

## **Amendment No. 20**

**Date: 14.07.2015**

**Subject: Amendment no. 20 to the Tender Enquiry Document**

**Ref: (i) Tender Enquiry No.: HLL/PCD/PMSSY-II/06/14-15 dated 12.01.2015 and subsequent amendments published thereafter.**

The following amendment in technical specifications is made and to be read along with the tender document and subsequent amendments published thereafter.

### **Section VII** **Technical Specifications**

#### **Schedule No. 12** **800mA X-Ray unit with Ceiling Mount column and Dual Detector**

- 1. Existing Para:** High powered X ray unit with two direct digital flat panel detectors for various radiography examinations for the department of Radio diagnosis.

**Read as:** High powered X ray unit with two direct digital flat panel detectors for various radiography examinations for the department of Radio diagnosis. **At least two out of three main components ie, X Ray Generator, Detector and X Ray Tube should be from the same manufacturer**

- 2. Existing Para 2: X-Ray Tube (After Amendment):** Anode heat storage capacity should be **500 KHU or more.**

**Read as:** Anode heat storage capacity should be 300 KHU or more.

- 3. Existing Para 7: Image Viewing, Post –Processing and reporting Station and Documentation:** System should have facility to acquire tomographic images.

**Read as: Deleted.**

- 4. Added Para for Turnkey:**

#### **The Turnkey Scope of Work for 800mA X Ray Unit with Ceiling mount column and Dual Detector**

1. The supplier should inspect the proposed site offered by the Consignee institute in which the DR system has to be installed and they are required to submit the plan for the complete DR Centre on a turnkey basis. The scope of work includes complete Civil work, Electrical, Plumbing, Furnishing, Air-conditioning and Fire fighting for the construction of DR Centre.
2. While preparing the plan, the following aspects have to be addressed:

- i. Care should be taken to provide easy negotiation of the patient stretchers/ trolleys through corridors and doors.
  - ii. Radiation shielding for doors, walls, windows etc
  - iii. Furniture like desk, chairs, shelves etc
  - iv. Patient stretcher and other furniture/ accessory to make the DR centre functional.
3. The cost of Turnkey for the area of 1500sq.ft and Air-conditioning of Tonnage 15TR will be considered for Ranking/ Evaluation purpose.
4. Moreover Bidders will have to quote the unit rates of the following components for turnkey work.
- a) Civil Works
  - b) Electrical Works
  - c) Public Health (Plumbing and sanitary fittings)
  - d) Air Conditioning (HVAC)
  - e) Interior Furnishing & Furniture
  - f) Miscellaneous

#### **Scope of Work for Turnkey DR System**

The supplier should inspect the proposed site and submit all the detailed structural and architectural drawings and BOQ for the proposed DR Centres along with technical bid of the tender.

#### **The DR centre shall consist of the following rooms:**

- a) DR Room
- b) Console room
- c) Equipment room
- d) Patient preparation room
- e) Reporting room
- f) Patient waiting room
- g) Radiologist room

The actual area of turnkey works done will be considered for payment, based on the site measurements.

### **Civil work**

- a) Civil construction work including construction of brick wall if any, plastering, flooring as per the approved plan and equipment layout plan.
- b) Concrete bed at DR equipment area.
- c) Platform for unloading and shifting the DR should be provided if necessary.
- d) Cable tray, trench & channel – necessary trenches, cable tray and channels at required location would be provided.
- e) All the construction work to be done as per the final plan approved by the Consignee.

### **Flooring**

1. 600 x 600 mm vitrified tiles with 100mm tile skirting to match in console room, lobby and patient preparation areas, Radiologist room etc.
2. 50 mm thick cement concrete flooring with Vinyl flooring in DR equipment / UPS room.

### **Painting**

1. Two coats Plastic Emulsion Paint over 2 coats of wall putty including primer in patient preparation area, Lobby area, console room, DR room & Equipment room etc.

