

Amendment No.VI Dated 07.02.2018
HSCC/PUR/CNCI/Kolkata/Medical Equipment/03 dt. 15.11.2017
Procurement of Medical Equipment CNCI 2nd Campus

All bidders are requested to note the following:

1. SCC Clause no. 9 under section V may please read as under:

Reimbursement of Custom Duty & IGST: CNCI deserves for customs duty exemption through DSIR certificate. The custom duty & IGST amount as mentioned in the price schedule section –XI (B) (convert in INR at the rate of exchange mentioned in bill of entry) will be compared with the actual total custom duty & IGST amount levied by custom department and reimbursed to the supplier as per below:

- a) If the custom duty & IGST amount as mentioned in the price schedule section –XI (B) is equal to the actual total custom duty & IGST amount levied by custom department, the actual total custom duty & IGST amount levied by custom department shall be prevailed and reimbursed to the supplier in INR accordingly.
- b) If the custom duty & IGST amount as mentioned in the price schedule section –XI (B) is more than actual total custom duty & IGST amount levied by custom department, the actual total custom duty & IGST amount levied by custom department shall be prevailed and reimbursed to the supplier in INR accordingly.
- c) If the custom duty & IGST amount as mentioned in the price schedule section –XI (B) is less than the actual total custom duty & IGST amount levied by custom department, the custom duty & IGST amount as mentioned in the price schedule section –XI (B) shall be prevail and reimbursed to the supplier at rate of exchange rate mentioned on the bill of entry in INR accordingly.

2. SCC Clause no. 2 under section V “....two year compressive warranty cost including all spare....” stands deleted.

3. Price may submit on revised price schedule format as attached.

All other terms and conditions of the tender enquiry document shall remain unchanged.

Prospective bidders are advised to regularly visit HSCC website/ CPP as corrigendum /amendments etc. if any, will be notified on this portal only, no separate advertisement will published in the news papers.

Chief General Manager, HSCC (I) Ltd
For & on behalf of Director CNCI, Kolkata

Annexure A

Item No.1 MRI 3 Tesla

Tender Specifications Item No.1 MRI 3 Tesla	May please read as
3.E. Silent MRI" sequence package. Please specify the decibel levels for silent MRI and list the sequences where silent MRI not available to be included in standard package.	Tender terms prevail.
4. RF System 2.A) If the vendor has additionally technology like Zoom it/FOCUS or equivalent for selective excitation within a user specified FoV, the same should be quoted. True shape and true form or equivalent technologiesuch as multi drive/multi transit 4D to be quoted	If the vendor has additionally technology like Zoom it/FOCUS or equivalent for selective excitation within a user specified FoV, the same should be quoted. High resolution, distortion free diffusion capabilities should be offered
4.B. It should also have at least 32 independent RF receiver channels "acquisition" with each having bandwidth of 1 MHz or more along with necessary hardware to support quadrature array / Matrix coils.	Tender terms prevail.
4.c. It should support Parallel acquisition techniques with a factor of 12 or more . Highest available PAT factor to be quoted.	Tender terms prevail.
5.APatient table should be fully motorized with computer controlled table movements in vertical and horizontal directions. (Specify the patient load capacity).	Patient table should be fully motorized and dockable with computer controlled table movements in vertical and horizontal directions. (Specify the patient load capacity).
8.iMultichannel Head coil with 32 channels or more for EPI/DTI application.	Tender terms prevail.
8.v. Suitable surface coil for peripheral angiography application of at least 32 channels Suitable surface / phased array coil for peripheral angiography application of at least 32 channels with coverage of minimum 80 cm, with single or combination of coils. For Angio application if the coils offered are in combination it will be counted as 1 coil for the purpose of peripheral angiography.	Tender terms prevail.
8.vi. Bilateral Breast Coil with at least 16 channels with fully functional spectroscopy	With Biopsy attachment.
8.ix Dedicated Wrist Coil - 8 channels	Tender terms prevail.
8.x. Large (2 quantity) - 4 channel Small (2 quantity)- 4 channel	Tender terms prevail.
8.xi. Small flex coil for paediatric and neonatal head and neck applications- 8 channels or more	Small flex coil for paediatric and neonatal head and neck applications- 4 channels or more
8.xii. Dedicated Ankle Coil with 16 channels or more.	Dedicated Ankle Coil with 8 channels or more.
9(I) Prostate Imaging with Parametric cards (Ktrans, Kep, Ve, Vp) – quote this as optional and price will not be included in calculation for L1	Prostate Imaging with Parametric cards (Ktrans, Kep, Ve, Vp) – quote this as standard.
9(J) Workflow improvement Techniques with availability of “Previous”Scans”such as Smart Exam/Auto Align/Ready for Brain application to be provided.	Workflow improvement Techniques with availability of “Previous”Scans”such as Smart Exam to dot engine package/Auto Align/Ready for Brain application to be provided

