

27-01-2020

Amendment No. 02**Sub: Amendment to the referred tender enquiry****Ref.: Tender Enquiry Document HITES/PCD/PMSSY-IV/07/RAD/19-20 dated 16-12-2019 and Amendment No 01 dated 15-01-2020**

Following changes are being incorporated in the above referred Tender Enquiry Document.

SECTION VII**Technical Specification**

Tender Page & Para	TENDER SPECIFICATION	READ AS
Item No 01 1000 mA Digital X-RAY System with Digital Flat Panel Detector		
Pg 44 Para 2.e	Grey scale of 12 bit.	Grey scale of 14 bit or more
Pg 44 Para 2. j	DQE at 0.5lp/mm should be atleast 65%	DQE at 0.05lp/mm or 0lp/mm should be 65% or more
Pg 44 Para 3.c	KVP range 40 kV - 150 kV with 1 kV steps.	KVP range 40 kV - 150 kV with 1-5 kV steps.
Pg 46 Para 9.e	System should have latest processor with 8GB or more RAM and total storage capacity of atleast 2TB (internal and /or external)	System should have latest processor with 4GB or more RAM and total storage capacity of atleast 2TB (internal and /or external)
Pg 46 Para 9.f	Automatic stitching should be available in table as well as in chest stand	Automatic stitching should be available in table as well as in chest stand. Image acquisition software & stitching software should be from the same Principal manufacturer and should be US FDA/European CE/BIS approved
Pg 46	g. Image viewing, post processing, reporting and documentation station	10. Reporting Workstation: Image viewing, post processing, reporting and documentation station
Pg 46	b. 24" or more LCD/LED medical grade monitor of minimum 3MP resolution must be provided.	21" or more LCD/LED medical grade monitor of minimum 3MP resolution must be provided.
Item No 02 DRF - Digital Flat Panel Fluoroscopy cum Radiography System		
Pg 51 Para A.9	It should have provision for digital display of kV. mA both for radiography and fluoroscopy mode	It should have provision for digital display of kV, mAs both for radiography and fluoroscopy mode
Pg 51 Para B.7	Should have provision of electromagnetic locks with collision protection sensors	Should have provision of electromagnetic locks with collision protection mechanism

Tender Page & Para	TENDER SPECIFICATION	READ AS
Pg 52 Para D.1	Field of view of at least 40 x 40 cm or more / 35 x 43 cm with rotating facility	Field of view of at least 43 x 43 cm or more / (35 x 43 cm with rotating facility)
Pg 52 Para D.4	Should have cine loop facility and last image hold facility during fluoroscopy	Should have cine/fluoro loop facility and last image hold facility during fluoroscopy
Pg 52 Para E.2	Detector must be at least 40 x 40 cms or more / 35 x 43 cm with rotating facility	Detector must be at least 43 x 43 cm or more / (35 x 43 cm with rotating facility)
Pg 52 Para E.6	DQE at 0.5lp/mm should be atleast 65%	DQE at 0.05lp/mm or 0lp/mm should be 65% or more
Pg 52 Para F.2	Post Processing Work Station: Post-acquisition image processing, viewing, reprocessing, hard copy documentation and onward transmission. It should be connected with main console.24" or more LCD/LED medical grade monitor of minimum 3MP resolution must be provided. System should have latest processor with 8GB or more RAM.	Post Processing Work Station: Post-acquisition image processing, viewing, reprocessing, hard copy documentation and onward transmission. It should be connected with main console. 21" or more LCD/LED medical grade monitor of minimum 3MP resolution must be provided. System should have latest processor with 8GB or more RAM.
Pg 53 I.8	Patient fixing belts and compression devices (for performing excretory urography)	Patient fixing belts (for performing excretory urography)
Item No 03 800mA Digital X-Ray unit with Single Detector		
Page 58	Unit should be high frequency digital radiography system with rotating anode XRay tube fitted on a versatile U/C-arm or versatile Ceiling Suspended system along with single flat panel detector, table generator and operator console. The system should be able to perform various radiography in supine & erect positions including standard chest radiography PA view	Unit should be high frequency digital radiography system with rotating anode XRay tube fitted on a versatile U/C-arm or versatile Ceiling Suspended or Floor mounted system along with single flat panel detector, table generator and operator console. The system should be able to perform various radiography in supine & erect positions including standard chest radiography PA view
Page 58 Para 1.c	X-ray : KV range should be 40 to 150KV in 1KV increments	KVP range 40 kV - 150 kV with 1-5 kV steps.
Page 58 Para 3.a	The detector should be of solid state flat detector of latest technology. The material of detector should be amorphous silicon with Cesium Iodide as scintillator.	The integrated detector should be of solid state flat detector of latest technology. The material of detector should be amorphous silicon with Cesium Iodide as scintillator.
Page 58 Para 3.e	The resolution should be minimum of 2.5lp/mm up to 5lp/mm.	Deleted

