# JAMMU AND KASHMIR MEDICAL SUPPLIES CORPORATION LTD.



(Public Sector Undertaking of the Government of Jammu and Kashmir) Corporate Head Office: GMC Complex, Bakshi Nagar, Jammu -180001, Ph. 0191-2580842 Corporate Office: 121-Green Avenue, Hyderpora (J&K)-190014: Telefax: 0194-2432008

email: <a href="mailto:enquiryikmscl@gmail.com">enquiryikmscl@gmail.com</a>; <a href="mailto:jkmscl@gmail.com">jkmsclepm@gmail.com</a>; <a href="mailto:www.jkmscl.nic.in">website</a>; <a href="mailto:www.jkmscl.nic.in">www.jkmscl.nic.in</a></a>

Erbis Engineering Co. Ltd

2E/12, 4th Floor Jhandewalan Extension

New Delhi 110055 India

Tel: 01123513571, Fax: 01123524080 E.mail: delhi@erbismedical.com

No: JKMSCL/GM/2017/1444- 58

Sub: Finalization of Annual Rate Contract for the procurement of "16 Slice CT Scan Machine"- issuance of

Ref No. 1. NIT/JKMSCL/Mach/CT/2017/146 dated 22.02.2017.

2. Minutes of State Level Purchase Committee vide No. JKMSCL/PS/MD/2017/1345-62 dated 09.11.2017.

3. Acceptance Letter of M/S Erbis Engineering Co. Ltd vide No. EECL/DEL-G/JKMSCL/CT/19/01/2016-17

Dear Sir,

The Jammu and Kashmir Medical Supplies Corporation J&K has approved the following item under group "16 Slice CT Scan Machine" in your favour, as per the rates mentioned against each. The rate contract shall remain valid for a period of one year (12 Months) from the date of issuance of the Contract which may be extended for a period of 90 days or till such time the new rate contract is finalized, whichever is earlier, with mutual consent of JKMSCL and successful bidder:

Description of work	Currency	Rates without	America 41		<u> </u>	
		Taxes	Any other Taxes	Custom Duty	Packing & Forwarding Charges/Insuranc e & Freight	
16 Slice CT Scan Machine Model: Aquilion Lighting (TSX-035A)	YEN	34634500	1209170	6695500	Charges 365500	
HSN Code: 90221200 Specifications attached as Annexure A)			·		<i>2</i> 5	
Accessories/ ndian Items	INR	3000000	150000	  -		

mprehensive maintenance contract of five years shall start after the expiry of warranty period of five years as

Description of work  Comprehensive Maintenance  Contract (CMC)	Currency	Unit	Approved Rates (INR)	
	INR	First Year Second Year Third year Forth Year Fifth Year Total	Rs.1750000 Rs.1750000 Rs.1750000 Rs.1750000 Rs.1750000 Rs.8750000 (Eight Seven Lakhs fifty	

### **Terms and Conditions:**

1. Delivery Site: Rates are FOR Site/any Govt. Institution of J&K State, wherever installation is required.

The rate contract shall remain valid for a period of one year from the date of issuance of the Contract which may be extended for a period of 90 days or till such time the new rate contract

is finalized, whichever is earlier, with mutual consent of JKMSCL and successful bidder.

A). The Custom duty shall be paid as actual on the production of documentary proof. Taxes:

B). The taxes shall be paid as per new tax structure i.e GST as per the terms & conditions of

Five Years from the date of installation (including tube and batteries) followed by CMC Warranty:

5. Performance

Security

You are further required to deposit the performance security equivalent to 5% of the total invoice value in the shape of Bank Guarantee in favour of FA/CAO, JKMSCL within seven days from the date of issuance of Purchase Order(s) from time to time.

Supplies

Within 60 days from the date of issuance of supply order from the date of issuing supply Order and handling over of space with the availability of power & other requisite installations by the end users, confirm LC alongwith AERB. Approval of site plan as per AERB norms shall be the responsibility of end user.

