

Amendment No. 2

Date: 21/12/2015

Sub: Amendment to the Tender Enquiry Document

Ref: NIT No.: HLL/PCD/PMSSY-II/07/15-16 dated 28/10/2015 & subsequent amendments

The following changes have been incorporated in the referred NIT.

Section – VII Technical Specifications

Item Sl. No. 17

128 SLICE MDCT WITH INDEPENDENT 64 OR MORE ROWS OF DETECTOR

1. Existing:

Para 2: Single Source dual energy capability as standard

The quoted system should have dual energy capability and all the possible applications must be mentioned clearly as standard part of software. The system must have dual energy capability and the following applications should be available.

- a) Differentiation of brain hemorrhage from contrast enhancement.
- b) Virtual NCCT for brain.
- c) Mono-energetic imaging for beam hardening artifact elimination. Contrast augmentation & tissue visualization with Mono-energetic images.
- d) Characterization of Renal Calculi & differentiation of Uric Acid and Calcified Stones
- e) Characterization of Gout - Application for visualizing deposits of uric and crystals.
- f) Lung perfusion using dual energy.

Read as: Single Source dual energy capability as standard

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- a) Differentiation of brain hemorrhage from contrast enhancement.
- b) Virtual NCCT for brain.
- c) Mono-energetic imaging for beam hardening artifact elimination. Contrast augmentation & tissue visualization with Mono-energetic images.
- d) Characterization of Renal Calculi & differentiation of Uric Acid and Calcified Stones
- e) Characterization of Gout - Application for visualizing deposits of uric and crystals.
- f) Lung perfusion using dual energy.
- g) Direct Neuro CTA - Neuro CTA with accurate bone removal in complex body regions using dual energy method**
- h) Material density data - Electron Density and Atomic number visualization and processing (Optional)**
- i) Vascular Plaque characterization - Vascular Plaque characterization using dual energy method (Optional)**

2. Existing Para 3.c: Tube Voltage: Minimum range 80-140 kV.

Read as: Tube Voltage: Minimum range **80-135** kV.

3. Existing Para 4.c: Entire range of rotation times for full 360 degree should be 0.40 seconds or less for excellent Cardiac Acquisition & Whole Body Applications

Read as: Entire range of rotation times for full 360 degree should be **0.35** seconds or less for excellent Cardiac Acquisition & Whole Body Applications

4. Existing Para 10; Workstation: A multimodality client server architecture based solution with minimum concurrent 30000 slices rendering capacity (Intellispace Portal 6/ Dexux-AW server 2/ Syngo Via 30A etc), with 64GB RAM with storage of minimum 2TB and Additional storage of 10 TB on the server, having following client hardware specification- Workstation:Z820 or equivalent CPU, dual quad core processor, 16 GB RAM, 1TB hard drive, DVD Writing with clinical grade monitor of minimum 3 MP (braw or equivalent) / & 5 button mouse (logitech or equivalent). A reputed Anti- Virus Solution for Server should be in place. The Server should be with minimum three

concurrent user (Three Hardware)facility. All the three workstation should have following processing tools-software's Available as standard-:

Read as: A multimodality client server architecture based solution with minimum concurrent 30000 slices rendering capacity (Intellispace Portal 6/ Dexux-AW server 2/ Syngo Via 30A etc), with 64GB RAM with storage of minimum 2TB and Additional storage of 10 TB on the server, having following client hardware specification- Workstation:Z820 or equivalent CPU, dual quad core processor, 16 GB RAM, 1TB hard drive, DVD Writing with clinical grade monitor of minimum 3 MP (braw or equivalent) / & 5 button mouse (logitech or equivalent). A reputed Anti- Virus Solution for Server should be in place. **The Server should be Apple or Equivalent and should be with minimum five concurrent user (five Hardware)facility. All the five workstation should have following processing tools-software's Available as standard-:**

5. Existing Para 10; Under Workstation: All the three workstation should have following processing tools-software's Available as standard-:

Multi planar reconstruction (MPR).

Minimum and Maximum intensity projection (Min IP & MIP).

3D Volume rendering.

Auto Bone Removal.

Volume measurement.

Following applications on two concurrent users:

Advance Vessel Analysis with Plaque visualization

Colonography.

Perfusion CT.

Image Fusion of CT, MR & PET Data.

CT angio, CT whole brain perfusion with stroke protocol.

Neuro DSA.

Coronary tree analysis: automated 3D processing of coronary arteries, calcium scoring, stent analysis LV analysis.

Multi-modality automatic tumor tracking & Automatic measurements in RECIST, WHO, Volume

& Choi criteria calculation.
Virtual endoscopy/ Fly through.
Lung nodule evaluation.

