

# KARNATAKA PUBLIC PROCUREMENT PORTAL



|          |                                    |           |                        |      |                                 |                |               |                 | _                  |                          | igiish *                           |         |
|----------|------------------------------------|-----------|------------------------|------|---------------------------------|----------------|---------------|-----------------|--------------------|--------------------------|------------------------------------|---------|
|          |                                    |           |                        |      |                                 |                |               |                 |                    |                          |                                    |         |
|          | Search Tenders                     |           |                        |      |                                 |                |               |                 |                    |                          |                                    |         |
|          | Tender<br>Number:                  | NIMHANS/  | 2019-20/IND            | 598  | Category                        | : Sel          | ect ▼         |                 |                    |                          |                                    |         |
|          | Tender<br>Title<br>/Name :         |           |                        |      | Sub-<br>Category                | Sel            | ect           |                 |                    |                          |                                    | ▼       |
|          | Tender Description /Scope:         |           |                        |      | District                        | Sel            | ect           |                 |                    | ▼                        |                                    |         |
|          | ECV Range<br>:                     | Select    | ▼                      |      | Departm                         | ent Na         | tional Instit | ute of Me       | ntal Health        | & N ▼                    |                                    |         |
|          | Status :                           | Published | t                      |      | Departm<br>Location             | ent Sel        | ect           |                 |                    | ▼                        |                                    |         |
|          | Tender<br>Published<br>From Date:  |           |                        |      | Tender<br>Published<br>To Date: | d              |               | •               |                    |                          |                                    |         |
|          | Tender<br>Submission<br>From date: |           |                        |      | Tender<br>Submissi<br>To Date:  | on             |               |                 |                    |                          |                                    |         |
|          |                                    |           | Regular                | tend | ders O                          | Prequali       | fication ten  | ders O R        | eserved ten        | ders                     |                                    |         |
|          | Search Clear Close                 |           |                        |      |                                 |                |               |                 |                    |                          |                                    |         |
| SI<br>Io | Department                         | /Location | Tender<br>Numbei       |      | Tender<br>Title                 | Tender<br>Type | Category      | Sub<br>Category | Estimated<br>Value | NIT<br>Published<br>Date | Last Date<br>for Bid<br>Submission | Actions |
| 1        | NIMHANS                            |           | NIMHANS/2<br>20/IND598 |      | C-ARM<br>[IITV]                 | OPEN           | GOODS         |                 |                    | 19/02/2020<br>17:26:04   | 18/03/2020<br>11:00:00             |         |
|          |                                    |           |                        |      |                                 |                |               |                 |                    |                          |                                    | ā       |

This site is best viewed in 1024x768 resolution.





Blue ▼

English ▼

Login

#### **Corrigendum Details**

Tender No.: NIMHANS/2019-20/IND598

Department: National Institute of Mental Health & Neuro Sciences

Tender Title : C-ARM [IITV]

### Tender Dates

Bid Validity Period (In Days)

120 Days

| Date   | Original Date       | Changed Date        |
|--|---------------------|---------------------|
| Last Date & Time for receipt of tenders            | 05-03-2020 11:00:00 | 18-03-2020 11:00:00 |
| Last Date & Time for Tender Queries/Clarifications | 26-02-2020 11:00:00 | 11-03-2020 11:00:00 |
| Date & Time for Opening of Technical Bid           | 06-03-2020 11:00:01 | 19-03-2020 11:00:01 |

Refer Karnataka Transparency in Public Procurement Rules Chapter V,Rule 17 for Minimum Time for Submission of Tenders

