

Clarification Regarding Technical Specifications

Date: 11/01/2014

Subject: Clarification regarding Technical Specifications

**Ref: (i) Tender Enquiry No.: HLL/PCD/PMSSY/AIIMS-II/02/13-14 dated 02/12/2013
(ii) Amendment No.1 dated 06/01/2014.
(iii) Amendment No.2 dated 10/01/2014.**

The following clarifications regarding technical specifications are made further to the TED and Amendments as referred.

Section – VII Technical Specifications

Schedule No. 1

Technical Specification for a New State of the Art multidetector, multislice (128 rows detector) CT Scanner System on a turnkey basis

1. Added Para:

- i. DUAL ENERGY APPLICATIONS to be provided as standard: Renal Calculi Characterisation & Gout.**
- ii. Also Specify if DUAL ENERGY APPLICATIONS like Metal Artifact Correction / Beam Hardening artifact Correction, Brain Haemorrhage are available in the system. Any other application for dual energy if present in future upgrades should be part of the system.**

2. Existing Specification:

Para 8: Image processing section

- a. The system should have standard software like 3D Volume rendering , MIP,CT angio, color angio Display, Colonoscopy, CT Perfusion , Dental scan , Bone Mineral Study should be available as standard on the **Workstation**.

Read as:

Para 8.: Image Processing section

- a. The system should have standard software like 3D Volume rendering , MIP,CT angio, color angio Display, CT Perfusion , Dental scan , Bone Mineral Study should be available as standard on the **Workstation** .

Quote as OPTIONAL: Computer Aided Detection (CAD) Colonoscopy to be provided. (Price to be quoted separately).

3. Existing Specification:

Para 8.: Image Processing section

- i. Lung CT: low dose lung CT protocols for advanced lung nodule detection, assessment and follow-up. Lung segmentation software for nodule detection.

Read as:

Para 8.: Image Processing section

- i. Lung CT: low dose lung CT protocols for advanced lung nodule detection, assessment and follow-up. Lung segmentation software for nodule detection.
Quote as OPTIONAL: provide LUNG CAD for virtual bronchoscopy (Price to be quoted separately).

4. Existing Specification:

- Para.10. Accessories:
p. Zero lead aprons-4 Nos.

Read as:

- Para.10. Accessories:
p. **ULTRA LIGHT WEIGHT lead aprons - 4 Nos.**

5. Existing Specification:

Para 8.: Image Processing section

- 1) Tumor ablation system with treatment planning solution & RF generator to be quoted. **(Price to be quoted separately).**

Read as:

Para 8.: Image Processing section

- 1) **OPTIONAL ITEM:** Tumour ablation system with treatment planning solution & RF generator . **(Price to be quoted separately).**

Schedule no. 2

Technical specification of a new, state of the art, 3T MRI scanner

1. Existing Specification:

RF COILS

- a) 32 channel or more head coil.
- b) Neck phased array 8 channel or more.
- f) Coil for peripheral angiography 32 channels or more as standard
- h) Breast coil 7 channel or more
- j) Shoulder coil – Multi channel (8 channels or more) flex or rigid type – 2nos. (One large and one small)

Read as:

RF COILS

- a) 32 channel or more head coil-**capable of multi frequency MR spectroscopy (1H & 31P).**
- b) Neck phased array 8 channel **or** more.
- f) **Dedicated Coil for peripheral angiography** 32 channels or more as standard **(Price to be quoted separately).**
- h) Breast coil 7 channel or more
- j) Shoulder coil – Multi channel (8 channels or more) **flex loop** or rigid type – 2nos. (One large and one small)

2. Existing Specification:

Para.:9 DATA ACQUISITION
Deleted

Read as:

Para.:9 DATA ACQUISITION

Breath Hold Acquisition for Cardiac and Abdominal Imaging must be possible.

3. Existing Specification:

Added under Para: 10 EPI MODE

BOLD, SWI, T2 Perfusion (with all post processing licences as standard)

Complete Functional MRI of Brain package as standard (incl. of patient camera, goggles etc).

Read as:

Added under Para: 10 EPI MODE

BOLD, SWI, T2 Perfusion (with all post processing licences as standard)

Complete Functional MRI of Brain package as standard (incl. of patient camera, goggles etc).

Susceptibility-weighted Phase Imaging to differentiate calcification & haemorrhage.

4. Existing Specification:

Added under Para 10: IMAGING SEQUENCES

MRS: Proton (^1H) MRS- Single voxel (SV), Multi-voxel CSI -2D and 3D- in both short and long TE

Multi nuclear – ^{31}P , ^{23}Na and ^{13}C with compatible necessary hardware.

Iron, Elastography Cartilage – Standard

Read as:

Added under Para 10: IMAGING SEQUENCES

MRS: Proton (^1H) MRS- Single voxel (SV), Multi-voxel CSI -2D and 3D- in both short and long TE

Multi nuclear – ^{31}P , ^{23}Na and ^{13}C with compatible necessary hardware (**Optional- Price to be quoted seperately**).

MRS – 31P – Specify details of sequences and preparatory pulses used.

Specify future upgradability for 23Na & 13C MRS with necessary hardware/coil.

