.
14.V	Archiving capability — (CD / DVD writing / blue ray recording)
14.W	USB device capability - Blue ray/ DVD USB drive, USB Printer, USB storage media
15	**CONTRAST MEDIUM INJECTOR**
15.	Microprocessor-controlled compact, powerful digital high-pressure injector, suitable for procedures in digital subtraction angiography.
15.A	There should be automatic protection for overflow, over volume and over pressure.
15.B	Syringe: 150 ml polypropylene disposable – 100 pcs to be provided.
15.C	The make and the model shall be clearly indicated
15.D	It should be pedestal version.
15.E	There should be a facility to control the flow rate of contrast during injection
15.F	Pressure limit: selectable, ranging at least from 130 psi to 1200 psi.
15.G	Flow rate: at least 0.1 ml/sec up to 40 ml/sec.
15.H	Programmable control: Minimum up to 6 different flow-rate, volumes and/or delays and transition time for one automatic injection series.
15.I	Timer synchronization of injection to image acquisition with variable delay.
15.J	Syringe heater to maintain preheated contrast at body temperature
15.K	Indicator light to indicate injector ready or in progress.
15.L	Scale reading indicating amount of contrast in syringe.
15.M	There should be a colour touch screen in the console room
15.N	The unit should be synchronized with the application
16	**Anesthesia workstation with Hemodynamic monitor (Trolley Version)**
16.A	Should be advanced, reliable, compact and mobile with integrated ventilator.
16.B	Should be based on microprocessor and suitable for low flow as well as minimal flow anesthesia for adults, pediatrics and neonatal use.
16.C	Machine should be suitable for premature babies, neonates, pediatric and adults.
16.D	Should have a facility to connect to the central supply (oxygen and air) , pin index

	cylinder one each of oxygen and air with on screen digital display of pressure gauges for central supply and cylinder.
16.E	Machine should have working surface and illumination with the storage space for keeping accessories.
16.F	Should have electronic gas mixing with FiO2 & total flow setting along with virtual flow meter displays
16.G	Should have integrated safety feature like electronic hypoxic guard, N2O/Air cut off in case of O2 low pressure/failure, alarm and O2 flush etc.
16.H	Should have onscreen virtual flow meter display of O2 and N2O/Air.
16.I	Should have compact autoclavable breathing system and soda lime chamber maximum capacity of 1.5L. The sodalime canister should be compatible with the devices in all the operating rooms.
16.J	Should have electronically controlled and electrically/pneumatically driven anesthesia ventilator
16.K	The machine should be suitable for low & minimal flow Anesthesia application
16.L	Should able to log all alarms, self-tests, messages and other events.
16.M	Should have integrated touch screen color display with minimum15” screen size.
16.N	The machine should have automatic calculations and presetting of patient specific ventilation settings via ideal body weight, Age and height
16.O	The machine should calculate agent consumption and uptake by patient with display of fresh gas usage even during the case and after the case in the logbook.
16.P	System should be European CE or FDA approved and confirms to EN 60601-2-13 (Requirement for safety and essential performance of anaesthesia system)
16.Q	Anesthesia ventilator should have the following settings:
16.Q.1	Automatic breathing circuit Compliance correction
16.Q.2	Spontaneous. Breathing
16.Q.3	Manual Ventilation
16.Q.4	Volume controlled mode
16.Q.5	Pressure controlled ventilation
16.Q.6	SIMV in VCV & PCV