10. iv) MRI – HIFU complete system with application for fibroid, prostate, bone etc.	Point deleted.
10.v. "Silent MRI" sequence package. Please specify the decibel levels for silent MRI and list all the sequences with their acquisition time where silent MRI is not available.	Point deleted.
10.vii) Breast coil, biopsy attachment – 4 channels.	Point deleted.
10.ix) Coil for Cardiac application	Coil is required as standard.
11. Client server architecture-server with 5 concurrent clients (Dexus, intelligence portal, Syngo. Via etc or higher) capable of rendering 4000 images at peak performance. Workstation hardware should be industry standards, and should be the latest with the vendors, as per their globally launched product catalogue	Client server architecture-server with 5 concurrent clients (Dexus, intelligence portal, Syngo. Via etc or higher) capable of rendering 20000 images at peak performance. Workstation hardware should be industry standards, and should be the latest with the vendors, as per their globally launched product catalogue
11. A.ii) Advanced post-processing offered applications including FMRI, perfusion quantification, advanced diffusion and DTI, advanced cardiac evaluation (EF, Calculation, Wall motions, analysis) including perfusion analysis, processing of 2D/3D CSI data, with color metabolite mapping, quantification of CSF flow data, vascular analysis package on at least two clients concurrently.	All optional items to be quote as standard.
<p>13. Accessories</p> <p>A- DICOM compatible Dry Chemistry laser camera (1 No.s) with integrated processor for filming from main console & workstation. The camera should be capable of printing on films of 14" x 17", 11" x 14" and 10" x 8" sizes in a resolution of 600 or more dpi. It should be possible to connect other imaging modalities to the printer. 2000 compatible films to be provided. Films to be provided after installation as and when required by the user. Main equipment (MRI) in the emergency block to be networked with cameras of CT and DRF camera in the emergency block .</p>	Tender terms prevail.
Added	<p>i) All necessary licences for connectivity with treatment planning system, Linear accelerator and Brachytherapy machine.</p> <p>ii) Flat table top compatible for Linear Accelerator for Radiotherapy Treatment Planning.</p>
Item No. 2 CT Scan 256 Slice	
iv) The sub millimetre Slice @ 0.63 mm or less in 128 rows or more of detector with 256 or more acquisitions should be available. The system should be in position to perform 256 acquisition Slices/ Rotation for general, cardiac/vascular applications. (Specify the submillimetre slice thickness in millimetres)	Tender terms prevail.
ii) The System X ray power should be 100 kW (actual power) and above	Tender terms prevail.
iii) The mA range available should be between 20 to 800 mA or more with increments in steps of not more than 10mA.	Tender terms prevail.

<p>3) Detectors: ii) The 256 acquisition slice or more per Rotation should be possible. The Systems should have at least 128 Physical Rows of the detector or more.</p>	<p>at least 128 physical detectors rows as single layer/dual set/dual layer.</p>
<p>iii) Specify the Fan Angle of the X rays and the geometry. The detectors should not require frequent calibration.</p>	<p>The detectors should not require frequent calibration.</p>
<p>4) Patient Couch: vii) Remote UP/DOWN, FWD/BWD of the Patient Couch should be standard</p>	<p>Remote FWD/BWD of the Patient Couch should be standard</p>
<p>6. iv) Multi Slice CT Fluoroscopy to be quoted as standard. Price should be quoted separately.</p>	<p>Please quote as standard.</p>
<p>7) Computer Section: x) CT should be with dual monitor console with two concurrent workstations (thin client server architecture based solution) comprising of medical grade monitors (2 mega pixel resolution) with at least 8GB RAM. The server should have image storage capacity of 3 Tera bytes, minimum 20000 concurrent slice processing power and at least 32 GB RAM. It can be single/dual server configuration. The two concurrent workstations should have processing capabilities for basic 2D /3D and following advanced applications.</p>	<p>Tender terms prevail.</p>
<p>8. i) Computer Aided Detection (CAD) to be provided</p>	<p>for lungs and colons.</p>
<p>8. ii) Computer Aided Detection (CAD) to be provided</p>	<p>for lungs and colons.</p>
<p>8. x) The system should have standard software like 3D Volume rendering, MIP,CT angio, colorangio Display, CTPerfusion , Dental scan , Bone Mineral Study should be available as standard on the Workstation.</p>	<p>Osteo CT deleted.</p>
<p>9) Resolution: ii) The high contrast resolution should be more then 14.5 lp/mm in all routine scan, including spiral and axial mode.</p>	<p>Tender terms prevail.</p>
<p>iii) The low contrast resolution should not be more than 3 mm at 0.5 %. Shoulder, Pelvis Streak Artifact suppression Software should be standard.</p>	<p>The low contrast resolution should not be more than 5 mm at 0.3 %. Shoulder, Pelvis Streak Artifact suppression Software should be standard.</p>
<p>10)Accessories:(Make and Model of all the quoted accessories should be specified) xi) CT Phantom with various density for CT no. check.</p>	<p>Multi parametric CT performance evaluation Phantom (Slice geometry/noise/HCD/LCD/sensitometry/MTF) ACR phantom.</p>
<p>xv) Tumour ablation system with treatment planning solution & RF generator .</p>	<p>Tender terms prevail.</p>
<p>xvi) Specifications as below. a) Computerized needle positioning guiding tool along with radio frequency ablation system for CT guidance in tumor ablation. b) System should support different ablation system. c) Registration of the data, post processing segmentation before and after ablation should be possible d) Overlay of non-contrast images with contrast images to be possible. e) Should include radio frequency ablation generator with: 1) Frequency at least 450KHz. 2) To support multiprong electrode and capable of 7cm ablation in one sitting. 3) Temperature range should be 15-125 deg C with steps of 1 deg C.</p>	<p>Intelliflow pumphas been deleted.</p>