## Description for Corrigendum

| SI<br>No | Reference<br>Number* | Read As   |
|----------|----------------------|---|
| 1        | SL. NO. 1            | "The C-arm should have orbital movement of $+$ 90 / - 45 degrees for better penetration in Cranial/Caudal movement" SHOULD BE READ AS "The C-arm should have orbital movement of $+$ 90 / - 25 degrees for better penetration in Cranial/Caudal movement"   |
| 2        | SL. NO. 1            | "The C-arm depth should be 67 cm or more to provide a large imaging space and C-arm clearance around the patient and the imaging table" SHOULD BE READ AS "The C-arm depth should be 61 cm or more to provide a large imaging space and C-arm clearance around the patient and the imaging table" |
| 3        | SL. NO. 1            | "The system should have a minimum of 77cm free space within the C-Arm to provide a large imaging space" SHOULD BE READ AS "The system should have a minimum of 76 cm free space within the C-Arm to provide a large imaging space"  |
| 4        | SL. NO. 1            | "The C-arm should have a manual angulation of +/-200 degrees to allow the imaging chain to accomplish angled projections" SHOULD BE READ AS "The C-arm should have a manual angulation of +/-180 degrees to allow the imaging chain to accomplish angled projections"                             |

# Reason for Corrigendum:

#### AS PER RECOMMENDATION OF THE END-USER AND APPROVAL OF THE COMPETENT AUTHORITY

| Corrigendum Documents : |                       | <i>"</i> |
|-------------------------|-----------------------|----------|
| SI No                   | Document              |          |
| 1                       | enduser recommend.pdf |          |
|                         | Close                 |          |

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Ph: 26995923/13/5023-25/5090 E-mail: aaos@nimhans.ac.in

Fax: 080-26571563/26564830/2121/6811 Website: www.nimhans.ac.in/tender

E-Procurement Global Tender No. STR-D3/NIMHANS/2019-20/IND598

05.03.2020

# GLOBAL TENDER NOTIFICATION (Through e-procurement portal only)

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

| Sl.<br>No. | Name of the Item | Quantity (in Nos.) | EMD<br>(in ₹) |
|------------|------------------|--------------------|---------------|
| 1.         | C-ARM [IITV]     | 02                 | 2,80,000/-    |

# **Tender Schedule**

| Downloading of Tender documents from website - https://eproc.karnataka.gov.in/eportal/index.seam | From 05.03.2020 Onwards  |
|--|--------------------------|
| Last date for tender enquiry   | 11.03.2020 upto 11:00 AM |
| Tender submission last date and time   | 18.03.2020 upto 11:00 AM |
| Technical bid will be opened online by the authorized officer on                                 | 19.03.2020 at 11:00 AM   |

Sd/-, Director

# TENDER DOCUMENT Terms and conditions

- 1. The bid documents for the above item 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 **four months** from the due date. **NIMHANS, Bengaluru** will not take any responsibility for any technical issues.
- 3. Earnest Money Deposit (EMD):
  - **3.1.** The (EMD) shall be denominated in Indian Rupees [₹] and should be paid in the E-PROCUREMENT PORTAL as per the facility provided.
  - **3.2.** The EMD shall not bear any interest and will be refunded to
    - **a.** successful tenderer on receipt of Agreement and Bank Guarantee.
    - **b.** unsuccessful tenderer upon finalization of tender bid and award of tender to successful bidder.
    - **c.** all the tenderers if the tendered item is cancelled or retendered.
- **4.** The tender documents and all correspondence's relating to the bid should be in **English language** only.



# NATIONAL INSTITUTE OF MENTAL HEALTH & NEURO SCIENCES

(Institute of National Importance), P.B. No. 2900, Hosur Road, Bengaluru – 560 029 Ph: 26995923/13/5023-25/5090 E-mail: aaos@nimhans.ac.in

Fax: 080-26571563/26564830/2121/6811 Website: www.nimhans.ac.in/tender

# E-Procurement Global Tender No. STR-D3/NIMHANS/2019-20/IND598

05.03.2020

- 5. Technical bid should comprise of (uploaded copy of documents should be self attested, stamped and better quality preferably .PDF format) -
  - **5.1** Brochure/Catalogue and Data sheet of the equipment.
  - **5.2** Technical Compliance Statement
  - **5.3** Proprietary certificate from the manufacturer mentioning the unique technology or feature/s mentioned apart from the brand name (If applicable).
  - **5.4** 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)
  - **5.5** Delivery Period of the item to be supplied and Time required for installation from the date of purchase order has to be indicated.
  - **5.6** List of Institutes where the equipment has been supplied with copy of purchase orders.
  - 5.7 Copy of GST, PAN, TIN document
  - **5.8** Whether tenderer is manufacturer / accredited agent / sole representative, indicate details of principal's name & address. The offers of tenderer who are not manufacturer or direct authorized agent will be summarily rejected. Sub- distributors will not be accepted.
  - **5.9** 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 ₹100/-.
  - **5.10** Declaration towards acceptance of all terms and conditions should also be provided.
- 6. Financial Bid should comprise of-
  - 6.1. Quotation should be only for DAP 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. CMC COST SHOULD BE QUOTED IN INR ONLY.