16.Q.7	Pressure Support, PS with CPAP, PS with SIMV in VCV/PCV
16.Q.8	Auto flow or PCV-VG or similar mode – delivering set tidal volume at minimum airway pressure. and in combination with SIMV
16.Q.9	High peak inspiratory flow upto 160 LPM or more.
16.Q.10	Tidal volume adjustment range 5 ml to 1500 min volume control mode.
16.Q.11	Adjustable PEEP:Off, 2 to 35 hPa (or cmH2O);and CPAP: 0, 2 to 35 mbar
16.Q.12	Respiratory frequency from 3 to 100 per min.
16.Q.13	I:E : max 1:50 to 50:1
16.Q.14	Should be able to ventilate with machine, in case of total fresh gas failure including Oxygen.
16.R	Should have tidal volume compensation or fresh gas decoupling valve.
16.S	Should have external fresh gas outlet for connecting the open circuits.
16.T	Should have dual flow sensing technology with flow sensor at inspiratory and expiratory side.
16.U	Should have display of up to 4 real time wave forms and display of concentration of CO2, O2, and anesthetics agents, airway pressure, inspiratory and expiratory flows and loops for P-V and F-V loops.
16.V	Anesthesia machine should monitor and display the measure value of minute volume, tidal volumes, peak airway pressure, mean pressure, plateau, PEEP, dynamic compliance and resistance.
16.W	Should have pause mode for short term interruptions of ventilation with variable time period up to 60 mins.
16.X	Should have alarms for high/low volume for expired tidal volume, minute volume frequency and airway pressure low MAC, FiO2, CO2,gas supply, leak, circuit disconnection, power failure, battery empty, low MAC, FiO2 CO2,gas supply, leak, circuit disconnection, power failure, battery empty etc
16.Y	Should be supplied with Sevoflurane and Isoflurane / Desflurane vaporizer (one of them as requested); All the vaporizers and monitor should be manufactured from same company as anaesthesia machine.
16.Z	Should be supplied with Active anesthesia scavenging system for pollution free atmosphere in operation theatre.
16.AA	Should have dual detection of anesthetic agent in case of change of anesthetic agent.
16.AB	Should have RS232 port to interface monitor to transfer the expired parameters on

	monitor
16.AC	Should have battery back up to at least 60-90minute including that for ventilator.
16.AD	System should have backup oxygen control in case of complete power failure and auxiliary oxygen supply source.
16.AE	Should have auxiliary Oxygen supply system.
16.AF	Should have anytime facility for manual ventilation possible at least with fresh gas O2 delivery and dosage of volatile agents with airway pressure monitoring in case of system failure / system "off".
16.AG	Should have the indicator or decision support to show the efficiency of fresh gas setting while used in Low flow and minimal flow
16.AH	Machine should be equipped with anesthesia gas monitoring with automatic identification of anesthetic agent (MAC , inspired and end tidal concentration) as well as O2 %, N2O %, FiO2 % and Inspired and expired CO2 (through side stream monitoring) in mm Hg;
16.AI	End tidal CO2 measurement should be of side stream technology
16.AJ	Machine should have tools to support low and minimal flow anesthesia such as Econometer, low flow wizard, O2 uptake and MV*CO2 values
16.AK	Machine should be able to calculate patient's lung compliance values.
16.AL	Should have sample gas return into the breathing system for better gas efficiency in low flow and minimal flow usage.
16.AM	Should have heated breathing system for optimized minimal flow anaesthesia usage and ventilation quality.
16.AN	Should be possible to deliver oxygen and anaesthetic agents in Man/spontaneous mode even when the machine is in switched off mode as an emergency back up
16.AO	The machine should have adjustable alarm limits for all the parameters with auto set alarm function.
16.AO.1	The machine should have automatic display of MACx values
16.AO.2	Should have automatic activation of low agent alarm
16.AO.3	Should have alarm logbook for displaying and saving alarm history
16.AO.4	System leak and fresh-gas deficiency alarm
16.AO.5	Should have cardiac bypass mode

16.AP	Should have fully automated self-test including calibration of all sensors without any user action necessary after start to test.
16.AQ	Should have backup manual mode to allow the direct change to manual ventilation while maintaining gas and ventilation monitoring; O2 and anaesthetic agents from the vaporisers can be continuously delivered
16.AR	Should have integrated active AGS system
16.AS	Each machine should be supplied with following accessories with each unit of same manufactures make.
16.AT	Multi parameter Monitor mounting should provide along with machine.
16.AU	Standard Scope of supply must include:
16.AV	Pipeline connections for O2, N2O and Air
16.AW	Semiclosed breathing system
16.AX	Adult & Peadiatric autoclavable patient tubings (1 each)
16.AY	Anaesthetic mask size – Adult & child
16.Z	Vaporisers for sevoflurane and Isoflurane / Desflurane (one of them as requested)
16.BA	Central gas supply hoses (Color coded)
16.BB	Sampling lines:10Nos and water traps: 12Nos
17	**Hemodynamic Patient Monitor to use along with Anaesthesia workstation**
17.A	Should be suitable for adult, paediatric neonatal patients monitoring in fixed environment.
17.B	have 17" and above touch screen colour display with large fonts and provide access to minimum 12 or more waveforms with ergonomic representation of multi-functionality
17.C	Monitor should be IT enabled for single point access to web-based applications (like HIS, PACS, PDMS, LIS and more) without requiring extra server, hardware and software
17.D	Should give direct access to Web-based applications, without requiring extra servers or licenses (such as Microsoft® clients, Citrix)
17.E	Should have minimum ECG, NIBP, SpO2, 2 temperature and 2 Invasive pressure as standard and all other parameters should be through upgrades as pods/modules and software.
17.F	Should have basic arrhythmia detection for life-threatening alarms that include asystole, ventricular fibrillation, ventricular tachycardia, and bradycardia and more.
17.G	Should have non-volatile graphic and tabular trending of all monitored parameters as standard for minimum 96hrs.
17.H	Should have manual as well as automatic setting of screen format with selectable parameter priority & colour selection for parameter on screen.