4) RFA accessories- Intelliflow pump, RFA probes, multiprong electrodes and coaxial biopsy gun of 9cm and 15cm with 20cm throw.	
iii) Penalty clause: Penalty at the rate of RS.10,000/ per day for short falling of 95% uptime guarantee. If the machine lies non-functional for a period of more than two weeks continuously, the same penalty will be imposed even if 95% uptime clause is met with for the given calendar year.	As per CNCI bid document.
11. iii) Penalty clause: Penalty at the rate of 10,000/- per day	As per CNCI bid document.
11. iv) Uptime warranty: if downtime exceeds 5% there shall be penalty of Rs 10,000/per day	As per CNCI bid document.
12) Training i) Qualified personnel nominated by the deptt, should be given application training by the vendor at their cost at site for three months and as and when required.	On site application training for one month. Two doctors and four technologist at site/ reputed institute having the same CT with the same specifications for two weeks in phases.
13)Certifications: vi) Dual energy application must be possible on all workstation and all fields of view with minimum FOV 33cm.	Dual energy application must be possible on all workstation and all fields of view. Please specify minimum FOV. All dual energy applications available should be quoted with FOV as standard. Future applications should be provided free of charge during life time of the machine.
vii) Also Specify the DUAL ENERGY APPLICATION like Metal Artifact Correction/Beam	deleted.
viii) Hardening artifact Correction, Brain Haemorrhage and virtual non contrast and direct Angio are available in the system. Any other application for dual energy if present in future upgrades should be part of the system.	deleted.
Added	The quoted model must have AERB type approval /NOC at the time of bid submission. All necessary licences for connectivity with treatment planning system, Linear accelerator and Brachytherapy machine.
Item No.3 Digital Mammography	
I (1) Should be an advanced high-end digital mammography machine upgradable to 3D mammography / Tomosynthesis. Tomosynthesis upgrade should not be a separate add on and should be integral to the system. Tomosynthesis should be possible in all positions i.e. inclusive of CC and MLO	Tender terms prevail.
2. Should have facility to do stereotactic biopsy.	Tender terms prevail.
3. Facility to place the Patient for stereotactic biopsy on a couch for patient Comfort.-(supine or lateral). Couch should be supplied.	Tender terms prevail.
II 2. Power output should be 5 KW or more. Please mention the mA range, mAs range, kV range, exposure time range and advantages.	Tender terms prevail.

<p>III (1) Dual track X-ray tube with dual focus for each track. III (2) Focal spot size 0.1 and 0.3 mm for both tracks.</p>	Tender terms prevail.
<p>3. Anode heat storage capacity should be at least 150 KHU</p>	Tender terms prevail.
<p>IV. Gantry assembly: 1. It should be an isocentric system</p>	Should be preferably iso-centric system.
<p>IV (4) The patient compression device should be motorised automatic and should have multispeed variable system. It should be state of the art.</p>	Tender terms prevail.
<p>6. Should have facility for magnification 1.5 and 1.8</p>	Should have facility for magnification. Please specify factors.
<p>12.(a).Large paddle for 18X24 and 24X30 cms.</p>	It should be 18x24 and 24X30+/- 1cm.
<p>12 d. Special paddles if available should be quoted- optional.</p>	<p>Two Special paddles if available should be quoted as standard example: 1.Spotmagnification paddle 2.Perforated localization paddle</p>
<p>V(2) The anode track and filters shall be selected automatically and manually.</p>	Tender terms prevail.
<p>VI. Flat panel detector 1. Should have a large flat panel detector of size at least 24x29cms and the pixel size should be 100 micro meter or less</p>	Flat panel detector 1. Should have a large flat panel detector of size at least 24x29cms +/- 1 cm.
<p>6. No Ghosting or lag effect should be present, specify image depth .</p>	Tender terms prevail.
<p>VII (10). Acquisition workstation should be height adjustable for operator convenience.</p>	Acquisition workstation / monitor should be height adjustable for operator convenience.
<p>VIII. Reporting Work station 2. Monitor should be approved for Mammography reporting. Where Web QA is available, vendor to provide license for web QA.</p>	Tender terms prevail.
<p>3 h. Image evaluation like contrast enhancement histogram display, length measurements before and after comparison etc.,</p>	Tender terms prevail.
<p>4 There should be a DVD ROM drive, Quadrant zooming or selected zooming function should be available. The RAM should be minimum 4GB. The online storage capacity should be more than 5000images. Hard disk capacity should be expandable. There should be multi modality viewer should display ultra sound x-ray digital mammography, MRI, PET, CT etc. At least 2 high contrast resolution5mp LCD medical grade monitors should be provided.</p>	in addition 5MP monitors should be FDA approved for mammography and tomosynthesis reporting.
<p>IX 3. Facility for needle core biopsy, Fine needle aspiration and wire localization should be available.</p>	with core biopsy gun.