Detailed breakup of the cost should be provided under icon "Action column" by clicking the % symbol which will be mentioned as Added statutory components.

- **6.2.** The tenderer should also quote 5 years CMC cost for the post warranty period in INR under Action column in E procurement portal but CMC cost will not be considered for successful tenderer decision.
  - **6.2.1** In case of Import, Customs Duty will be considered only at 5.50% of the total Purchase order value and the required Customs clearance documents will be provided by NIMHANS on prior intimation (atleast 5 working days prior intimation) of shipment along with details and relevant documents from the supplier.
  - **6.2.2** If the tenderer is quoting in Indian Rupees (INR) for items NOT MANUFACTURING IN INDIA (NMIC), the CUSTOM DUTY EXEMPTION



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CERTIFICATE WILL NOT BE ISSUED BY THE INSTITUTE. The Rate quoted should be inclusive of Custom duty & other incidental charges.

- 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 6.1).
- 8. The cost of the "C-ARM [IITV]" 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 presence of tenderers or their representatives who choose to attend.
  - The Tenderers' or representatives who are present shall submit authorization letter along with copy of Photo id proof and shall sign a register evidencing their attendance.
- **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.** 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.
- **14.** 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.
- **15.** 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.



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**16.** 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.

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

- **18.** 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.
- 19. 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.

# 20. Payment terms:

- **21.1**Payment (NEFT / RTGS / Wire transfer / LC) will be made only after good working condition of the equipment certified by the end user. **NO ADVANCE PAYMENT WILL BE ENTERTAINED**.
- **21.2**In case of foreign payments made by Letter of Credit (LC) or wire transfer, bank incidental charges within India will be borne by the Institute and outside India should be borne by tenderer.
- **21.3**Any amendment or extension of LC sought by the tenderer thereafter should be borne by the tenderer.

# 21. 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.

22. 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/

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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.

- 23. 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 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.
- **24.** Any corrections/changes in the tender will be uploaded as corrigendum in the NIMHANS and E procurement websites only.
- **25.** 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.
- **26.** 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.
- **27.** Failure to adhere any of the above terms and conditions the bid(s) may be rejected and EMD may be forfeited.
- **28.** 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.

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

**Sd/-**,

**Director** 



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05.03.2020

# <u>DECLARATION</u> (TO BE GIVEN BY THE TENDERER

|                 |  | (TO BE GIVEN BY THE TENDERER)   |
|-----------------|--|---|
|                 | ame of the Item<br>ame of the company  | : C-ARM [IITV]  |
| To              | •  |   |
| Na<br>(Ir<br>Po | ne Director,<br>ational Institute of Menta<br>astitute of National Impo<br>ast Box No. 2900,<br>asur Road, Bengaluru – 5 |   |
| De              | ear Sir,   |   |
| 2.              | I/We have made requisit & daterejected.  | our tender for the  |
| 4.              | connection including de  | all the terms and conditions, stipulated by the NIMHANS, in this elivery, warranty, penalty etc. Quotations for each group are being onsidered on their face value.                                     |
| 5.              | of issue of the letter of  | he contract/agreement, if required, within reasonable time from the date acceptance, failing which our/my security money deposited may be ame may be removed from the list of suppliers at the NIMHANS, |
| IN<br>TH        | DICATED IN THE QU<br>HE RATES ARE INCL   | CONDITIONS SUCH AS TAXES/LEVIES ETC, HAS BEEN OTATIONS FAILING WHICH IT WILL BE PRESUMED THAT USIVE OF ALL TAXES/LEVIES AND OTHER TERMS AND AS PER YOUR REQUIREMENTS.                                   |