17.I	Should have excellent cable management with as minimum as possible cables at monitor & patient end for maximum comfort to patient as well as user.
17.J	Should have integrated transport monitor with battery backup of 180min and one-button disconnect and without additional modules or batteries and shall allow transport with all currently monitored parameters remaining active.
17.K	The transport display shall automatically adjust its orientation using a gravitational sensor when it is rotated to a different view.
17.L	The transport monitor should have minimum 6 inches of touch screen and 3 or more waveforms
17.M	It should be US FDA and European CE approved for monitor as well as all the parameters.
17.N	Should have Defibrillator and ESU protection, ECG Sync, IABP interface (ECG and Arterial for triggering and deflation with a device delay of <20 millisec)
17.O	Ready for wired networking
17.P	Facility to upgrade to automatic electronic charting and data management solution with data archival facility for patient monitor and ventilator data. It should be single centralised server based for multiple bed's upgrade. Charts should be seen on patient monitor screen itself.
17.Q	Monitoring solution shall support at least sixteen (16) different display layouts, and at least five (5) for the transport component.
17.R	While using another application, the monitor configuration will always allow for continuous viewing of the real-time parameter data
17.S	360-degree alarm bar & Rotary knob lights up when conformation for user selection is required
17.T	Touchscreen, Rotary knob & keyboard
17.U	Monitor when interfaced with Anaesthesia Machine , the monitor shall provide capabilities for display of multi-parameter sets to be used in lung recruitment procedures through an analysis tool.
17.V	Monitor shall provide the option to connect a secondary display that can be configured independent display without the need for additional hardware and users the ability to configure the location, speed and color of the parameters and their associated waveforms separately to the monitoring workstation
17.W	Monitor should able to connect to anaesthesia machine and should be able to display

	ventilator waveforms, parameters and loops.
17.X	The monitor must be mounted over anaesthesia machine and the necessary mounts must be supplied
17.Y	Should have following parameters
17.Y.1	ECG
17.Y.1. 1	5 lead ECG monitoring with three leads of ECG waveform simultaneously monitoring
17.Y.1.2	Should display 12 leads of ECG monitoring
17.Y.1.3	Range 15 to 300bpm
17.Y.1.4	– Should display 12 leads of ECG by connecting 6/5 ECG lead wires (Reduced lead set algorithm) as standard feature with max. lead positions as per standard lead placement
17.Y.2	RESPIRATION
17.Y.3	SpO2
17.Y.3.A	Should be supplied with Masimo SET technology with respective sensors
17.Y.3.B	Should display digital value and Plethysmograph
17.Y.4	NIBP
17.Y.4.1	By oscillometric principle of measurement with step wise deflation.
17.Y.4.2	Suitable for adult, paediatric, neonatal patients
17.Y.4.3	Should display Systolic, diastolic, mean pressure in large easy to read display
17.Y.4.4	Should have manual/ stat mode or automatic mode with adjustable time intervals from 2 – 240 minutes and adjustable alarm limits
17.Y.4.5	Monitor should have capability for continuous arterial pressure monitoring through non-invasive technique – preferred
17.Y.5	IBPs - Simultaneous monitoring of 2 Invasive Pressures should be standard and upgradable to 8 Invasive Pressures
17.Y.5.1	Range: -50 to 400mmHg
17.Z	Temperature - two temperature one core and second skin simultaneous monitoring and upgradable to 4 Temperature