Tender Page & Para	TENDER SPECIFICATION	READ AS
Page 58 Para 3 g	Digital Detector DQE at 0.5lp/mm should be at least 65%	DQE at 0.05lp/mm or 0lp/mm should be 65% or more
Page 59 Para 5	Automatic U/C Arm Positioner or Automatic Ceiling Suspended system with control unit	Automatic U/C Arm Positioner or Automatic Ceiling Suspended or Floor mounted system with control unit
Page 59 Para 5.a	Counter balanced U/C Arm stand should be provided. In case of ceiling suspended system, it should have floor mounted column stand	Deleted
Page 59 Para 5.b	U/C arm or Ceiling Suspended System must facilitate a rotation of at least through 120 degree or more	U/C arm or Ceiling Suspended or Floor mounted System must facilitate a rotation of at least through 120 degree or more
Page 59 Para 5.d	U/C arm or Ceiling Suspended System must have facility to mount a focused stationary grid.	U/C arm or Ceiling Suspended or Floor mounted System must have facility to mount a focused stationary grid.
Page 59	The console must provide full amount of post processing features like geometric corrections window/level, algorithm , annotations such as markers, predefined text, drawing line and Geometric shape, measurement of distance and angles, histogram, zoom, gray scale reversal	The console must provide full amount of post processing features like geometric corrections window/level, annotations such as markers, predefined text, drawing line and Geometric shape, measurement of distance and angles, histogram, zoom, gray scale reversal
Page 59	Application related software like black border/black masking should be available.	Deleted
Page 59 Para 7	Stand Alone Review Station: Latest PC based workstation for management of images and studies. PC Specs: Processor Core i5, 8GB RAM, 2TB HDD, DVDRW, KeyBoard, Mouse, etc with 24"Medical Grade Monitor of 3MP resolution.	Stand Alone Review Station: Latest PC based workstation for management of images and studies. PC Specs: Processor Core i5, 8GB RAM, 2TB HDD, DVDRW, KeyBoard, Mouse, etc with 21" or more Medical Grade Monitor of 3MP resolution.
Item No 04 Computed Radiography Unit with Dry Imager		
Pg 65 Para 2.c	It should have a resolution of 6 pixels/mm (minimum) for standard resolution cassettes & 10 pixel/mm (minimum) for high resolution cassette reading.	It should have a resolution of 5 pixels/mm (minimum) for standard resolution cassettes & 10 pixel/mm (minimum) for high resolution cassette reading.