4. Should be compatible to use with vacuum assisted biopsy.	Tender terms prevail.
X. SYSTEM CONFIGURATION 6. Height adjustable &Trendlenberg chair for patient 01	Motorized, Height adjustable &Trendlenberg chair for patient 01: Akurai or equivalent
XI(4) UPS/CVT of suitable rating conforming to IS-302 to be supplied.	Tender terms prevail.
XII (4) The digital mammography unit with all features as per specification and thestereotactic system shall be CE &FDA approved and if other international standard certificates are available should be mentioned. Tomosynthesis should be CE Certified.	In addition: The FDA approval must be on the name of the quoted model". FDA certificate with model name and number should be provided.
The unit and x ray tube should be approved by AERB.	The quoted model must have AERB type approval /NOC at the time of bid submission
5. The offered unit should have a minimum of 5 installations in the country, of the same model, and thisshould be supported by end user certificates, purchase order copies and installation reports.	The offered unit should have a minimum of 3 installations in the country, of the same model, and thisshould be supported by end user certificates, purchase order copies and installation reports.
XIII 6. Five years comprehensive on site warranty of entire system (Spares and labour), without anyexclusion, including detector, X-ray tube, computers and all other accessories peripherals like UPS etc.. This will be followed by 5 years CMC to be quoted separately, year wise.	UPS batteries shall be covered under warranty and CMC period.
7. CMC should cover all updates.	UPS batteries shall be covered under warranty and CMC period.
Uptime guarantee: During warranty and the CMC period, the uptime of the system shall be at least 95% of the 365 days in a year. If downtime exceeds 5%, there shall be a penalty of Rs.2000 / per day.	Please refer to our CNCI Bid document.
Others	
	The equipment shall be supplied on turnkey basis as per AERB regulations, which will include the following a. Lead lining as required b. Necessary A.C. c. Civil/Electrical/Mechanical /Finishing d. Furniture Ex:-table ,chairs, almirah , apron rack, wall cabinet
Include as optional item	Point deleted.
Penalty clause: Penalty at the rate of RS.2000/ per day for short falling of 95% uptime guarantee. If the machine lies non-functional for a period of more than two weeks continuously, the same penalty will be imposed even if 95% uptime clause is met with for the given calendar year.	Tender terms prevail.
New guidelines of ELORA in order to initiate procurement permission by the department well in	All necessary registration, licenses from AERB shall be responsibility of

	time.	vendor.
	Payment terms 21.1(A)	Tender Terms Prevail
Item No.4 Digital Fluro Radiography		
	<p>General : High powered X-ray unit with Digital flat panel for various fluroscopy and radiography examinations for the department of radio diagnosis. The Unit should be equipped with integrated high-frequency generator,digital detector and Digital Image processing system. It should becapable of performing all plain and contrast enhanced radiology and fluoroscopy along-withangiography facility for interventional procedures. Among three major componentstube/generator /detector at least two component must be manufactured by quoting vendorthemselves. It should be US FDA approved. Type approval from AERB is mandatory. The vendorshould have prior experience of supplying same/similar equipment in India in the reputedgovernment or private institutions as per DGHS /MOHFW guidelines. The order copies andperformance certificates from these reputed (Govt./Private institutions)should be available. Thesystem should have the following essential features. The bidder should quote their latest model. Please mention year of launch. Supplier should have a trained service engineer in the state of supply for better uptime.</p>	<p>The quoted model must have AERB type approval /NOC at the time of bid submission. Performance certificate from reputed (Govt./Private institutions) in India/ reputed hospitals in abroadshould be available. In addition supplier should have a trained service engineer in or around Kolkata for better uptime. Rest of the Tender Terms Prevail.</p>
	Point 1.i.1000mA unit with microprocessor controlled high frequency (100 KHz) X-ray generator.	1000mA unit with microprocessor controlled high frequency (≥50 KHz) X-ray generator.
	ix) Fluoro mA 0.2-6 mA.	Fluoro mA 0.2-4 mA or more.
	2) TABLE: ii) Table should have minimum lowest height of 90 cm or lesser to facilitate easy patient transfer.	Table should have minimum lowest height of 55cm or lesser to fecilitate easy patient transfer.
	iii) System should have motor driven longitudinal and horizontal table top movements. Please specify the range of movements.	Tender Terms Prevail.
	iv) Table should have angulations from vertical to head down positions. (Vertical +90 Degrees to Trendelenburg - 20 degrees).	Table should have angulations from vertical to head down positions. (Vertical +90 Degrees to Trendelenburg -20 degrees or more)
	v) Table should support patient weight upto 250 kgs.	Table should support patient weight upto 200 kg with all movements.
	3.ii.The X Ray tube should have dual focal spots. Large focal spot of 1 mm or lower. Small focal spot of 0.7 mm or lower.	Tender Terms Prevail
	v) “Large focal spot power rating should be in the range 70 to 90 kW”	Tender Terms Prevail
	4) Digital Imaging system for Fluroscopy: i) Field of view of at least 40cms or more.	Tender Terms Prevail
	5.i “Tube Column – detector assembly movement should be motorized and not less than 160cm”	“Tube Column – detector assembly movement should be motorized and not less than 105 cm ”