17.Z.1	Range: -5 to 50Deg C
17.AA	**Following upgrades should be offered – (Quote unit prices in price bid)**
17.AA.1	BIS/Entropy to measure depth of anaesthesia
17.AA.2	NMT Neuro muscular transmission module
17.AA.3	Cardiac Output by thermodilution technique
17.AA.4	Masimo rainbow SET; SpHb, SpOC, SpCO, SpMet or PVI, at the users discretion from one sensor source.
17.AB	**Standard Scope of supply must include:**
17.AB.1	5/6/10 lead ECG Cable – 1 no
17.AB.2	SpO2 Masimo set finger Pead, Neonate and Adult sensor with extension cable – 1 no
17.AB.3	Skin temperature Probe – 1 no
17.AB.4	Rectal / Oesophageal temperature probe – 1 no
17.AB.5	NIBP Hose – 1 no
17.AB.6	Adult, Neonate & Paediatric Cuff – 1 each
17.AB.7	IBP reusable cable for 2 IBP and 10 pcs disposable transducers
17.AB.8	NMT module -1
18	**Airway management set**
18.A	C Mac Video laryngoscope with mini monitor and blade
19	**ADDITIONAL REQUIREMENTS**
19.A	10 nos of ultra-light weight lead free aprons – 04 Nos. two piece wrap around/ 06 Nos. single piece wrap around
19.B	10nos thyroid collars
19.C	Table mounted lead protected shield
19.D	Ceiling-suspended lamp with shield
19.E	Ceiling mounted and floor movable lead glass shield with frame of at least 2ft x 4ft - 2 nos
19.F	Radiation protection goggles - 5 no's
19.G	Console room and review station in the Cath lab with computer and DVD/CD writing
19.H	Console room chairs and tables (as per site requirement)
19.I	Mobile shield with lower body protection – 1no

19.J	Lead window 150x100 cm as per AERB specifications or higher (as per site requirement)
19.K	Lead impregnated door as per AERB specifications (as per site requirement)
19.L	Wireless remote communication with operators from outside
19.M	Music system (as per site requirement)
19.N	To ensure high patient safety during procedure a suitable UPS of required capacity should be quoted with back up at least 20 min for complete Cath lab
19.O	VBM Pressure Infusor 200
19.O.1	VBM Pressure Infusor cuffs 1000 ml
19.O.2	VBM Pressure Infusor cuffs 500 ml
19.O.3	Pressure infusor weight sensor with alarm
20	**STANDARDS AND SAFETY**
20.A	The quoted DSA system should have a valid Indian standards quality certification. If there is no Indian standard is available, then the item /equipment should have a US FDA/ European CE with four digit identification number from a notified body of certification.
21	**General Terms &Condition:**
21.A	Complete Supply, Installation testing and commissioning of Video & Image Integration system for BIPLANE DSA FOR NEURO INTERVENTION in accordance with the specifications, bill of quantities. The above works should also entail necessary Turnkey works including providing of free spare parts and service during Warranty Period.
21.B	Installation by qualified personnel
21.C	Customer training
21.D	Service and Maintenance Agreement
21.E	All associated twisted pair/fibre optic cables and termination are to be supplied. Cables should be suitable routed through concealed conduits. In essence the whole installation would be a turnkey work.
22	**Approvals: Preferred**
22.A	Medical device Class I
22.B	CE Marking according to Directive 93/42/EEC
22.C	US FDA
23	**Special Conditions**
23.A	All the medical devices shall be CE marked as per EU Medical Device Directive No.93/42/EEC and other component parts shall bear CE mark as per relevant EU directive/s. or US FDA Approved. Self-declaration of conformity documents with other related certificates e.g. Notified Body certificates shall be uploaded. Additional documents to verify the claims may be asked for.
23.B	Bidder should clearly mention country of origin of each and every product quoted.
24	**General Requirements:**
24.A	The equipment's and all accessories shall have CE mark with valid EU'S MDD certificate from notified body of certification.
24.B	European Conformity (EC) notified bodies issued from European address or valid US FDA approval and documentary evidence to that effect shall be submitted.
24.C	All statutory approvals including AERB, KSEI etc as applicable should be provided by the vendor.