Signature of Tenderer & seal

Yours faithfully,



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05 03 2020

# CHECK LIST (TO BE FILLED BY THE TENDERER)

|    | (10 BE FILLED BY THE TENDERER)                   |     |   |  |  |  |  |  |
|----|--|-----|---|--|--|--|--|--|
| 1  | Name & Address of the Tenderer                   |     |   |  |  |  |  |  |
| 2  | Name & Address Of the<br>Manufacturer            |     |   |  |  |  |  |  |
|    | Name of the Equipment & Model                    |     | ARM [IITV]                                    |  |  |  |  |  |
| 3  | Quoted   | C-F |   |  |  |  |  |  |
| 4  | Validity of the Quotation                        | Fo  | ur months from the due date                   |  |  |  |  |  |
|    | a. Delivery Period                               |     |   |  |  |  |  |  |
| 5  | b. Warranty Period                               | 5 y | vears   |  |  |  |  |  |
|    | c. Installation Period                           |     |   |  |  |  |  |  |
|    |  | a.  | Application Fee submitted                     |  |  |  |  |  |
|    |  | b.  | EMD submitted                                 |  |  |  |  |  |
|    |  | c.  | Brochure/Catalogue uploaded                   |  |  |  |  |  |
|    |  | d.  |   |  |  |  |  |  |
|    |  | e.  | Manufacturer Proprietary certificate uploaded |  |  |  |  |  |
|    |  |     | Pre requirements details uploaded             |  |  |  |  |  |
|    | Tender Bid details (Yes or No against each item) |     | List of users uploaded                        |  |  |  |  |  |
|    |  | h.  | Copy of GST/PAN/TIN & Bank details            |  |  |  |  |  |
| 6  |  | n.  | uploaded                                      |  |  |  |  |  |
|    |  | i.  | Distributor authorization letter uploaded     |  |  |  |  |  |
|    |  | j.  | Non-blacklisting certification uploaded       |  |  |  |  |  |
|    |  | k.  | Declaration enclosed                          |  |  |  |  |  |
|    |  | l,  | Equipment Door delivery cost quoted           |  |  |  |  |  |
|    |  | m.  | AMC & CMC cost for 5 years post warranty      |  |  |  |  |  |
|    |  |     | period  |  |  |  |  |  |
| 8  | Training will be provided (Yes or No)            |     |   |  |  |  |  |  |
|    | a. Whether after sales, service is               |     |   |  |  |  |  |  |
|    | available in Bengaluru?                          |     |   |  |  |  |  |  |
|    | If yes, quote                                    |     |   |  |  |  |  |  |
| 9  | b. What is the arrangement for                   |     |   |  |  |  |  |  |
|    | post contract / warranty                         |     |   |  |  |  |  |  |
|    | monitoring of the equipment?                     |     |   |  |  |  |  |  |
|    | Details of the EMD Submitted                     |     |   |  |  |  |  |  |
|    | (Reference no., date & bank                      |     |   |  |  |  |  |  |
| 10 | details)   |     |   |  |  |  |  |  |
|    | Any Other Information (Enclose                   |     |   |  |  |  |  |  |
| 11 | separately in letter head – Yes or               |     |   |  |  |  |  |  |
|    | No)  |     |   |  |  |  |  |  |
|    | · · · · · · · · · · · · · · · · · · ·            |     |   |  |  |  |  |  |

Signature of Tenderer along with seal

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E-Procurement Global Tender No. STR-D3/NIMHANS/2019-20/IND598

05.03.2020

# C-ARM [IITV]

## For Technical Clarifications contact:

Dr. Dwarakanath. S, Professor & Head - Mobile: - +91-80-9480829605

Office Landline: +91-80-26995403/5724/5934

Dept. of Neurosurgery, Faculty Building, NIMHANS, Hosur Road, Bengaluru

Email ID: dwarakaneuro@yahoo.com & surgery.nimhans@gmail.com

## TENDER SPECIFICATIONS

# 1) GANTRY / C-ARM

- The system should have a minimum of 76 cm free space within the C-Arm to provide a large imaging space.
- The C-arm depth should be 61 cm or more to provide a large imaging space and C-arm clearance around the patient and the imaging table.
- The C-arm should have a manual angulation of +/-180 degrees to allow the imaging chain to accomplish angled projections.
- The C-arm field of view should be a square field of view for better ROI coverage.
- The C-arm should have orbital movement of +90 / 25 degrees for better penetration in Cranial/Caudal movement.
- The system should have at least 40cm of motorized vertical C-Arm travel capability to adjust the imaging chain height.
- The C-arm should provide side to side (wig-wag) and the horizontal travel movements to allow panning during an imaging.