5.ii.Tube Column – detector assembly movement should be motorized and not less than 160cm.	Tube Column – detector assembly movement should be motorized and not less than 105 cm or more.
5.iii.Tube rotation should be preferably motorized -90/+180 degrees	Tender Terms Prevail
6) DETECTOR SYSTEM :- ii) Detector must be at least 40x40 cms or more	Tender Terms Prevail
iv) Pixels size should be 150 microns or lesser.	Pixels size should be 160 microns or lesser.
.viii.Specify refresh cycle (time for second exposure).	Tender Terms Prevail
ix) Frame rate should be at least 1 to 30 image/sec.	Tender Terms Prevail
x) Dynamic range should be 16 bits or more.	Dynamic Digitization Depth/range should be 16 bits or more.
7. iii) “Digital Fluoroscopy at minimum of 15 f/s at 1024 matrix or better”	“Digital Fluoroscopy at minimum of 12 f/s at 1024 matrix or better ”
xi) “The system should have capability of online digital subtraction angiography facility with image filters road mapping and peak pacification facilities.	Tender Terms Prevail
xii) “In DSA mode the frame rate should be atleast 8 per second.”	Please specify frame rate.
8 i) “Total of 4 monochrome monitors of 19 inches each to be provided - of these two should be ceiling suspended in examination room. Other two in console room.”	“Total of 4 monochrome monitors of 19 inches each to be provided - of these two should be in examination room. Other two in console room.”
iii) Post acquisition image processing viewing reprocessing hardcopy documentation and onward transmissionshould be possible while doing fluoroscopy or radiography. System should have the facility to integrate display of sources such as endoscopy / ultrasound on the right-handmonitor of the examination room display unit.	Post acquisition image processing viewing reprocessing hardcopy documentation and onward transmissionshould be possible while doing fluoroscopy or radiography. Preferably System should have the facility to integrate display of sources such as endoscopy / ultrasound .
9. ii) “The system should have facility for edge enhancement, positive/negative image display windowing contrast brightness electronic shuttering image pixel shifting vertical and horizontal image reversal zoom functions”	Tender Terms Prevail
12) C.M.C :Comprehensive Maintenance charges of complete system for which order is placed including turnkey works must be quoted year-wise for next 5 years after completion of warranty.	UPS batteries shall be covered under warranty and CMC period.
20) TURNKEY i) Necessary Turnkey modification of the provided premises is to be done by the vendor.	layout will be provided. Turnkey quotation to be submitted assuming area of 1500 square feet with scope of work clearly defined as per standard PMSSY / 6 new AIIMS radiology tenders and should be as per AERB guidelines including lead lining . In addition to furnitures asked for following also should be provided – Almirah, bookrack and wall cabinet for storage purpose.
Commercial	
	Payment terms under clause 21.1 (B) (for all items 1 to 6) 75% may be please read 80% and 25% may please be read as 20% other terms under this clause remain same
Special Conditions Of Contract (SCC)	Tender Terms Prevail
Custom Duty	Tender Terms Prevail
Distribution of Dispatch Documents for Clearance/Receipt of Goods Inspection Certificate for	SCC clause of the tender document terms shall prevail.

<p>the despatched equipments issued by recognized/ reputed agency like SGS, Lloyd or equivalent (acceptable to the purchaser) prior to despatch</p>	
<p>SECTION - VI Required Delivery Schedule: a) For Indigenous goods or for imported goods if supplied from India: 90 days from date of Notification of Award to delivery at consignee site. The date of delivery will be the date of delivery at consignee site.</p>	<p>Tender Terms Prevail</p>
<p>B) Payment for Imported Goods: Payment for foreign currency portion shall be made in the currency as specified in the contract in the following manner: a) On Shipment: Seventy Five (75) % of the net CIP price (CIP price less Indian Agency commission) of the goods shipped shall be paid through irrevocable, non-transferable Letter of Credit (LC) opened in favour of the supplier in a bank in his country and upon submission of documents specified hereunder: On Acceptance: Balance payment of 25 % of net CIP price of goods would be made against 'Final Acceptance Certificate' as per Section XVIII to be issued by the consignees to the supplier. The supplier shall submit the original final acceptance certificate to the Purchaser (HSCC India Ltd) who shall issue no objection certificate to the banker for payment through irrevocable Letter of Credit (LC) opened in favour of the Foreign Principal in a bank in his country, subject to recoveries, if any.</p>	<p>Payment terms under clause 21.1 (B) (for all items 1 to 6) 75% may be please read 80% and 25% may please be read as 20% other terms under this clause remain same.</p>
<p>Item No.5 Digital Mobile X- Ray</p>	
<p>The unit should be compact easily transportable digital mobile radiographic unit with articulated or telescopic arm and built in monitors. It should be suitable for bedside x-ray for ward patients, intensive care units and operation theatres. If the DR system is inoperable it should be able to function as conventional system. Out of three major components (Detector, X-Ray Tube & X-Ray Generator) at least two should be from the same manufacturer. It should be FDA approved. Type approval from AERB is mandatory. The vendor should have prior experience of supplying same/similar equipment in India in their reputed government or private institutions as per DGHS /MOHFW guidelines. The order copies and performance certificates from these reputed (Govt./Private institutions) should be available. The system should have the following essential features. The bidder should quote their latest model. Please mention year of launch. The system must include the following:</p>	<p>Preferably articulated or telescopic arm if other please specify. Out of three major components (Detector, X-Ray Tube & X-Ray Generator) at least two should be preferably from the same manufacturer” The quoted model should be FDA /European CE with 4 digit registration approved. The vendor should have service centre around Kolkata. “Type approval from AERB/NOC is mandatory” Rest Tender terms prevail.</p>
<p>B) The Generator: ii) It should have a digital display of mAs and kV and an electronic timer.</p>	<p>It should have a digital display of mAs and kV.</p>
<p>iii) KV range: 40kV to 125kV or more in increments of 1kV</p>	<p>KV range: Within 40kV to 125kV.</p>