ANNEXURE – 2

TECHNICAL BID

A. Online Technical Bid

Online Technical Bid consists of the following:

1. Scanned copy of Bid Security Declaration Certificate
2. Copy of GST Registration Certificate.
3. Copy of PAN Card
4. Clear specification matching as given in the tender document
5. Product No/catalogue No. (Catalogue in original to be attached)
6. Model No.
7. Valid authorization from the manufacturer, if bid is submitted by the agent and distributors (as per enclosed format)
8. Technical features
9. How old is this technology & when is going to be discontinued
10. When is the upgraded/Updated version likely to come
11. Additional features very particulate to the system.
12. If workstation or PC is quoted, its full configuration, brand, model No. etc.
13. Period of warranty as called for in the Tender.
14. Enlistment of the Indian Agent with DGS&D.
15. AMC coverage items
    a. Comprehensive (Spares & Labour)
    b. Labour alone
16. History of service and maintenance support in the Institute.
17. List of Installations in public sector/private sector with contact person : Name, Designation & Telephone No.
18. List of essential spares
19. Certificate of quality like USFDA 510K CLEARED/BIS/ CDSCO/ AERB
20. Documents, if clause no:35 in the tender is applicable (Copy of Registration Certificate & Product List)
21. Filled Check list & Compliance Statement in the excel format provided in e-tender portal.

B. Hard Copy of Technical Bid & Original Bid Security Declaration Form

The hard copy of the Techno-Commercial Bid as specified above with the original Bid Security Declaration should be addressed to the Director, SCTIMST, Medical College P.O, Thiruvananthapuram - 695 011, Kerala in the sealed envelop superscribed as "Techno-Commercial Bid" , "Tender No.", "Item Name" and "Due Date". The sentence "NOT TO BE OPENED BEFORE due date and tender opening time" is also to be printed on this envelope. The hard copy can be sent by post/courier or dropped in the tender box located at AMCHSS, SCTIMST, Medical College Campus,

Thiruvananthapuram or the same shall be submitted by the bidder by hand to Inward Section, 4th Floor, AMCHSS, SCTIMST, Thiruvananthapuram.

C. Price Bid

Price Bid in the prescribed proforma should be submitted in online mode only. The tender will stand rejected if the price bid is submitted along with hardcopy of techno-commercial bid

श्री चित्रा तिरुनाल आयुर्विज्ञान और प्रौद्योगिकी संस्थान, तिरुवनंतपुरम- 11, केरल
Sree ChitraTirunal Institute for Medical Sciences and Technology, Thiruvananthapuram - 11, Kerala
(भारत सरकार के अधीन राष्ट्रीय महत्व संस्थान)
(An Institute of National Importance under Government of India)
टेलीफॉन नं./Telephone No. 0471-2443152 फाक्स/Fax 0471-24464332550728
ई-मेल/E-mail :sct@sctimst.ac.in वेबसाइट/ Website : www.sctimst.ac.in

ANNEXURE-3

MANUFACTURER'S AUTHORISATION FORM

The Director,
Sree Chitra Tirunal Institute For Medical Sciences and Technology,
Medical College P.O,
Thiruvananthapuram-695011.

Dear Sir/Madam,

Ref: Tender No _____ dated _____

We, _____ who are proven and reputable manufacturers of_____(*name and description of the goods offered in the bid*) having factories at_____, hereby authorise Messrs_____(*name and address of the agent*) to submit a bid, process the same further and enter into a contract with you against your requirement as contained in the above referred tender documents for the above goods manufactured by us.

We also state that we are not participating directly in this bid for the following reason(s):
_____*(please provide reason here).*

We further confirm that no supplier or firm or individual other than Messrs. _____ (*name and address of the above agent*) is authorised to submit a bid, process the same further and enter into a contract with you against your requirement as contained in the above referred tender documents for the above goods manufactured by us.