7. Penalty

In case of extension in the delivery period with liquidated damages, recovery of liquidated Damages shall be made at such rates, as given below, of value of stores which the bidder has failed to supply:-

(a) Delay up to one-fourth period of the prescribed delivery period -2.5%

(b) Delay exceeding one fourth but not exceeding half of the prescribed delivery period - 5%

(c) Delay exceeding half but not exceeding three- fourth of the prescribed delivery period -7.5%

(d) Delay exceeding three- fourth of the prescribed period -10%

(e) Fraction of a day in reckoning the period of delay in supplies shall be eliminated if it is less than half a day. The maximum amount of agreed liquidated damage shall be 10%.

- 8. Installation: Installation / commissioning and necessary training for upkeep of the equipment shall be provided free of cost.
- 9. Conversion of Rates: The rate of conversion of foreign currency shall be applicable as per the rates, at the time of opening of financial bid or at the exchange rate, at the time of opening of L.C whichever is
- 10. You have to certify that the rates mentioned above as quoted by your firm are the lowest rates applicable to all Govt./private Institution/PSU etc. Variation found if any, during the rate contract period by the Corporation/Intending department or any other agency shall be the sole responsibility of the Contractor/Supplier/manufacturer/importer. Moreover, Procurement & Supplies section/Supply orders issuance authority of JKMSCL may ensure that the approved rates are not higher than any other Corporation/other Premier Health Institutions, from time to time, before issuing of POs/work order to the said specified product.
- 11. The supplier/manufacturer/importer shall ensure to supply the item(s) strictly as per specifications/sample(s) approved. Variations found, if any, in instant case/or in later stages by the Corporation/Intending department/any other agency which may lead to sub standard or Not of standard/approved quality, shall be the sole responsibility of the supplier/ manufacturer/ importer/contractor.
- 12. JKMSCL is at liberty to get the feedback from the end-user department regarding the functioning of the machinery & equipment supplied by your agency. Adverse report, if any, may lead to strict action against you under rules/terms & conditions of the NIT/guidelines issued by the Govt. from time to time.
- 13. Comprehensive Maintenance Agreement: You are further required to execute Comprehensive maintenance agreement before the release of payment.
- 14. Orders shall only be placed on the basis of actual requirement and funds are available under the relevant Head of Accounts.

All the terms and conditions of the NIT, terms mentioned in the LOI shall be part of the approved Rate Contract.

Managing Director / TI

Copy for information to the:

- 1. Principal Secretary to Govt., Health & Medical Education Deptt., J&K(Director, Board of Directors-JKMSCL).
- 2. Principal, Govt. Medical College, Srinagar (Kashmir) (Director, Board of Directors- JKMSCL).
- 3. Principal, Government Medical College, Jammu (Director, Board of Directors JKMSCL). 4. Principal, Government Dental College, Srinagar (Director, Board of Directors- JKMSCL).
- 5. Principal, Government Dental College, Jammu (Director, Board of Directors- JKMSCL).
- 6. Director General, Indian System of Medicines, J&K (Director, Board of Directors- JKMSCL).

- 7. Director, Family Welfare, MCH & Immunization, J&K (Director, Board of Directors- JKMSCL). 8. Director, Health Services, Jammu (Director, Board of Directors- JKMSCL).
- 9. Director, Health Services, Kashmir (Director, Board of Directors- JKMSCL). 10. Mission Director, NHM, J&K (Director, Board of Directors- JKMSCL).
- 11. Controller, Drug & Food Control Organization, J&K (Director, Board of Directors JKMSCL).
- 12. F.A/Chief Accounts Officer, J&K Medical Supplies Corporation Limited
- 13. General Manager -J (Adm), J&K Medical Supplies Corporation Limited. 14. General Manager -K(P&S, IT), J&K Medical Supplies Corporation Limited

### Technical Specifications for a Whole Body 16 Slice Scanner

This tender is to fulfil requirement for the latest generation multi-slice CT Scanner capable of acquiring 16 or more slices per 360 degree rotation for all types of scans and applications. The model offered should be a state of the art whole body CT Scanner with volume scanning capabilities.

The quoted product should be under current production and the gantry should be manufactured with high speed slip-ring technology.

The quoted product should be offered with latest reconstruction technology

The offered product should meet the following specifications:

### X-Ray Generator:

- 1. The X-ray generator should be high frequency generator with output of at least 50 KW and above.
- 2. The mA range available should be specified.