v) mAs range: 0.1 – 350 mAs (to specify mA and seconds separately)	mAs range: 0.2 – 320 mAs or more (to specify mA and seconds separately)
vi) Exposure time range: 0.004 – 10 s	Exposure time range: Please specify.
C) X-Ray Tube: ii) Focal spot should be less than 1 mm	Tender terms prevail
iv) Heat storage capacity of the anode : 120 KHU or better	Tender terms prevail
E) Flat panel detector: iii) The detector pixel matrix size should be 2.0K x 2.0K or more.	Tender terms prevail
iv) Pixel size 200 microns or less	Pixel size 150 microns or less It should have ingress protection
v) The machine should have a detector storage compartment.	Tender terms prevail
vi) The image viewing time after exposure should not be more than 10 sec.	Tender terms prevail
F. v) The battery should be able to be charged from a normal 15A 230 V single phase socket in less than 6 hours.	The battery should be able to be charged from a normal 15A 230 V single phase socket in less than 8 hours.
G. Workstation: iv) The touch screen size should be at least 15 inches.	Tender terms prevail
vii) Dry Chemistry Printer:- The System should be supplied with dry imager (dry chemistry) with a spatial resolution of 500 ppi/dpi or more. It should have contrast resolution of 12 bits /pixel or more. It should have all possible film sizes. The imager should preferably come with standard films sorter at the output for sorting the films based on modality connected. It should have a normal through put of 75 films per hour for the largest size. Access time for 1st film 90 seconds or less. The imager should be DICOM compatible for receive send and print facility. The system allows at least 3 sizes from the five sizes to be loaded at any time. Printer status should be displayed for any error status etc.	Dry Chemistry Printer:- The System should be supplied with dry imager (dry chemistry) with a spatial resolution of 500 ppi/dpi or more. It should have contrast resolution of 12 bits /pixel or more. It should have all possible film sizes.. It should have a normal through put of 75 films per hour for the largest size. Access time for 1st film 90 seconds or less. The imager should be DICOM compatible for receive send and print facility. The system allows at least 3 sizes from the five sizes to be loaded at any time. Printer status should be displayed for any error status etc.
I. vi) 2 Grids of at least 8:1 or better ratio and frequency should be provided.	2 Grids of at least 6:1 or better ratio and frequency should be provided.
Addendum request: Flat Panel Detector should have ingress protection: IP 33 or better	Tender terms prevail
Addendum request: Supplier should provide one time detector replacement during warranty due to whatever failure	Supplier should provide one time detector replacement during warranty due to whatever failure