Tender Page & Para	TENDER SPECIFICATION	READ AS
Pg 67 Para 6	The unit Should have US FDA or European CE with four digit notified body number certificate and certificate to be submitted.	The equipment should have US FDA or European CE with four digit notified body number or BIS certified and certificate to be submitted
Item No 05 Computed Radiography Unit Single Loader		
Pag 3 69 Para 6	The unit should be US FDA or European CE approved	The equipment should have US FDA or European CE with four digit notified body number or BIS certified and certificate to be submitted
Item No 06 Colour Doppler - 2D		
Pg 73 Para 14	The unit should have US FDA or European CE with four digit notified body number certificate and certificate to be submitted.	The equipment should have US FDA or European CE with four digit notified body number or BIS certified and certificate to be submitted
Item No 07 Color Doppler System - (4D)		
Pg 74 Para 5	Elastography should be available in Linear Probe	Shearwave Elastography should be available in Linear, convex and trans vaginal Probes.
Pg 74 Para 6	Contrast Ultrasound Capability (CEUS)	Contrast Enhanced Ultrasound Capability (CEUS)
Pg 75 Para 9.2	The system shall possess the ability to control speckle through the use of a speckle reduction algorithm that enhances borders, reduces speckle artifact and improves detail and contract resolution in gray scale with compatibility in Colour mode, 3D and side-by-side display. This feature shall have operator selectable settings and be capable of displaying in side-by-side mode with non-speckle reduced image.	The system shall possess the ability to control speckle through the use of a speckle reduction algorithm that enhances borders, reduces speckle artifact and improves detail and contract resolution in gray scale with compatibility in Colour mode, 3D and side-by-side display.
Pg 76 Para 16.a	Convex, with biopsy attachment. Operating Frequency: 2 - 5 MHz	Convex, with biopsy attachment. Operating Frequency: 2 - 5 MHz with elastography & CEUS
Pg 76 Para 16.b	Linear, with biopsy attachment. Operating Frequency: 5 – 13 MHz	Linear, with biopsy attachment. Operating Frequency: 5 – 13 MHz with elastography & CEUS
Pg 76 Para 16.c	Trans-vaginal Probe with Biopsy attachment, Operating Frequency : 4-9 MHz	Trans-vaginal Probe with Biopsy attachment, Operating Frequency : 4-9 MHz with elastography & CEUS
Pg 76 Para 16.f	Sector Probe (TCD):2-5Mhz (Optional)	TCD sector probe (Pediatric) :2-5Mhz (Optional)

Tender Page & Para	TENDER SPECIFICATION	READ AS
Pg 76 para 18	The system should have US FDA or European CE with four digit notified body number certificate and certificate to be submitted.	The equipment should have US FDA or European CE with four digit notified body number or BIS certified and certificate to be submitted
Item No 08 Portable - Colour Doppler		
Pg 77 Para 5	Scanning depth to be 24 cm or more	Scanning depth to be 30 cm or more
Pg 77 Para 13	The system should have cine loop review facility of not less than 20 sec/1000 frames.	The system should have cine loop review facility of not less than 20 sec or minimum 1000 frames.
Pg 78 Para 28	The unit should be Should have US FDA or European CE with four digit notified body number certificate and certificate to be submitted.	The equipment should have US FDA or European CE with four digit notified body number or BIS certified and certificate to be submitted
Item No 11 Mobile C Arm Image intensifier		
Pg 83 par A.8	Housing heat capacity of minimum 400 KHU or fluroscopy time 30 min minimum	Housing heat capacity of minimum 400 KHU or fluroscopy time 25 min minimum
Pg 84 Para E.b.1	b) CCD camera 1 CCD camera with 1kx1k resolution for high resolution image acquisition	b) CCD/CMOS camera 1 CCD/CMOS camera with 1kx1k resolution for high resolution image acquisition
Pg 84 Para E.c.2	Min 18 inch or more , black and white, flicker free, high resolution (1280x1024 pixels or better), medical grade flat screen TFT, manual control of brightness and contrast, mounted on mobile trolley with locking device	Min 18 inch or more , black and white, flicker free, high resolution (1280x1024 pixels or better), medical grade flat screen TFT/LED , manual control of brightness and contrast, mounted on mobile trolley with locking device
Item No 12 C Arm with DSA		
Pg 86	CCD camera	CCD/CMOS camera
Pg 86 Para E.b.1	CCD camera with 1kx1k resolution for high resolution image acquisition	CCD/CMOS camera with 1kx1k resolution for high resolution image acquisition
Pg 86 Para H.7	Support of virtually all DICOM 3.0 functionalities: DICOM Send/Receive, Storage, Print, Work list, Query/Retrieve, MPPS (Modality Performed Procedure Step) for importing data from HIS/RIS system.	Support all DICOM 3.0 functionalities: DICOM Send/Receive, Storage, Print, Work list, Query/Retrieve, MPPS (Modality Performed Procedure Step) for importing data from HIS/RIS system.
Item No 13 PICTURE ARCHIVING & COMMUNICATION SYSTEM (PACS) & Radiology Information		

