

13.03.2019

TAMILNADU MEDICAL SERVICES CORPORATION LTD.,

**TENDER FOR FIXING RATE CONTRACT FOR SUPPLY AND INSTALLATION OF
HIGH END CARM SYSTEM TO GOVT. MEDICAL COLLEGE HOSPITAL,
PUDUKOTTAI**

TENDER NO.358/CARM/DME-PDK/TNMSC/ENGG/2018, DT.04.09.2018

CORRIGENDUM

a) The following corrigendum are issued:-

Sl. No.	Tender document reference	Instead	Read as
1.	Page No.54 to 56 Section VI: Technical Specification 1. Specification for High End C-Arm System	Existing Text	Revised Text at Annexure - I

b) The following clarification are furnished:-

Sl. No.	Tender document reference	Point Raised	Clarification Furnished
1.	Page No.46 Section IV: Special Conditions of Contract 10. Payment (GCC Clause 15) <u>Payment for Goods and Services shall be made in Indian Rupees as follows:</u> <u>(i) No advance payment is payable.</u> <u>(ii) 100% payment will be made against supply and installation of the equipments at the respective sites against</u>	Request to amend as "Payment shall be made in Indian Rupee through Inland Letter of credit with:- a) 80% of payment shall be made against proof of delivery of equipment. b) Balance 20% of payment shall be made within one month from the date of installation.	No Change. Hence, published term prevails.

Sl. No.	Tender document reference	Point Raised	Clarification Furnished
	<u>certification along with necessary stock entry bills from the respective consignee.</u>		
2.	<p>Page No.46</p> <p>Section IV: Special Conditions of Contract</p> <p>16. Annual Maintenance Contract (AMC)</p> <p><u>Any major repair pointed out by the Purchaser shall be rectified by the Supplier from the date of intimation within a period of 3 calendar days and commission the equipment to the satisfaction of the Purchaser. Failing which the Purchaser has a right to levy a penalty on the Supplier a sum of Rs.10,000/- per day or part thereof for each equipment until the equipments are repaired and commissioned to the satisfaction of the Purchaser.</u></p>	<p>Request to amend as monetary penalty, extension of warranty/contract period by two days for every extra day beyond the permissible downtime should be considered.</p>	<p>No Change. Hence, published term prevails.</p>

All other terms and conditions of the tender remain unaltered.

The above forms part of the bidding documents. The bidder shall attach the copy of this corrigendum duly signed by their authorized signatory, in their bid.

**Sd/-
General Manager (E)**

SECTION VI: TECHNICAL SPECIFICATION - REVISED

1. SPECIFICATION FOR HIGH END C-ARM SYSTEM - REVISED

- C-Arm: High End C-arm with LCD panel & with 1Kx1K CCD or 1k x 1k CMOS Camera 9" Image Intensifier.
- The unit should be based on digital technology for unparalleled reliability and ease of use. The movements should be smooth having very simple positioning.

X-ray Generator

1. High Frequency (40 KHz) X-ray generator with power output atleast 5KW or more should be provided.
2. Following modes should be provided.
 - Radiography
 - Fluoroscopy
3. KV range (Rad./Fluoro): 40 - 120 KV in 1KV/step.
4. Radiographic mA range: atleast 100 mA.
5. Fluoroscopy mA output: Up to 3.5mA or more
: Up to 15mA or more (High definition mode)
6. mAs output: 250mAs or more in steps.

X-ray Tube:

1. Dual focus rotating/stationary anode x-ray tube should be provided with better focal spot atleast 0.3 mm or less (small) and 0.6mm or less (Large) should be provided.
2. Iris collimator or equivalent collimator technology should be provided.

LCD Control Panel:

1. LCD Display for following parameters should be provided:
 - Minimum 7" inch or more size large display with touch screen on which kV, radiography mAs, fluoro time, FmA II Zoom, error interlock display for KV, mA, thermal etc are displayed.
2. Radiographic mode: Manual or APR mode or Auto mode.
3. Timer (Fluoroscopic): Fluoroscopic cumulative timer.
4. Sensor: X-ray tube head temperature sensor for thermal safely cut off.

5. Switches: Mode selector switch.
 - Collimator control switches.
 - 1.1 Zoom selection switches.
 - Exposure initiation switches for Fluoro/Radiography.
6. ABS Mode: Automatic Brightness system for fluoroscopy.
7. Self Diagnostic: Various interlocks are displayed on Lock screen or various systems errors.

Stand

1. Motorized Up/down movement: atleast 400 mm or more.
2. Horizontal Movement: At least 200 mm.
3. Arc orbital: $90^{\circ} + 30^{\circ}$ (120°)
4. Wig wag: $\pm 12.5^{\circ}$ (25°)
5. Rotation: $\pm 180^{\circ}$ or more.
6. Free space: 700 mm or more
7. Source to image distance: 940mm or more
8. Arc depth: 60 cm or more.
9. Locks: Locks for all the movements
10. Foot Lock: Control stand foot lock.
11. Steering wheel for easy steering & movement should be available.

Image Intensifier TV System:

1. 9 inches, triple field image intensifier should be provided.
2. High resolution compact CCD camera or CMOS camera of 1K x 1K matrix.

Memory System

PC based or embedded memory systems with more than 2000 images storages and following features should be provided:

1. Image processing software with real time image capturing, storage and display in 1K x 1K format in embedded system or PC based.
2. DICOM compatible 3.0 inbuilt with external/internal workstation.
3. Hard disk with storage facility 20000 images or more.
4. DICOM CD/DVD inbuilt or external.
5. Zoom with pan

6. Last image hold
7. Image printing
8. Flip
9. Real time noise reduction recursive filter averaging up to 16 frames
10. Connectivity with DICOM 3.0 PACS and HIS on internal or external workstation.
11. Pre programming for image setting for different operating modes.
12. Image flipping, image rotation and reversal without radiation.
13. WWW level adjustments
14. Image inversion
15. Patient directory
16. Patient data entry

Monitors

- 2 Nos. Medical display high brightness, high contrast, high resolution B/W 19" LCD monitors or 1 no. medical display high brightness, high contrast, high resolution coloured 24" LCD monitors should be provided. High end monitor trolley with foldable arms for monitors and actuator driven height adjustment of monitors should be provided.

Power supply requirements

- Single phase, 230 volts, AC, 15 amps, 50 Hz, $\pm 10\%$ regulation. Independent earthing required on the wall socket adjustment of monitors should be provided.

Other requirements

- The company must be ISO certified.
- The unit should be approved by AERB

Note: Bidders shall furnish technical compliance statement for the model quoted , details of manufacturer including deviations if any. Technical catalogue /data sheet shall also be furnished in support of technical compliance statement without fail.