<p>iii) The exposure release switch should be detachable with a cord of at least 5 meters. Exposures with remote control should be possible. Remote control should be offered with system.</p>	<p>The exposure release switch should be detachable with a cord of at least 4.5 meters. Exposures with remote control should be possible. Remote control should be offered with system.</p>
<p>Commercial</p>	
<p>GCC Clause: Spare Parts 12.1.b.ii :- Immediately following such discontinuation, providing the Purchaser / Consignee free of cost, the designs, drawings, layouts and specifications of the spare parts, as and if requested by the Purchaser / Consignee</p>	<p>Supplier shall provide an undertaking to provide spare parts for specific period of time for 10 years.</p>
<p>GCC: Warranty: Clause 15.10:- The Supplier along with its Indian Agent and the CMC Provider shall always accord most favoured client status to the Purchaser vis-à-vis its other Clients/Purchasers of its equipments/machines/goods etc. and shall always give the most competitive price for its machines/equipment supplied to the Purchaser/Consignee</p>	<p>Tender Terms prevail.</p>
<p>GCC Payment of Turnkey: Point No 21.1(C) Turnkey payment will be made to the manufacturer's agent in Indian rupees indicated in the relevant Price Schedule (as per prevailing rate of exchange ruling on the date of Contract) and shall not be subject to further escalation / exchange variation.</p>	<p>For all items 1- 6, Turnkey payment will be made on pro- rata basis against work done certified by site In- charge, other terms shall prevail as per tender document terms.</p>
<p>GCC Payment of Domestic Goods Located within India Point No.21.1: 80% payment of the contract price shall be paid on receipt of goods in good condition and upon Balance 20% payment would be made on submission of</p>	<p>Tender Term Prevail</p>
<p>SCC Point no-9-c Reimbursement of Custom Duty:- If the custom duty amount as mentioned in the price schedule section -XI (B) is less than the actual total custom duty amount levied by custom department, the custom duty amount as mentioned in the price schedule section -XI (B) shall prevail and be reimbursed to the supplier at rate of exchange rate mentioned on the bill of entry in INR accordingly</p>	<p>Tender Term Prevail</p>
<p>SECTION- VI Required Delivery Schedule a) For Indigenous goods or for imported goods if supplied from India: (i) Delivery period for Radiology, Radio therapy Equipments: 90 days from date of Notification of Award to delivery at consignee site. The date of delivery will be the date of delivery at consignee site. (ii) Installation and commissioning period Radiology, Radio therapy Equipments:- 90 days for receipt of the stores/ goods delivery at site or 90 days from handing over the site or instruction for installation, whichever is later.</p>	<p>Tender Term Prevail</p>
<p>SECTION - VI Required Delivery Schedule b) For Imported goods directly from foreign through LC: (i) Delivery period for Radiology, Radiotherapy Equipments: 90 days from date of Notification of</p>	<p>For all items 1 -6: The date of delivery will be the date of AWB/Bill of Lading.</p>

Award to delivery at consignee site. The date of delivery will be the date of delivery at consignee site. (ii)Installation and commissioning period Radiology, Radio therapy Equipments:- 90 days for receipt of the stores/ goods delivery at site or 90 days from handing over the site or instruction for installation,whichever is later.	
Penalty Clause Penalty at the rate of Rs. per day for short falling of 95% uptime guarantee. If the machine lies non functional for a period of more than two weekscontinuously, the samepenalty will be imposed even if 95% uptime clause is met with.	Tender Terms Prevail
Clause20.1 Taxes & Duties Supplier shall be entirely responsible for all taxes, duties, fees , levies etc. incurred until delivery of the contracted goods to the purchaser	Tender Terms Prevail
Item No.6 High End Ultra sound machine	
6. The system should have minimum 192 hardware channels and 80000 or more digitally processing channels. Original manufacturing letter to be attached for confirming above channel numbers	Tender terms prevail.
7. The system should perform up to 1000 frames/sec. or more. Also system should support transducers of frequency range from 1-18 Mhz.	Tender terms prevail.
17. Up to 10X digital zoom should be available, on live, frozen, cine, dual screen images-Preserves full image resolution within the zoom ROI. HD zoom should be available	Up to 8X digital zoom should be available, on live, frozen, cine, dual screen images-Preserves full image resolution within the zoom ROI. HD zoom should be available
18. The System should have THREE activetransducer ports or more.	Tender terms prevail.
36. Monitor: i. Monitor should be high resolution, 21” (inch) or more Back Lit LED/ LCD Monitor with 1080 x1080 matrix or more. Please specify resolution range with IPS technology.	Tender terms prevail.
37.i) The freely programmable, mode-sensitive 10” or more Color Touch Command Screen which enables direct access to all basic and advanced system controls.	The freely programmable, mode-sensitive 9” or more Color Touch Command Screen which enables direct access to all basic and advanced system controls.
38. Data Management: i) A large-capacity minimum 1TB HDD should be provided in the standard configuration, facilitating efficient management of acquired images. Images can be viewed in Image Review Mode. Also cine memory of more than 2000 frames should be available.	Tender terms prevail.
40. (i) Convex Probe with Band width of 1 MHz to 6 MHz OR MORE with Biopsy Guide for Abdominal applications and Support for Strain and Shear wave Elastography and Fusion with Navigation Application.	Tender terms prevail.
(ii) Convex volume probe 2-7MHz with 4D package.(including multislice ,MPR, curved VOI, fetalstic)	Convex volume probe 2-7MHz with 4D package.(including multislice ,MPR, curved VOI)