### 2) GENERATOR & X-RAY TUBE

- The generator should be Micro Processor controlled converter type with output of 12 KW or more and minimum 50 kHZ frequency (or higher).
- The system should operate in full capacity on 220 volts AC, 15 amps.
- Fluoroscopic kVp range: 40-120kVp or more
- Fluoroscopic mA range : 4 mA 20 mA or more
- Radiographic kVp range : 40-110kVp or more
- Radiographic mA range: Minimum 70mA
- The generator should be capable of providing pulse fluoroscopy with pulse rates upto 25 frames/sec.
- The X-ray tube should be a rotating anode X-ray tube type.
- The tube should have additional safety filtration for the stray or scattered radiation i.e. cu filters.
- Focal spot size should be 0.3mm & 0.6mm dual focal spots.
- Anode heat storage capacity should be 200 KH.U. or higher

## 3) IMAGE INTENSIFIER DETECTOR SYSTEM (IITV)

- The system should have Image intensifier system. The Size of the detector should be of 12"Image intensifier system. The resolution of CCD camera should be high resolution 1k x 1k matrix
- The system should have triple mode zoom facility.
- The system should be equipped with two high-resolution 18" LCD/TFT medical grade monitors or more./one high resolution large display of min 32"with split facility.
- The system should provide a last image hold capability that the last image is displayed on the active monitor after the termination of an exposure.
- The system should be equipped with touch control panel.
- The system shall allow the user to change the image orientation on the display screen during a live exposure

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or using the last image hold. Those functions include image rotation, and top to bottom image reversals.

## 4) DIGITAL SYSTEM & IMAGE MANAGEMENT

- The system should have multi patient data base for handling large quantities of image, including dose management report.
- The system should automatically select proper imaging parameters, kVp and mA during an imaging, but also provide the user to over-ride these setting manually.
- Real time and automatic brightness and contrast should be provided to optimize displayed image.
- The system should provide a real time post processing edge enhancement capabilities to get better image quality according to the density of the tissue. An electronic/digital zoom function, save function to hard disk, Multi display.
- The system should be capable of saving more than 5000 images to the internal hard disk and retrieve stored images later.
- It should have facility to record on line fluoroscopy.
- It should have facility for image and fluoro sequences retrieval on a CD/DVD/Pen drive.
- System should have facility for DICOM connectivity and DICOM Ready. All DICOM functions (DICOM Send/Storage Commitment, DICOM Print, DICOM Query/Retrieve, DICOM Worklist/MPPS) should be offered.
- Software to enhancement the contrast of image with respect to density of organ should be offered, allowing the contrast of structures to be emphasized without loss of information in bright and dark image areas

## Following Dose Reduction Package should be offered

- Integrated dose measuring chamber with automatic transfer of the accumulated dose into a radiation report.
- Radiation-free positioning of primary collimators through graphical display in the LIH image on the image monitor

### 5) Essential Certification:

- The offered model should be US FDA and European CE.
- Equipment should have AERB Type Approval Certificate for radiation safety should be enclosed

# 6) ESSENTIAL ACCESSORIES – Local supply

- Light weight(Lead free) Aprons with all round protection: 6 Nos
- Light weight (Lead free)Aprons with front protection: 6 Nos
- Thyroid shield: 6 Nos
- Lead eye glasses: 2 Nos
- UPS with 10 minutes backup.

**WARRANTY: 5 YEARS** 

COMPREHENSIVE MAINTENANCE CONTRACT [CMC]: 6<sup>TH</sup> to 10<sup>TH</sup> Year (5 Years)