### **False Ceiling**

1. Acoustical tile for ceiling with light weight insulating material of high quality supported on grid or finished seamless with support above ceiling. Finished with white paint or powder coated with white paint, if metallic. Ceiling height to suit the equipment mount and clearances.

### **Plumbing work**

1. All water pipes and fittings shall be of high density polythene of approved and standard make. The gratings shall be brass chrome plated. All plumbing accessories should be of standard make.

### **Electrical work**

1. The supplier shall be required to specify the total load requirements for the DR centre including the load of air conditioning , room lighting and for the accessories if any. The supply line will be provided by the Institute up to one point within the DR centre . The distribution panel shall be provided by the vendor. Few lights in each room shall be connected to the UPS to provide emergency lighting.
2. **The electrical work shall include the following:**
  - a) Wiring – All interior electrical wiring- with main distribution panel board, necessary MCBs, DB, joint box, switch box etc. the wires shall be of copper of different capacity as per the load and should be renowned make as listed below.
  - b) Switches light and power points should be of modular type and of standard make as listed below.
  - c) General lights – Mirror optical type 1X28 W or 2X28 W/CFL fittings 2X36, 3X36 W with electronic ballasts

**AIR CONDITIONING:**

Duct-able package air conditioners and split AC units may be used according to room requirement and suitability. Humidity control should be effective to eliminate moisture condensation on equipment surface. . The Air conditioning should be designed with standby provision to function 24 hours a day.

The outdoor units of AC should have grill coverings to prevent theft and damage. Ventilation is required in toilet.

**Environment specifications:**

- a) Humidity range: Relative humidity 60% and 80% in all areas except equipment room which shall be as per requirement of the equipment.
- b) Temperature ranges:  $22 \pm 2^{\circ}$  C in all areas except equipment room which shall be as per requirement of the equipment.
- c) Air conditioning load: The heat load calculations and maintaining the desired temperature and humidity shall be the responsibility of the bidder.

**Furniture:**

- a) Revolving chairs height adjustable, medium-back with hand-rest in the Control room, Radiologist room and viewing area. – 4 NO.S
- b) Chairs for patient waiting area – Three seater (chrome plated). - 10 NO.S
- c) Cupboard with laminate door shutters for storage of spare parts and accessories and records as per requirement. – 3 NO.S
- d) Cupboard with laminate door shutters for storage of spare parts and accessories and records as per requirement. – 3 NO.S
- e) Drug trolleys 1 numbers for patient preparation area.
- f) Patient trolley with rubber foam mattress to be kept in the patient preparation room.
- g) Name boards for all rooms
- h) Tables for Workstation and Radiologist in reporting room.- 2 NO.S
- i) Changing rooms should have change lockers and dressing table.
- j) Dustbins (plastic with lid) to be provided as required.
- k) Any other furniture item as per requirement.

All furniture items should be of standard make as mentioned in the table below.

**Miscellaneous:**

- 1. Reporting room should have LED X-ray Film viewer with adjustable brightness; capable of holding 3 films of 14"x17" size. – 2 no.s

2. Cabling of Network (LAN) connectivity for camera system, console system, workstation and computers etc
3. Broadband connection: for REMOTE SERVICE of DR system.
4. Fire extinguisher Dry CO2 type as required for the building safety.

### **LIST OF ITEMS AND SUGGESTED MANUFACTURERS.**

<b>SL NO</b>	<b>ITEMS</b>	<b>PREFERRED MAKES</b>
A	FLOORING VITRIFIED TILES -	Somany, Kajaria , H&R Johnson, RAK india
B	PAINT -	Dulux, Asian Paints , Nerolac
C	PLUMBING -	Kohler, Jaguar , Grohe , Roca
D	SANITARY ITEMS -	CERA, Hindware, Parryware
<b>E</b>	<b>ELECTRICAL</b>	
1	CABLES -	Finolex, Havells , V-Guard
2	SWITCHES -	Legrand, L&T, Crabtree , Roma
3	DISTRIBUTION BOX , MCB -	Legrand, L&T, Siemens, Havels
4	LIGHT FITTINGS -	Philips / Crompton / Kesselec-Schreder / Wipro.
F	AIR CONDINTIONING -	Daikin, Hitachi, Blue Star, Voltas,
G	FURNITURE -	Hermen Miller , Godrej , Featherlite

