



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-I

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-120. During and after pre-bid meeting various suggestions from prospective bidders were received and accordingly some amendments have been made in the technical specification of certain equipment which are annexed as **annexure- I** of this corrigendum In order to facilitate the maximum participation of bidders, the tender schedule is being revised as following:-

Tender Reference No.	BMSICL/2018-19/ME-120
Date and time for downloading of bid document	Up to 15th February 2019 till 17:00 Hrs.
Last date and time of submission of online bids	16th February 2019 till 17:00 Hrs.
Last date and time of submission of original documents of EMD, Tender Fee and Document.	18th February 2019 till 14:00 Hrs.
Date, Time and Place of opening of Technical Bid	18thFebruary 2019 (at 15:00 Hrs.) on the website of www.eproc.bihar.gov.in in the office of BMSICL
Date and time of opening of financial Bids	To be announced later on www.eproc.bihar.gov.in

Sd/-

GM (Procurement)

BMSICL, Patna

Annexure-1

Name of Equipment - Digital Mammography

SI no.	BMSICL Specification before amendments	Technical Specification After Amendment
	A) X-Ray Generator	No Change
	High Frequency X-Ray Generator with 50 KHz frequency should be provided.	High Frequency X-Ray Generator with 35 KHZ or more.
	Power of generator should be more than 4KW	No Change
	Maximum mA output should be more than 100mA.	No Change
	KV Rang should be from 1mAs to 650 mAs or more.	mAs range should be 2 mAs to 600 mAs
		Additional Point:- KV range should be 23 to 35 KV or more.
	1 no. High voltage cable should be provided.	No Change
	B) X-Ray Tube	No Change
	Rotating Anode X-Ray Tube having dual focus should be provided.	No Change
	Focal Spots should be	No Change
	Small Focus -0.1	No Change
	Large Focus -0.3	No Change
	Anode heat storage capacity should be more than 200KHU.	No Change
	C) Control panel	No Change
	Control panel should have below feature:	No Change
	Fully integrated system Imaging system controls X-Ray parameters.	No Change
	Following Techniqie selections should be provided.	No Change
	• Zero point technique with digital AEC.	Deleted
	• Manual Two point technique selector (KV AND mAs)	No Change
	• Anatomical programming for different Breast sizes.	No Change

	Inbuilt Digital AEC for better exposure control and diagnosis.	No Change
	Multiple step image optical density control.	Deleted
	Filter should be automatically selected as per the KV selected (Molybdenum filter and Rhodium filter)	Filter should be automatically selected as per the KV selected (Molybdenum/ Aluminium filter and Rhodium)
	Following parameters should be displayed:	No Change
	· KV	No Change
	· mAs	No Change
	· interlocks indicating the fault in the machine.	No Change
	· Type of filter selected.	No Change
	· Compression force in Kg.	Compression force in Newton or kgf or daN
	· Compressed breast thickness.	No Change
	· Gantry angel.	No Change
	Following Switches should be provided on Acquisition PC graphic interface:	No Change
	· Focal sport Selection	No Change
	· APR/AEC selection.	No Change
	· KV increment and decrement	No Change
	· mAs increment and decrement.	No Change
	Breast Release mechanism in case of power failure:	No Change
	Push to OFF type emergency switches should be provided on both sides of gantry to release breast in case of power failure. This mechanism should operate from a inbuilt power source.	Push to OFF type emergency switches should be provided on both sides of gantry to release breast in case of power failure. This mechanism should operate from a inbuilt power source or otherwise manual operation to release the breast should be possible
	Below safety features should be provided:	No Change
	· Computer controlled exposure parameter selection. Microcontroller based embedded platform to ensure accuracy of these parameters.	No Change
	· Automatic compression locking after maximum compression of compression paddle.	No Change
	· Earthing interlock is provided in the machine for safety of user and machine (Without proper earthing machine would show error)	Separate earthing to be provided at the time of installation.