ADDENDUM- ACCESSORIES	Adequate A.C as per room and machine requirement Almirah, bookrack and wall cabinet for storage purpose, revolving chairs and departmental books.
Item No.7 Mid End Ultra sound machine	
1. The system must be latest and state of the art with fully digital technology equipment to incorporate the facility of 2D, M-Mode, CDI, PW Doppler, CW Doppler, Power Doppler, directional power angio, real time 3D(4-D) Elastography imaging. The vendor should have at least 5 installations in Government Institution in India in last 5 years.	The vendor should have at least 5 installations in Government/Corporate Institution in India in last 5 years.
3. System should have 60,000 digital processing channels or more.	Tender terms prevail.
4. System should have dynamic range of 200dB or more.	Tender terms prevail.
5. System should be offered with a 2D frame rate of at least 630 or more frames/second.	Tender terms prevail.
11. System should be offered with a 19 inch or more high resolution flat panel medical grade display monitor with facility for position adjustments.	Tender terms prevail.
19 System should be capable of scanning up to depth of 30cm or more.	Tender terms prevail.
Transducers 1. 2-6 MHz or better Broadband Convex Transducer for General Imaging, Abdomen, Renal, OB/GYN imaging with capabilities of CEUS and strain elastography.	Tender terms prevail.
Commercial Query	
8. Inspection, Testing and Quality Control 8.1 The purchaser and/or its nominated representative(s) will, without any extra cost to the purchaser, inspect and/or test the ordered goods and the related services to confirm their conformity to the contract specifications and other quality control details incorporated in the contract. The purchaser shall inform the supplier in advance, in writing, the purchaser's programme for such inspection and, also the identity of the officials to be deputed for this purpose. The cost towards the transportation, boarding & lodging will be borne by the purchaser and/or its nominated representative(s) for the first visit. In case the goods are rejected in the first instance and the supplier requests for re-inspection, & if same is accepted by purchaser / consignee / PSA/ PA, all subsequent inspections shall be at the cost of the supplier. The expense will be to and fro. Economy Airfare, Local Conveyance, Boarding and Lodging of the inspection team for the inspection period. Page 30 of TE Document.	SCC clause of the tender document terms shall prevail.
Price Bid Page#110 point no.6 The uptime warranty will be 98 % on 24 (hrs) X 7 (days) X 365 (days) basis or as stated in Technical Specification of the TE document.	For all items 1 -6:-
Page No. 102 Point No. 1b b) 98% up time Warranty of complete equipment with extension of Warranty period by double the downtime period on 24 (hrs) X 7 (days) X 365 (days) basis.	Uptime warranty shall be 95% instead of 98%
Page No. 102 Point No. 4e e) There will be 98% uptime warranty during CMC period on 24 (hrs)	

<p>X 7 (days) X 365 (days) basis, with penalty, to extend CMC period by double the downtime period.</p> <p>For major equipment the penalty will be as under:</p> <ul style="list-style-type: none"> i) Liner Accelerator -Rs. 25,000/- per day, 8 hours working basis. ii) Brachytherapy -Rs. 10,000/- per day, (8 hours working basis). iii) CT Simulator -Rs. 10,000/- per day, (8 hours working basis). iv) CT Scan, Gamma Camera -Rs. 10,000/- per day, (8 hours working basis). v) MRI, PET -Rs. 15,000/- per day, (8 hours working basis). vi) X-ray, MMG -Rs 2,000/- per day, (8 hours working basis). 	
<p>Page No. 44</p> <p>b) For Imported goods directly from foreign:</p> <p>Delivery period for Radiology, Radio therapy Equipments: 90 days from date of Notification of Award to delivery at consignee site. The date of delivery will be the date of delivery at consignee site.</p> <p>c) Installation and commissioning period Radiology, Radio therapy Equipments:-90 days for receipt of the stores/ goods delivery at site or 90 days from handing over the site or instruction for installation, whichever is later.</p>	Tender Terms Prevail
<p>15- Warranty 15.4 / 15.6</p> <p>15.4 Upon receipt of such notice, the supplier shall, within 8 hours on a 24(hrs) X 7 (days) X 365 (days) basis respond to take action to repair or replace the defective goods or parts thereof, free of cost, at the ultimate destination. The supplier shall take over the replaced parts/goods after providing their replacements and no claim, whatsoever shall lie on the purchaser for such replaced parts/goods thereafter. The penalty clause for non-rectification will be applicable as per tender conditions</p> <p>15.6 If the supplier, having been notified, fails to respond to take action to repair or replace the defect(s) within 8 hours on a 24(hrs) X 7 (days) X 365 (days) basis, the purchaser may proceed to take such remedial action(s) as deemed fit by the purchaser, at the risk and expense of the supplier and without prejudice to other contractual rights and remedies, which the purchaser may have against the supplier- Ref: Page 33 of TE Document</p>	Tender Terms Prevail
<p>Page No. 43 Point No.9</p> <p>Reimbursement of Custom Duty: CNCI deserves for customs duty exemption through DSIR certificate. The custom duty amount as mentioned in the price schedule section -XI (B)(convert in INR at the rate of exchange mentioned in bill of entry) will compared with the actual total custom duty amount levied by custom department and reimbursed to the supplier as per below:</p> <p>a. If the custom duty amount as mentioned in the price schedule section -XI (B) is equal to the actual total custom duty amount levied by custom department, the actual total custom duty</p>	Tender Terms Prevail

amount levied by custom department shall be prevailed and reimbursed to the supplier in INR accordingly.

b. If the custom duty amount as mentioned in the price schedule section –XI (B) is more than actual total custom duty amount levied by custom department, the actual total custom duty amount levied by custom department shall be prevailed and reimbursed to the supplier in INR accordingly.

c. If the custom duty amount as mentioned in the price schedule section –XI (B) is less than the actual total custom duty amount levied by custom department, the custom duty amount as mentioned in the price schedule section –XI (B) shall be prevail and reimbursed to the supplier at rate of exchange rate mentioned on the bill of entry in INR accordingly.