Tender Page & Para	TENDER SPECIFICATION	READ AS
System (RIS)		
Pg 88 Para I.3	Bidder should provide suitable hardware & software to match the volume of procedure required (procedure per annum). If the hospital needs any increase in procedures per annum in future the vendor should upgrade the PACS with suitable hardware & software. Cost for the same to be quoted separately	Bidder should provide suitable hardware & software to match the volume of procedure required (procedure per annum). If the hospital needs any increase in procedures per annum in future the vendor should upgrade the PACS with suitable hardware & software. Cost for the same to be quoted separately as mentioned in the BOQ
Pg 88 Para II.1	The proposed system should be the state of the art solution and should be a fully scalable solution. Any future upgrade or integration with the other RIS-PACS system in the hospital should be possible. System should conform to latest DICOM and HL7 standards. It should be compatible with all the standard modalities, PACS and imaging entities currently in the institute and also with those added in the future. The system should allow high speed transmission and viewing of data with adequate security measures against viruses, unauthorized access, and encryption to prevent misuse. The PACS system should comply with VNA standards allowing storage, retrieval and viewing of all kind of medical images such as imaging, pathology, echo, ophthalmology, clinical photographs etc	The proposed system should be the state of the art solution and should be a fully scalable solution. Any future upgrade or integration with the other RIS-PACS system in the hospital should be possible. System should conform to latest DICOM and HL7 standards. It should be compatible with all the standard modalities, PACS and imaging entities currently in the institute and also with those added in the future. The system should allow high speed transmission and viewing of data with adequate security measures against viruses, unauthorized access, and encryption to prevent misuse. The PACS system should comply with VNA (level 5) standards allowing storage, retrieval and viewing of all kind of medical images such as imaging, pathology, echo, ophthalmology, clinical photographs etc in their original formats without conversion to DICOM.
Pg 89 Para III.2	PACS database should be running on Oracle / Sybase	PACS database should be running on Oracle / Sybase/ MICROSOFT SQL.
Pg 90 Para VI.2	The Archiving software should support storage of 25000 procedures per annum	The Archiving software should support storage of 50,000 procedures per annum
Pg 90	V Radiology Information System	VII Radiology Information System
	VI Miscellaneous	VIII Miscellaneous
	BOQ	BOQ
Pg 92 7	Annual study volume Licenses 25000 licenses	Annual study volume Licenses 50,000 licenses

Tender Page & Para	TENDER SPECIFICATION	READ AS
	Added para in BOQ	23. Radiologist reporting & Radiographer module licenses - Unlimited
	Added para in BOQ	24. If the hospital needs any increase in procedures per annum in future the vendor should upgrade the PACS with suitable hardware & software. Optional Price to be quoted separately - The vendor has to quote additional annual volume licensing in slabs of 50,000 procedure per annum. This cost should include all networking, cabling, hardware & software
	Added para in BOQ	25. Optional price for storage in slabs of 25TB to be quoted separately for future up-gradation

All other contents of the tender enquiry including terms & conditions remain unaltered.

Note:

- i. Techno Commercial Sheet v1.0 for this tender is being uploaded on CPPP. The same need to be downloaded for submission.
- ii. Price Bid format v1.0 for this tender is being uploaded on CPPP. The same need to be downloaded for submission.
- iii. Prospective Bidders are also advised to check the website regularly prior to the closing date and time of online submission of bids