Read as: All the three workstation should have following processing tools-software's Available as standard-:

Multi planar reconstruction (MPR).

Minimum and Maximum intensity projection (Min IP & MIP).

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Liver segmentation display software in different colours, volumetry and virtual surgical plane Identification

6. Existing Para 14.b: High contrast spatial resolution should be not less than 17 lines pair per cm or higher maximum at 0% MTF X-Y axis for FOV not less than cm. Specify the same at 10% MTF.

Read as: Deleted

7. Existing Para 16.a: One dry chemistry camera with resolution of 500 dpi or more. The unit should be digital DICOM 3.0 complaint.

Read as: One dry chemistry camera with resolution of **650 dpi or more**. The unit should be digital DICOM 3.0 complaint

Item SI No.18 Endoscope system of Neurosurgery

1. Existing Para 1.1: Neuroendoscope is a small device that allows the identification of the anatomy of the brain's ventricular system. It aids the neurosurgeon in placing the shunt.

Read as: Neuroendoscope is a small device that allows the identification of the anatomy of the brain's ventricular system. It aids the neurosurgeon in placing the shunt Ventriculoscope with Wide Angle Straight Forward Telescope 6°, angled eyepiece, outer diameter 6.1 mm, length 18 cm, working channel diameter 2.9 mm, irrigation/suction channel diameter 1.6, autoclavable, fibre optic light transmission incorporated, With suitable operating sheath. with biopsy, coagulating forcep.

Ventriculoscope, small, Wide Angle Straight Forward Telescope 6°, with angled eyepiece, outer diameter 3.6 mm, length 18, working channel diameter 1.6 mm, with suction and irrigation channel diameter 0.8 mm, autoclavable, with irrigation adapter, fibre optic light transmission incorporated, for use with: suitable small operating sheath, with biopsy and coagulating forcep.

2. Added Para under Para 2 : All items should be from same manufacturer for total system compatibility and highest performance.

3. Existing Para 3.13: Straight forward telescope 6 deg., enlarged view, autoclavable, with angled eyepiece, with instrument channel dia.3mm fiberoptic light transmission incorporated, preferably color coded.

Read as: Straight forward telescope 6 deg., enlarged view, autoclavable, with angled eyepiece, with instrument channel **dia.2.9mm or more, with working length shall be for both paed & adult** fiberoptic light transmission incorporated, preferably color coded

4. Added Para Under Para 3.15: Integrated Optical Zoom lens f= 14-30mm.

The process should be able to produce USB port for direct recording of still and video images.

The processor should be able to split two images for simultaneously comparison of two structure at the same time.

System should have facility to offer various visualization modes for surgery and diagnosis by shifting the color spectrum like BLUE & GREEN light for recognition of the finest tissue Structures and their differentiation

The processor should be able to produce our digital video DVI-D and for long transmission SDI video.

5. Added para under Para 3.18: FULL HD 32inch Monitor.

6. Added para under Para 3.19: Suitable Bipolar cable to be provided 2Nos.

7. Existing Para 3.27: Mobile cart (Imported).

Read as: Mobile cart **from same manufacturer**

8. Existing Para 5.1: The unit shall be capable of being stored continuously in ambient temperature of 0 -50 C and relative humidity of 15-90%.

Read as: The unit shall be capable of being stored continuously in ambient temperature of **0 -50 Deg C** and relative humidity of 15-90%.

Item SI No. 20 OT Light LED

1. Existing Para: Operating Room Surgical Lighting System should provide an ideal combination of brightness, maneuverability, and shadow resolution without sacrificing color accuracy through a consistent LED technology with a unique faceted reflector design technology.

Read as: Operating Room Surgical Lighting System should provide an ideal combination of brightness, maneuverability, and shadow resolution without sacrificing color accuracy through a consistent LED technology, **homogenous and shadow less light.**

2. Existing Para: OT Light should have 5 arms (2no. for dome, 2 No. for monitors & 1 No. for camera)

Read as: OT Light should have **4 arms (2no. for dome and 2 No. for monitors)**

3. Existing Para: Field Size Diameter : 20 to 28cm (+/- 10%)

Read as: Field Size Diameter: **19 to 28cm (+/- 10%)**

4. Existing Para: Life of Light Source : >40,000 Hrs.

Read as: Life of Light Source : **>30,000 Hrs**

5. Existing Para: Light head area : 5000 square cm (+/- 10%)

Read as: Light head area: 5000 square cm (+/- 10%) **for major dome**

6. Existing Para: Bulb Type : LED.

Read as: Bulb Type: **White LED**

7. Existing Para Title: HD Camera System – 1080p.

Read as: HD Camera System – **1080p or 1080i**

8. Existing Para HD LED FLAT PANEL MONITOR; point 1: It should have 1 Nos. 52” HD Flat panel Monitors for wall mounting.

Read as: It Should have 1 Nos. **26” or more** HD Flat panel Monitors for wall mounting

9. Existing Para HD LED FLAT PANEL MONITOR; point 2: It should have 2 nos. 32” High Definition Flat panel Monitors to be mounted on separate arms in OT light.

