Bihar Medical Services & Infrastructure Corporation Limited 4th floor State Building Construction Corporation Limited. Hospital Road, Shastri Nagar, Patna 800023, Phone/Fax: +91612 2283287,+ 91612 2283288

Corrigendum-III

Bihar Medical Services and Infrastructure Corporation Limited (BMSICL) had invited E-Bids from the interested parties for the procurement, rate contract and the supply of medical equipment for different Govt. Health Institutions of Bihar vide Notice Inviting Tender No.-BMSICL/2018-19/ME-116. During and after pre-bid meeting various suggestions from prospective bidders were received and accordingly some amendments in technical specification of certain equipment were uploaded through Corrigendum-I (with Annexure-I). After uploading the corrigendum some objections were raised by certain firms. In order to facilitate maximum participation of bidders, the technical specification of Digital Radiography (1000 mA) has been re-amended which is annexed as Annexure-1 of this corrigendum.

Sd/-

GM (Procurement)

BMSICL, Patna

Annexure-1		
Name of Equipment - Digital Radiography (1000 mA)		
Sl no.	**BMSICL Specification after amendments**	**Technical Specification after re-amendment**
1	Should be a digital Radiography system with two flat panel detectors, capable to take digital images in horizontal, vertical and oblique positions of all skeletal body including spine and chest. Out of four major components (Detector, Acquisition software, X-ray tube and generator) at least 2 should be from same manufacturer of the main (complete) system.	No Change
	II. Generator	
1	Generator should be of high frequency inverter technology for constant output	No Change
2	Should have at least 80KW power	No Change
3	The KV range from 40 to 150KV with 1KV step	No Change
4	KV/ mA output specification- 1000mA at 80 KV, 800mA at 100KV	No Change
5	Should have automatic exposure control device	No Change
6	Should have anatomical programming for radiography	No Change
7	Should have over load protection feature	No Change
8	Should have a digital display for KV and mAs	No Change
	III. X-Ray tube and collimator	
1	Should be a high speed rotating anode high speed (8000 rpm or more), dual focus tube compatible with the generator	No Change
2	Should have focal spot sizes of 0.6mm (small) or less and 1.2mm (Large) or less. X ray tube loading should be atleast 30 KW for small focus & atleast 80 KW for large focus	No Change

3	Should have a multi leaf collimator having halogen/bright light source with auto shut provision for the light, auto collimation	No Change
4	Should have over load protection	No Change
5	Should have an anode heat capacity of 300 KHU or more	No Change
	IV. Ceiling suspended tube	
1	Should be ceiling suspended type with auto-tracking with detectors	No Change
2	It should have movements in all directions i.e.3D 140cm or more	No Change
3	All movements should have electromagnetic brakes with fully counter balanced mechanism	No Change
4	It should have facility to display FFD/SID	No Change
5	It should have provision for auto positioning, auto synchronization and auto centering with vertical bucky and table	**It must have auto positioning, auto synchronization and auto centering with vertical bucky and table**
6	Tube rotation at vertical axis and horizontal axis +/- 135 degree or more	No Change
	V. X-Ray Table with detector	
1	Should be a carbon fibre/equivalent motorized up/down table, with four-way floating table top having a weight carrying capacity of minimum 200kgs.	No Change
2	The buky travel should be 400 mm or more	No Change
3	It should have automatic exposure control with at least 3 fields	No Change
4	Should have tracking with X-Ray tube.	No Change
	VI. Vertical detector stand	
1	Should have an in-built detector capable to take digital images in horizontal, vertical and oblique positions with suitable motorized movements for all skeletal body including spine and chest	No Change
2	It should have provision to do chest radiography without grid	No Change

3	It should have automatic exposure control with at least 3 fields	No Change
4	Should be supplied with grids suitable for horizontal and vertical imaging	No Change
5	The Vertical Bucky should be capable of rotating on its axis across +90 to -15 degrees	No Change
	VII. Digital detector	
1	The detector should be a flat panel detector of Amorphous silicon with Cesium Iodide Scintillator.	No Change
2	The size of the detector should be 41cm x 41cm or more for both detectors	No Change
3	Should have spatial resolution of 3 lines pair / millimeter or better	No Change
4	Detector Quantum Efficiency (DQE) should be 60% or more @ Zero lines pairs.	No Change
5	The active matrix size should be 2.8k x2.8k or more. Pixel size should be less than 150x 150 um	**The active matrix size should be 2.8k x2.8k or more. Pixel size should be 150 um or less**
6	Should have a minimum image depth of 14 bit	No Change
		No Change
	VIII. Image acquisition, image processing	
1	The digital workstation should be based on the latest high speed processors of at least 64 bit with 20 inch 2 megapixel medical grade monitor or more	No Change
2	It should have the possibility of acquiring the image from the detector system. Should have preview time 5 seconds or better	No Change
3	It should have image storage of 1 TB or more.	No Change
4	The system should have DICOM 3 (or newer) ready & compliance (DICOM Worklist, DICOM Store, DICOM point, DICOM modality performed procedure step etc)	No Change
5	Complete Long Length Imaging (LLI) hardware & software be available on vertical bucky with automatic stiriching software available on the acquisition console.	No Change

6	Post processing function must be available.	No Change
7	Dry imager camera with at least 3 online film trays, 500 dpi or more for printing the digital images	No Change
8	CD, DVD – R/W drive should be supplied.	No Change
	IX. Accessories	
1	On line UPS with 30 minutes back up for both work station and Printer. Automatic servo voltage stabilizer for suitable k VA for the main equipment to be supplied by bidder	No Change
2	Lead glass of size 80cms x 120cms	No Change
3	Light weight Radiation protection Apron of 0.5 mm lead equivalence, AERB approved – 5 nos, Thyroid Shield (AERB approved) -02, Lead Goggle (AERB approved)-01	No Change
4	One additional workstation should be provided with UPS, CPU, 1 MP 19" monitor, workstation software, computer Table & 02 nos revolving chair	No Change
5	Should be supplied with X-Ray view box (LED Type) Double – 2 No.	No Change
6	Lead lining of 02 nos LEAD door (patinent entry + Console room) as per AERB norms must be provided by vendor.	No Change
	X. Quality Certificates	
	a. The system should have US FDA and European CE (Issued by a notified body) and AERB approval/ NOC for the whole system on the date of closing of tender. Any other certification from any regulatory authority will be the responsibility of the supplier.	**USFDA / European CE by Notified body and AERB Approval for whole system Any other certification from any regulatory authority will be the responsibility of the supplier**.
	b. Approval of site plan and registration of the installation from AERB shall be the responsibility of the successful bidder.	No Change
	C. The equipment must have typed approval of the model quoted on the date of opening of the tender.	No Change

	d. QA test should be done free of cost during warranty period (once in every year) and yearly QA test shall be done in the CMC period also and the rates shall be included in the CMC offered.	No Change
	e. QA test of the machine as per AERB guidelines will be responsibility of supplier during warranty & during CMC, cost is added in CMC cost of the machine.	No Change