### **Schedule No.20** **VATS Equipment**

1. **Existing Para 3.1.1:** Rod Lens Telescope 30 deg., enlarged view, diameter 10 mm, length 31 cm, autoclavable. Fiber optic light transmission incorporated. - Qty 1

**Read as:** Rod Lens **full HD Telescope 30 deg.**, enlarged view, diameter 10 mm, length 31 cm, autoclavable. Fiber optic light transmission incorporated. - Qty 1

2. **Existing Para 3.1.3:** Telescope, 10 mm, length 32 cm, variable direction of view from 0 deg. - 120 deg., twisting controller to select the desired view of direction, fiber optic light transmission incorporated - Qty 1.

**Read as:** **Full HD Telescope**, 10 mm, length 32 cm, variable direction of view from 0 deg. - 120 deg., twisting controller to select the desired view of direction **is preferable, otherwise a 0 deg 10mm full HD telescope, 32cm is acceptable.** Should have fiber optic light transmission incorporated - Qty 1

3. **Existing Para 3.2:** VIDEO PROCESSORE WITH LIGHT SOURCE & MONITOR.

**Read as: Full HD Camera system & Monitor.**

4. **Existing Para 3.2.4:** Controls for colour adjustment, to enhancement and balance settings.

**Read as: Deleted**

5. **Existing Para 3.2.6:** Patient and physician data input keyboard.

**Read as: Deleted**

6. **Existing Para 3.2.8:** 26" or more LED colour monitor with XGA resolution compatible.

**Read as:** 26" or more LED colour monitor with **resolution of at least 1920x1080p with 16:9/16:10 aspect ratio.**

7. **Existing Para 3.2.9:** USB port for Capturing FULL HD Videos/ HD Stills in External USB drive and direct interface of USB Printer to facilitate direct printouts.

**Read as: Deleted**

8. **Existing Para 3.5: FULL HD IMAGE/VIDEO RECORDING SYSTEM:** Controllable via membrane buttons on front panel, camera head buttons, footswitch mouse and keyboard.

**Read as:** Controllable via **camera head buttons & membrane buttons on front panel or touch screen**

9. **Existing Para 3.5: FULL HD IMAGE/VIDEO RECORDING SYSTEM:** Medical grade unit CE certified, ICE 60601-1.

**Read as: It should be European CE or USFDA certificate. It should confirm to electrical safety norms IEC 60601-1**

10. **Existing Para 3.5: FULL HD IMAGE/VIDEO RECORDING SYSTEM:** USB Silicon Keyboard with Touchpad.

**Read as:** USB Silicon Keyboard with Touchpad **or touch screen.**

11. **Existing Para 3.5: FULL HD IMAGE/VIDEO RECORDING SYSTEM:** Video signal inputs: DVI-1 Dual Link, HD-SDI, Composite, S-Video, RGB, YPbPr.

**Read as:** Video signal inputs: **DVI, HD-SDI, Composite, RGB**

12. **Existing Para 3.5: FULL HD IMAGE/VIDEO RECORDING SYSTEM:** Video Out: DVI-I Dual link.

**Read as:** Video Out: **DVI**

13. **Existing Para 3.5: FULL HD IMAGE/VIDEO RECORDING SYSTEM:** Video output resolution: 1920 x 1080, 1280 x 1024, 1280 x 720, 1024 x 768, 800 x 600, 640 x 480.

**Read as:** Video output resolution: **1920 x 1080p**, 1280 x 1024, 1280 x 720, 1024 x 768, 800 x 600, 640 x 480

**All other terms and conditions of the tender enquiry remain unaltered.**