We also hereby extend our full warranty, CAMC as per terms & conditions of the tender.
We also hereby confirm that we would be responsible for the satisfactory execution of contract placed on the authorized agent and the spares for the equipment shall be available for at least 10 years from the date of supply of equipment.
We also confirm that the price quoted by our agent shall not exceed the price which we would have quoted directly"

Yours faithfully,

[*Signature with date, name and designation*]
for and on behalf of Messrs_____
[*Name & address of the manufacturers*]

Note:

1. *This letter of authorisation should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer.*
2. *Original letter may be sent.*

श्री चित्रा तिरुनाल आयुर्विज्ञान और प्रौद्योगिकी संस्थान, तिरुवनंतपुरम- 11, केरल
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ANNEXURE-4

Bid Security Declaration
(In Company Letter Head)

To
The DIRECTOR,
SCTIMST, Trivandrum,

Dear Madam/Sir,

1. I/We Mr./Ms ..... authorised person to sign the bid documents for tender for supply, Installation & Commissioning of do here by declare that I/We have gone through the entire tender documents including terms and condition mentioned in the tender documents and undertake to comply with them.
2. I/We further declare that we will not withdraw our bid or modify our offer during the period validity of the bid after the deadline for submission of such documents.
3. If I/We withdraw or modify the bids during the period of validity, or if I/We are awarded the contract and fail to sign the contract,or to submit a performance security before the deadline as defined in the tender document PO, we will be suspended for a period of Three Years from the date of disqualification from being eligible to submit bids/proposals for contracts with SCTIMST, Trivandrum.

Signature of Authorized Official

(with seal of firm)

(Name of Bidder)

Place .....

Date.....

श्री चित्रा तिरुनाल आयुर्विज्ञान और प्रौद्योगिकी संस्थान, तिरुवनंतपुरम- 11, केरल
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APPENDIX - A

INTEGRITY PACT

Between

SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCES AND TECHNOLOGY (SCTIMST)

hereafter referred to as **"The Principal"**

and

.....hereinafter referred to as **"The Bidder/Contractor"**

Preamble

The Principal intends to award, under laid down organizational procedures, contract/s for .....The Principal values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness / transparency in its relations with its Bidder(s) and / or Contractor(s).

In order to achieve these goals, the principal will appoint Independent External Monitors (IEMs)who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1-Commitments of the Principal

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe and to observe the following principles :-

a. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand ,take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

b. The Principal will, during the tender process treat all Bidder(s) with equity and reason. The principal will in particular ,before and during the tender process, provide to all Bidders(s) the same information and will not provide to any Bibber(s) confidential /additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution .

c. The principal will exclude from the process all known prejudiced persons.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2 -Commitments of the Bidder(s) /Contractor(s)

(1) The Bidder(s) /Contractor(s) commit themselves to take all measures necessary to prevent corruption. The Bidder(s) /Contractor(s) commit themselves to observe the following principles during participation in the tender process and during the contract execution.

sd/-
DIRECTOR, SCTIMST BIDDER

a. The Bidder(s) /Contractor(s) will not directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to ,in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

b. The Bidder(s) /Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specification, certification ,subsidiary contracts, submission or non-submission of bids or any other actions or restrict competitiveness or to introduce cartelization in the bidding process.

c. The Bidder(s) /Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s) /Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

d. The Bidder(s) /Contractor(s)of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly the Bidder(s) /Contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals. if any, Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by Bidder(s) /Contractor(s).Further all the payments made to the Indian agent/representative have to be in Indian Rupees only.

e. The Bidder(s) /Contractor(s) will, when presenting their bid, disclose any and all payments made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

f. Bidder(s) /Contractor(s) who have signed the Integrity Pact shall not approach the courts while representing the matter to IEMs and shall wait for their decision in the matter.

(2) The Bidder(s) /Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 -Disqualification from tender process and exclusion from future contracts

If the Bidder(s) /Contractor(s),before award or during execution has committed a transgression through a violation of Section 2,above or in any other form such as to put their reliability or credibility in question, the principal is entitled to disqualify the Bidder(s) /Contractor(s) from the tender process or take action as per the procedure applicable to SCTIMST.

sd/-
DIRECTOR, SCTIMST BIDDER

Section 4 -Compensation for Damages

(1) If the principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/Bid Security.

(2) If the principal has terminated the contact according to Section 3,or of the Principal is entitled to terminate the contract according to Section 3,the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the Contract value or the amount equivalent to performance Bank Guarantee.

Section 5 - previous Transgression

(1) The Bidder declares that no previous transgressions occurred in the last three years with any other company in any country conforming to the anti-corruption approach or with any Public Sector Enterprise in India that could justify his exclusion from the tender process.

(2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken as per the procedure mentioned in "Guidelines on Banning of business dealings".