### X-Ray Tube:

- 1. The X-ray tube should be single or dual focus with capacity of five or more than five MHU.
- 2. The X-ray tube should have a cooling rate of not less than 300 KHU per min and above.
- 3. Maximum scan field of view available should be 40 cm or more.

### **Detector and Data Acquisition System:**

- 1. The scanner should be able to simultaneously acquire 16 or more slices per rotation with slice thickness of 0.75mm or lower.
- 2. The detectors should not require frequent calibration.

#### Gantry:

- 1. The gantry should be provided with user-friendly control for easy positioning.
- 2. Gantry aperture should be 65 cm or more in diameter.
- 3. The CT scanner should have low voltage slip rings incorporated in the Gantry.
- 4. The scan time for a 360 Degree rotation should be < 1 second or lower.
- 5. The gantry should have a physical tilt of +/-30 degrees or more and remote tilt should be available as standard.

#### Patient Table:

- 1. The table should have a carbon fibre table top with a metal free scannable range of 120 cm or more.
- 2. The patient table offered should have a minimum load bearing capacity of at least 150 kg with 1mm positioning accuracy.
- 3. Minimum horizontal table speed at least 100mm/sec.
- 4. The vertical range should be at least 35 cms (maximum height-minimum height).
- 5. Remote UP/DOWN, Forward and Backward movements should be standard.

### **Spiral Section:**

- 1. The scanner should be able to simultaneously acquire 16 or more slices per rotation with slice thickness of 0.75 mm or lower.
- 2. Scan Time should be 01 second or lower for full 360 Degree rotation.
- 3. The range of spiral facilities in Axial direction should be more than 150 cm or more.
- 4. The real time reconstruction speed for spiral scans should be mentioned.
- 5. Bolus triggered or bolus chase spiral acquisition should be possible.
- 6. Slice increment specify scan and selectable slice thickness.
- 7. Pitch Factor (volume pitch): variable between 0.5 or more and should be user selectable or automated. Specify all possible nitch selections.

8

### **Image Reconstruction**

- 1. Real time reconstruction speed should be minimum 8 images/sec.
- 2. Display Matrix: 512x512.
- 3. Reconstructed slice thickness should be up to 10mm and should be freely selectable.
- 4. Direct 3D MPR from raw data should be possible.

### **Operator Console:**

- 1. The latest multitasking computer should be offered with 64 Bit Processor and a menu driven platform. The system should have a minimum RAM of >2 GB.
- 2. Main Console should include a high resolution, TFT/LCD color monitor of 19" or more.
- 3. The display matrix should be at least 1024x1024.
- 4. Should have adequate hard disk capacity for both image and raw data. It should have facility to store
- 5. The system should be supported with archiving facility, CD and DVD archiving facility are required.
- 6. DICOM facility to send, store, print, receive etc. should be standard.
- 7. Filming parallel to other activities, including independent scanning, documentation and postprocessing and configurable image text.
- 8. Archiving: DVD/Blue Ray writer should be provided for archival.
- 9. Option of viewing these disks on any PC without DICOM viewer should be available.
- 10. Software for remote diagnostic service over a telephone line is a must.
- 11. System must be PACs interface ready without any new hardware or software.

### **Image Processing Section (Operator Console):**

The following applications should be standard at the console and it should be able to use the following without requirement of a satellite workstation:

- 1. Registration, scheduling and protocol selection.
- 2. Real-time Multi-planar re-construction (MPR) of secondary views, with viewing perspectives in all planes including curved and orthogonal MPR.
- 3. CT Angiography: MIP and MinIP.
- 4. 3D Volume Rendering (VRT), Volume Measurements.
- 5. 3D Surface Shaded Display.
- 6. CT Number display, window width, window level.
- 7. Topogram display.
- 8. Cine Display.
- 9. Other advanced 3D applications and color coding for different tissues.
- 10. Sub-mm HRCT.