· Fast compression release mechanism in case if patient is uncomfortable with compression.	No Change
· Automatic breast release after x-ray exposure is completed.	No Change
D) Stand Assembly	No Change
A Compact stand supporting an iso-Centric gantry containing X-Ray Tube & Bucky Assembly should be provided.	No Change
Vertical Movement (Motor operated) should be 650mm or more.	No Change
Motorized rotation: +90 degree to -90 degree.	The system should have fully motorized rotation and updown movement, angle of Arm movement should be at least +180° to -150°
Source to image distance (SID) should be 600mm or more.	No Change
Breast compression: Motorized compression with fine manual adjustments of compression force.	No Change
Automatic compression release after exposure is over.	No Change
Compression paddles for Normal & Magnification Mode (Spot compression) should be provided.	No Change
Compression scale : 0 to 15cm.	Compression scale: 0 to 8 cm or above
Magnification Device: 1.8 X should be provided.	No Change
24 Xx 30cm digital Bucky with 24x30 cm Grid of 5:1,30 lines/cm. should be provided.	No Change
Suitable Filters (Preferably Molybdenum/Rhodium) should be provided.	No Change
Light Beam collimator with Halogen Lamp with auto shut off facility of Light source should be provided.	Light Beam collimator with Halogen Lamp / LED with auto shut off facility of Light source should be provided.
24cm x 30cm collimator should be provided.	No Change
Cone for localization & Radiation protection should be provided.	No Change
Switches for up/down movement of Gantry, placed conveniently on both sides of Gantry Arm should be provided.	No Change
Separate foot control for gantry movements should also be available for hands free operation.	No Change
Hand switch with retractable cord for initiation of exposure should be provided.	No Change
Free standing fully Transparent lead glass screen for operator protection should be	No Change

	provided.	
	E) Flat pane detector (FPD)	No Change
	A complete imaging solution with cutting edge of performance integrated with our X-Ray systems should be provided.	No Change
	Specifications of Flat panel detector:	No Change
	Direct conversion type solid state flat pane detector.	No Change
	Type : Direct/indirect conversion.	No Change
	Size ;24cm x 30cm	System should have a large flat panel detector of size atleast 24cm x30cm (maximum acceptable deviation of ±1cm in one or both of the axis will be allowed)
	Pixel pitch should be less than 100um.	No Change
	F) Image acquisition software ; should have below features:	No Change
	Acquisition software should have complete control of all image capture fuctions as well as x-ray parameters within the examination room, enhancing the entire workflow by delvering diagnostic images instantly and allowing users to move X-ray images electronically to remote workstations,image archives, and printers, also has the superexcellent performance on image quality control such as :	No Change
	· Patient data entry unique identification accession number.	No Change
	· Instant preview of the captured image.	No Change
	· Processing algorithms based on WW/WL, brightness and contrast.	No Change
	· ROI (Region of Interest) 8Magnification tool.	ROI (Region of Interest) and Magnification tool.
	· Split screen to compare 2 breast on same screen.	No Change
	· Annotations: Left/right marking, Tet additions, Lines, Rectangles, arrow marking and circles in workstation PC should be provided.	No Change
	· Measurement length area an angle in workstation PC should be provided.	No Change
	Networking:	No Change
	System should be fully DICOM 3.0 compatible which can be configured with existing PACS and RIS over TCP/IP protocol.	No Change
	DICOM send/receive, query/retrieve, DICOM print, HIS/RIS work list, storage and , MPPS.	No Change

	Workstation: 01 no. DICOM workstation should be provided.	No Change
	G) Power supply requirement.	No Change
	Single phase, 230 Volts +-10%,AC 50Hz, 15 Amps with independent earthing on the wall socket.	Single phase, 230 Volts +- 10%, AC 50Hz,
	Optional accessories at an additional cost.	
	Digital stereo tactic Biopsy system	Digital stereo tactic Biopsy system and 10 units of metallic needle guide need to be provided as standard
	CAD (computer Aided Detection) software.	
	High resolution LCD monitors of 5 Megapixel.	2 Nos. high resolution 5 mega pixel medical grade monitor (15 inch or more) for work station.
	I) Other Requirements:	
	· The company should be ISO company with CE certified products with notified number.	Certification - USFDA/European CE approved with notified body
	· The unit should be approved by AERB	No Change
	· The company should have local service center.	No Change
	· The company should have proven track record in Govt. sector.	No Change
		Added- (1) 3D mammography/ tomosynthesis with scan angle of 25 degree or more should be offered standard. Specify scan time & acquisition time per projection. (2) One vaccum assisted Biopsy system with 10 sets of needle diagnostic & therapatic.
		Added- Should have suitable on line UPS for the whole system with min. bachup of 3 minutes.