Section 6 - Equal Treatment of all Bidders/Contractors/Subcontractors

(1) In case of Sub-contracting, the Principal Contractor shall take the responsibility of the adoption of Integrity Pact by the Sub-contractor.

(2) The Principal will enter into agreements with identical conditions as this one with all Bidders and Contactors.

(3) The principal will disqualify from the tender process all bidders who do not sign this pact or violate its provisions.

Section 7- Criminal charges against violating Bidder(s) /Contractor(s) /Sub contractor(s)

If the principal obtains knowledge of conduct of a Bidder ,Contractor or Subcontractor ,or of an employee or a representative or an associate of a Bidder ,Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

Section 8 - Independent External Monitor

(1) The Principal appoints competent and credible Independent External Monitor for this pact after approval by Central Vigilance Commission. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

sd/-

DIRECTOR, SCTIMST BIDDER

(2) The Monitor is not subject to instructions by the representatives of the parties an performs his /her functions neutrally and independently. The Monitor would have access to all Contract documents, whenever required. It will be obligatory for him/her to treat the information and documents of the Bidders/Contractors as confidential.

(3) The Bidder(s) /Contractor(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his/her request and demonstration of a valid interest, unrestricted and unconditional access to their project documentation .The same is applicable to Sub-contractors.

(4) The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/Contractor(s)/Sub-Contractor(s) with confidentiality .The Monitor has also signed declarations on 'Non-Disclosure of Confidential Information' and of 'Absence of Conflict of Interest'. In case of any conflict of interest arising at a later date, the IEM shall rescue himself/herself from that case.

(5) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

(6) As soon as the Monitor notices, or believes to notice ,a violation of this agreement, he/she will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action .The Monitor in this regard submit non-binding recommendations. Beyond this ,the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

(7) The Monitor will submit a written report to the DIRECTOR, SCTIMST within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.

(8) If the Monitor has reported to the DIRECTOR, SCTIMST a substantiated suspicion of an offence under relevant IPC/PC Act, and the DIRECTOR,SCTIMST has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.

(9) The word **'Monitor'** would include both singular and plural.

Section -9 -Pact Duration

This pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings.

sd/-
DIRECTOR, SCTIMST BIDDER

If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by DIRECTOR,SCTIMST.

Section 10 -Other provisions

(1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Office of the Principal, ie THIRUVANANTHAPURAM.
(2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
(3) if the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

(4) Should one or several provisions of the agreement turn our to be invalid, the reminder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
(5) Issues like Warranty/Guarantee etc. shall be outside the purview of IEMs.
(6) In the event of any contradiction between the Integrity Pact and its Annexure, the clause in the Integrity Pact will prevail.

Sd/-
DIRECTOR, SCTIMST.

(For & On behalf of the Principal) (For & On behalf of Bidder/Contractor)

(Office Seal)

Place .....
Date.....

Witness 1: _____
(Name & Address) _____

Witness 1: _____
(Name & Address) _____

श्री चित्रा तिरुनाल आयुर्विज्ञान और प्रौद्योगिकी संस्थान, तिरुवनंतपुरम- 11, केरल
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APPENDIX - B

Restrictions under Rule 144 (XI) of the General Financial Rules (GFRs),2017

I. 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.

II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

Ill. "Bidder from a country which shares a land border with India" for the purpose of this Order means: -

a. An entity incorporated, established or registered in such a country; or
b. A subsidiary of an entity incorporated, established or registered in such acountry; or
c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
d. An entity whose *beneficial owner* is situated in such a country; or
e. An Indian (or other) agent of such an entity; or
f. A natural person who is a citizen of such a country; or
g. A consortium or joint venture where any member of the consortium or jointventure falls under any of the above

IV. The *beneficial owner* for the purpose of (iii) above will be as under:

1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.
Explanation-

a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the

company;

b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;

2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;

3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;

4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;

5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership

V. An Agent is a person employed to do any act for another, or to representanother in dealings with third person.

Competent Authority and proccedure for Registration

The competent authority for the purpose of registration under this order shall be the Registration committee constituted by the department for promotion of industry and internal Trade (DPIIT)

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Sree ChitraTirunal Institute for Medical Sciences and Technology, Thiruvananthapuram - 11, Kerala
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Model Certificate for Tenders to be Submitted by the Bidder.

"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 fulfils all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"