# The following evaluation tools should be standard:

- 1. Parallel evaluation of multiple ROI in circle, irregular and polygonal forms.
- 2. Statistical Evaluation for area/volume, S.D, Mean/Max and Histograms.
- 3. Distance & angle measurement, freely selectable positioning of coordinate system, grid and image

# The following post processing tools should be offered as standard:

- 1. 2-D Post processing, including image zoom and pan, image manipulations, including averaging, reversal of grey-scale values, and mirroring.
- 2. Image filter functions, including advanced smoothing algorithm and advanced bone correction.
- 3. Advanced image algorithms such as Posterior Fossa Optimization for reduction of beam hardening

### Workstation

1. The latest multi-tasking computer should be offered with 64 Bit Processor and a menu driven

- 2. Monitor: High resolution, TFT/LCD/LED color monitor of 19" or more.
- 3. The display matrix should be at least 1024 x 1024.
- 4. Independent hard Disk storage capacity for both image and raw data should be 500 GB or more.
- 5. It should be capable of simultaneous viewing of all post processing applications.
- 6. Fully DICOM 3.0 compatible (or newer version if available at time of delivery).
- 7. Memory of the workstation should be independent of the console.
- 8. Two way data transfer between the operator console and the satellite workstation should be standard.

### Image Processing (Workstation):

The following applications should be standard at the workstation and it should be able to use the following independent of the operator console:

- 1. Standard evaluation applications.
- 2. Real-time Multi-Planar Reconstruction (MPR) of secondary views, with viewing perspectives in all planes including curved and orthogonal MPR.
- 3. CT Angiography: MIP and MinIP.
- 4. 3D Volume Rendering (VRT).
- 5. 3D Surface Shaded Display.
- 6. One click bone removal.
- 7. Virtual Endoscopy/Bronchoscopy.
- 8. Dental CT.

#### Resolution:

- 1. The system should have at least 14 lp/cm for axial and spiral scan 0%MTF with full FOV.
- 2. Specify surface dose, mAs, slice thickness and HU used.

### Dry Imager:

- 1. A dry imager with Digital Interface and control integrated with main console. DICOM 3.0 (or newer version if available) compatible. Attach conformance statement of DICOM compatibility.
- 2. Camera should print on multiple film sizes, one of which must be 17"x 14"film size.
- 3. Camera having dpi resolution of 500 dpi or more with minimum three ports.

#### Accessories:

- 1. Lead glass of at least 100 cm by 80 cm.
- 2. 2 doors with lead sheets (meeting the AERB guidelines for radiation safety) one door for patient entry to gantry room from waiting hall and second door between gantry room and console room.
- 3. Full system UPS (of latest ISO Certification) suitable capacity for minimum 30 MIN backup (gantry, console and workstation). 3 phase Power supply upto UPS room to be provided by hospital authorities.
- 4. Single Head CT compatible pressure injector with remote control of standard make, latest model with interface software. Capable of maximum 300psi pressure and flow rate of 10ml/s.
- 5. 100 Pressure injector syringes and tubing compatible with pressure injector.
- 6. Patient positioning accessories: head rest, head and arm support, knee and leg support, coronal supine head holder.
- 7. 2 Lead aprons (Ultra light).
- 8. 2 Sleek LED view boxes with 3 film slots.
- 9. Medical grade epoxy coated console table and work station tables.
- 10. 6 ergonomic Godrej chairs or equivalent.
- 11. Split ACs (Hot and Cold) for gantry room, workstation room and reporting room.

### Warranty and CMC:

- 1. 5 years warranty should be standard (including tube and batteries) followed by CMC of 05 years.
- 2. Warranty should be inclusive of all spares including X-ray tube.
- 3. The product has to be AERB, CE marked / FDA approved. The offer should be accompanied by original product data sheet/brochure of the product.

The following items are also required to be supplied with the equipment:

R/X

8. The firm should provide split AC (Hot & Cold) in gantry, console room and reporting room of

9. Radiation protection (lead line) doors as per AERB guidelines shall be provided in gantry and

10. Appropriate console & workstation table alongwith 06 chairs (Godrej Make) shall be provided. 11. Two boxes slim type at each site shall be provided.

12. Two ultra light lead aprons shall be provided at each site.

13. The required 3 phase power including the necessary earthling shall be provided by the hospital which

14. Civil works/modifications will be done by the end user.

# Patient communication System:

1. An integrated intercom and automated patient instruction system (API) should be provided.