Iron, Elastography Cartilage – Standard

Fat and iron quantification of liver: standard

Hardware and sequences for MR Elastography of abdomen: Standard. (Price to be quoted separately)

5. Point no. 6 in Technical Amendment No.1 dated 20.12.13 under this schedule should read as deleted as it is same as point no.5 of Technical Amendment No.1

Schedule no. 3

TECHNICAL SPECIFICATIONS FOR BIPLANE D.S.A WITH ACCESSORIES

1. Existing Specification:

Para: G. Digital Imaging System and essential software:

16. Specify the time limit minimum 30 seconds for uninterrupted acquisition of on-line subtracted images at 1024 x 1024 matrix with maximum frame rate.

Read As:

16. Specify the time limit **for** minimum 30 seconds for uninterrupted acquisition of on-line subtracted images at 1024 x 1024 matrix with maximum frame rate.

2. Existing Specification:

Para: H. Essential accessories:

6. Lead gown as per the following specifications: **8 Nos.**

Read As:

Para: H. Essential accessories:

6. **Ultra light weight** Lead gown as per the following specifications: **8 Nos.**

3. Existing Specification:

Scope of work for turnkey Biplane D.S.A system:

6. AIR CONDITIONING:

b) Temperature ranges: $22 + 2^{\circ}$ C in all areas except equipment room which shall be as per requirement of the equipment.

Read As:

Scope of work for turnkey Biplane D.S.A system:

6. AIR CONDITIONING:

b) Temperature ranges: $22 \pm 2^{\circ}$ C in all areas except equipment room which shall be as per requirement of the equipment.

Schedule no. 4

SPECIFICATION FOR 1000 mA X-RAY UNIT WITH DIGITAL FLAT PANEL DETECTOR (On Turn-Key Basis)

1. Existing Specification:

Para 2.ii:

Detector Panel should be made of amorphous Silicon with CsI

Read As:

Para 2.ii:

Detector Panel should be made of amorphous Silicon **with CsI or Gadox.**

2. Existing Specification:

Para: 10. IX Image stitching software **and the necessary hardware** to be provided.

Read As:

DELETED

Schedule no. 7 (a) Specifications for colour Doppler (2d)

1. Existing Specification:

Para: 5. Post-acquisition Data Processing.

- 3D reconstruction from a stored 2D CINE-loop.

Read As:

Para: 5. Post-acquisition Data Processing.

- Deleted.

2. Existing Specification:

Para: 13 Transducers

- Transvaginal Probe , Operating Frequency 4- 9 MHz
- Convex Probe with biopsy attachment. Operating Frequency: 2 - 5 MHz
- Linear Probe with biopsy attachment. Operating Frequency: 5 – 10 MHz
- Sector probe** 2-5 MHz

Read As:

Para: 13 Transducers

- Transvaginal Probe **with Biopsy attachment**, Operating Frequency 4- 9 MHz
- Convex Probe with biopsy attachment. Operating Frequency: 2 - 5 MHz
- Linear Probe with biopsy attachment. Operating Frequency: 5 – 10 MHz
- Sector probe / Microconvex probe** for pediatric neurosonography 2-5 MHz

3. Added Para:

360⁰ mechanically rotated radial endoluminal probe Operating frequency: 7.5 - 10 MHz.
(Optional - Price to be quoted separately).

Schedule no. 7 (b) Specifications for colour doppler (3D)

1. Existing Specification:

Para: 8. Data Processing.

8.1.C : 3D reconstruction from a stored 2D CINE-loop.

Read As:

Para: 8.Data Processing.

8.1.C : Deleted.

2. Existing Specification:

Para: 15 DICOM Connectivity

15.1 The system shall support as an option for DICOM service classes:

Read As:

Para: 15 DICOM Connectivity

15.1 Deleted.

Added Para: DICOM Connectivity should be a standard feature with the hospital network and a stand alone PC (Windows based) with suitable DICOM viewer to be supplied

3. Existing Specification:

Para: 16 Transducers

- Trans-vaginal Probe, Frequency 3-11 MHz
- 4D Volume Convex Probe** (To be quoted as standard)

Read As:

Para: 16 Transducers

- d. Trans-vaginal Probe **with Biopsy attachment**, Frequency 3-11 MHz
- e. **3D / 4D Volume** Convex Probe (To be quoted as standard)

4. Existing Specification

Para: 19. System upgradability option should be available for Fusion/ Navigation.

Read As

Para: 19. System upgradability option should be available for Fusion/ Navigation. **It should also be upgradable to 3D endocavitary application.**

Schedule no. 10

Digital mammography system with stereotactic biopsy

1. Existing Specification:

Para 12. Accessories included

Radiation shield with 0,3 mm Pb equivalent at 49 kV

Read As:

Para 12. Accessories included

Radiation shield with **0.3 mm** Pb equivalent at 49 kV

2. Existing Specification:

Para 14. FFD based stereotaxy Unit

Biopsy table for patient positioning during stereotaxy in Decubitus or prone position. It must have motorised longitudinal, transverse and vertical movements. It should also have locking facility. Mention the type of detector used for stereotaxy biopsy. Table should be FDA/ CE approved.

Read As

Para 14. FFD based stereotaxy Unit

Biopsy table for patient positioning during stereotaxy in Decubitus or prone position. It must have motorised longitudinal, transverse and vertical movements. It should also have locking facility. Mention the type of detector used for stereotaxy biopsy. Table should be FDA/ CE approved.

Added Para: It should be possible to perform biopsy in sitting and decubitus /prone positions.

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