



# JAMMU AND KASHMIR MEDICAL SUPPLIES CORPORATION LTD.

(Public Sector Undertaking of the Government of Jammu and Kashmir)

Corporate Office Jammu : Plot No. 9 Transport Nagar, Jammu -180006,

Corporate Office Srinagar : 121-Green Avenue, Hyderpora (J&K)-190014: Telefax: 0194-2432008  
email: [enquiryjkmscl@gmail.com](mailto:enquiryjkmscl@gmail.com); website: [www.jkmscl.nic.in](http://www.jkmscl.nic.in)

## CORRIGENDUM

Subject: Corrigendum – E-bid for Annual Rate Contract for the Supply and Installation of 16 Slices CT Scan Machine.

As approved, in light of the decisions taken during the pre-bid meeting held on 11.02.2017 & recommendations/suggestions made by the technical experts from Health & Medical Education Department, J&K State on the basis of suggestions/representation made by the firms/bidders, the tender document for the finalization of Annual Rate Contract for the Supply and Installation of 16 Slice CT Scan Machine uploaded vide No. NIT/JKMSCL/Mach/2017/146 dated 28.01.2017 has been revised and following incorporations/amendments have been made :

Point No.	Specifications in tender document	Amendments : Please read the specification column (3) amended as :-
1	2	3
Page 9 8	The JKMSCL is not bound to accept the lowest bid and may reject any or all bids without assigning any reason thereof.	To be read as deleted
Page 33 2.1.1	Supply order shall be placed through registered post/e-mail/any communication medium by the JKMSCL. The date of receipt of e mail/fax/other communication shall be treated as the date of order for calculating the period of execution of order. The successful bidder shall execute the orders within a delivery period of 60 days or as specified in the supply order from the date of issuing supply order and handing over of space with the availability of power & other requisite installations by the end users.	Supply order shall be placed through registered post/e-mail/any communication medium by the JKMSCL. The date of receipt of e mail/fax/other communication shall be treated as the date of order for calculating the period of execution of order. The successful bidder shall execute the orders within a delivery period of 60 days or as specified in the supply order from the date of issuing supply order and handing over of space with the availability of power & other requisite installations by the end users, and <b>confirmed LC along with AERB.</b> - Approval of site plan as per AERB norms shall be the responsibility of end user.
Page 35 2.7.1	90% payment shall be made within 30 days of supply, installation & successful commissioning to the satisfaction of the committee of JKMSCL. 10% after the completion of six months training of the staff onsite/at company's location. If installation is not possible in three months due to non preparation of the site for installation, the end user shall give certificate in this regard and 90% of the payment shall be released after	90% payment shall be made within 30 days of receipt/verification of supplies and remaining 10% after the completion of six months training of the staff onsite/at company's location. If installation is not possible in three months due to non preparation of the site for installation, the end user shall give certificate in this regard and 90% of the payment shall be released after submission of Bank Guarantee valid upto installation and commissioning of equipment. The qualified bidders shall visit the office of the



# JAMMU AND KASHMIR MEDICAL SUPPLIES CORPORATION LTD.

(Public Sector Undertaking of the Government of Jammu and Kashmir)

Corporate Office Jammu : Plot No. 9 Transport Nagar, Jammu -180006,

Corporate Office Srinagar : 121-Green Avenue, Hyderpora (J&K)-190014: Telefax: 0194-2432008

email: [enquiryjkmscl@gmail.com](mailto:enquiryjkmscl@gmail.com); website: [www.jkmscl.nic.in](http://www.jkmscl.nic.in)

	<p>submission of Bank Guarantee valid upto installation and commissioning of equipment. The qualified bidders shall visit the office of the end user to ensure the preparation of site immediately after issuance of LOI. Payment shall be released on receipt of certificate of supply as per specifications and in good condition from the consignee along with the bill. Installation / commissioning of equipment and rendition of required satisfactory training to the consignee's personnel, if any, shall also be necessary for releasing payment. In case of delayed supplies, deduction of liquidated damages as per provisions shall be made from payments. The firms shall have to seek time for extension from the JKMSCL before executing delayed supplies.</p> <p><b>In case of Imported item(s), LC for 100% payment shall be issued.</b></p>	<p>end user to ensure the preparation of site immediately after issuance of LOI. Payment shall be released on receipt of certificate of supply as per specifications and in good condition from the consignee along with the bill. Installation / commissioning of equipment and rendition of required satisfactory training to the consignee's personnel, if any, shall also be necessary for releasing payment. In case of delayed supplies, deduction of liquidated damages as per provisions shall be made from payments. The firms shall have to seek time for extension from the JKMSCL before executing delayed supplies.</p> <p><b>In case of Imported item(s), LC for 100% payment shall be issued against bank guarantee.</b></p>
--	---	---

Furthermore, the technical specifications as mentioned in Annexure AVI of the NIT have been revised as per the recommendations of the technical experts and are mentioned below:

**Annexure AVI (of the NIT No. NIT/JKMSCL/Mach/2017/146 dated 28.01.2017)**

## **Tender 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.



# **JAMMU AND KASHMIR MEDICAL SUPPLIES CORPORATION LTD.**

(Public Sector Undertaking of the Government of Jammu and Kashmir)

Corporate Office Jammu : Plot No. 9 Transport Nagar, Jammu -180006,

Corporate Office Srinagar : 121-Green Avenue, Hyderpora (J&K)-190014; **Telefax:** 0194-2432008

**email:** [enquiryjkmscl@gmail.com](mailto:enquiryjkmscl@gmail.com); **website:** [www.jkmscl.nic.in](http://www.jkmscl.nic.in)

## **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 pitch selections.

## **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 atleast 1024x1024.
4. Should have adequate hard disk capacity for both image and raw data. It should have facility to store atleast 100000 images.
5. The system should be supported with archiving facility, CD and DVD archiving facility are required.



# JAMMU AND KASHMIR MEDICAL SUPPLIES CORPORATION LTD.

(Public Sector Undertaking of the Government of Jammu and Kashmir)

Corporate Office Jammu : Plot No. 9 Transport Nagar, Jammu -180006,

Corporate Office Srinagar : 121-Green Avenue, Hyderpora (J&K)-190014: Telefax: 0194-2432008

email: [enquiryjkmscl@gmail.com](mailto:enquiryjkmscl@gmail.com); website: [www.jkmscl.nic.in](http://www.jkmscl.nic.in)

6. DICOM facility to send, store, print, receive etc. should be standard.
7. Filming parallel to other activities, including independent scanning, documentation and post-processing 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 annotation.

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 artifacts in head images.

## Workstation

1. The latest multi-tasking computer should be offered with 64 Bit Processor and a menu driven platform.
2. Monitor: High resolution, TFT/LCD/LED color monitor of 19" or more.
3. The display matrix should be atleast 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.



# JAMMU AND KASHMIR MEDICAL SUPPLIES CORPORATION LTD.

(Public Sector Undertaking of the Government of Jammu and Kashmir)

Corporate Office Jammu : Plot No. 9 Transport Nagar, Jammu -180006,

Corporate Office Srinagar : 121-Green Avenue, Hyderpora (J&K)-190014: Telefax: 0194-2432008

email: [enquiryjkmscl@gmail.com](mailto:enquiryjkmscl@gmail.com); website: [www.jkmscl.nic.in](http://www.jkmscl.nic.in)

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.



JKMSCL

# JAMMU AND KASHMIR MEDICAL SUPPLIES CORPORATION LTD.

(Public Sector Undertaking of the Government of Jammu and Kashmir)

Corporate Office Jammu : Plot No. 9 Transport Nagar, Jammu -180006,

Corporate Office Srinagar : 121-Green Avenue, Hyderpora (J&K)-190014: Telefax: 0194-2432008

email: [enquiryjkmscl@gmail.com](mailto:enquiryjkmscl@gmail.com); website: [www.jkmscl.nic.in](http://www.jkmscl.nic.in)

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 :**

1. The firm should provide split AC (Hot & Cold) in gantry, console room and reporting room of adequate capacity as per the requirement.
2. Radiation protection (lead line) doors as per AERB guidelines shall be provided in gantry and console.
3. Appropriate console & workstation table alongwith 06 chairs (Godrej Make) shall be provided.
4. Two boxes slim type at each site shall be provided.
5. Two ultra light lead aprons shall be provided at each site.
6. The required 3 phase power including the necessary earthing shall be provided by the hospital which shall be terminated upto CT scan room.
7. 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.


**Please Note :**

1. *Those firms/bidders who have already uploaded his/her bid are required to re-uploaded their bids as per the amended specifications and corrigendum issued thereof.*
2. *Only technical/financial bids uploaded as per revised corrigendum shall be considered for evaluation.*

**In light of the above mentioned amendments, the critical dates have been revised. The bidders are requested to submit their e.bids as per the dates mentioned below :**

1. Last date of registration of firm : 08.03.2017 upto 1600 hts
2. Last date and time for submission of online bids : 10.03.2017 upto 1600 hrs
3. Date and time for online opening of technical bids : 11.03.2017 at 1100 hrs

All the bidders are requested to keep themselves updated & submit their e-bids through e-portal [www.jktenders.gov.in](http://www.jktenders.gov.in) as per specifications & BOQs. The amendments/modifications shall be available on [www.jktenders.gov.in](http://www.jktenders.gov.in), and [www.jkmsclbusiness.com](http://www.jkmsclbusiness.com).

  
**Dr. Rajinder Kr. Khajuria, KAS**  
General Manager – J(Adm)

No.: JKMSCL/Corg/2017/6129-30  
Copy for information to the:-

Dated: 22.02.2017

- 1 Managing Director, JKMSCL, Jammu.
- 2 Financial Advisor / Chief Accounts Officer, JKMSCL, Jammu.