Read as: It should have 2 nos. **26” or more** High Definition Flat panel Monitors to be mounted on separate arms in OT light

10. Added Para: Bidder should submit IEC-60601-1-1-2; latest edition certificate for the quoted model.

Item SI No. 21

Ultrasonic cutting and Coagulation device

1. Para 4.1.1.3: Ultrasonic Hand piece- 10 Nos. (Price to be quoted separately for each unit)

Read as: Ultrasonic Hand piece- **2 Nos.** (Price to be quoted separately for each unit)

2. Existing Para 4.1.1.4: Disposable coagulation shears for open surgery – 7mm dia 17cm long- 25 nos. (Price to be quoted separately)

Read as: Disposable coagulation shears for open surgery – **9-25cm long- 15 nos.** (Price to be quoted separately)

3. Existing Para 4.1.1.5: Disposable coagulation shears for laparoscopic surgery – 7mm dia 30-45cm long- 25 nos. (Price to be quoted separately)

Read as: Disposable coagulation shears for laparoscopic surgery – **5mm dia** 30-45cm long- **15 nos.** (Price to be quoted separately)

4. Existing Para 7.1: The generator must be CF isolated applied device and defibrillator protection must be available.

Read as: Deleted.

Item SI No. 22
Operating table Electro Hydraulic

2. Existing Para C Technical Data: Width : 640-660 mm.

Read as: Width : **540 mm or more**

3. Existing Para C Technical Data: Min 2 KVA UPS should be supplied as standard.

Read as: Deleted

4. Existing Para Accessories for 2 Nos. Neurosurgery OT Tables; Point i: Mayfield Skull clamp.

Read as: Mayfield – **2 Nos with horse shoe**

5. Existing Para Accessories for 2 Nos. Neurosurgery OT Tables; Point ii: Cervical attachment.

Read as: Cervical attachment **for sitting position**

6. Existing Para Accessories for 2 Nos. Neurosurgery OT Tables; Point iii: Accessories stand.

Read as: Accessories stand (**Arm stand**)

Item SI No. 23
Electric Cautery/Electro Surgical Unit with vessel Sealing

1. Existing Title: Electric Cautery/Electro Surgical Unit **with vessel Sealing.**

Read as: Electric Cautery/Electro Surgical Unit.

2. Existing Para 3.1: Integrated touch screen system with 300-400W output generator for monopolar cut, 100 -120Watt for monopolar coagulation, bipolar cut 90-150Watt and Bipolar coagulation 90-120Watt **and vessel sealing system for open and laparoscopic surgery with under water cutting current.**

Read as: Integrated touch screen **or touch button** system with 300-400W output generator for monopolar cut, 100 -120Watt for monopolar coagulation, bipolar cut 90-150Watt and Bipolar coagulation 90-120Watt.

3. Existing Para 3.11: Should be usable with laparoscopic monopolar and bipolar instruments, for which programs and accessories must be available

Read as: Should be usable with laparoscopic monopolar and bipolar instruments, for which programs and accessories must be available. (**Optional unit price for reusable laparoscopic monopolar and bipolar instruments to be quoted separately**)

4. Existing Para 4.2.a: trolley, qty 01.

Read as: Indigenous trolley, qty 01.

5. Existing Para 4.2.c: foot switches for different outputs, qty 01.

Read as: Foot switches for Monopolar and Bipolar, qty 01 as standard

6. Existing Para 4.2.j: Reusable and Disposable dedicated instruments for open and laparoscopic monopolar, bipolar **and vessel sealing use-** 5 Nos. (Separate price for each should be quoted and price should be freeze for 5 years)

Read as: Reusable and Disposable dedicated instruments for open and laparoscopic monopolar, bipolar - 5 Nos. (Optional- Separate price for each should be quoted and price should be freeze for 5 years)

Item SI No. 24

Electric Cautery/Electro Surgical unit

1. Existing Para 3.1: 120Watt for monopolar coagulation, bipolar cut 90-150Watt and Bipolar coagulation 90-120Watt and vessel sealing system for open and laparoscopic surgery with under water cutting current.

Read as: Integrated touch screen or touch button system with 300-400W output generator for monopolar cut, 100-120W for monopolar coagulation, bipolar cut 90-150W and bipolar coagulation 90-120W. **Laparoscopic probe should be quoted as optional for monopolar and bipolar**

2. Existing Para 3.10: Programmable memory for output settings.

Read as: Programmable memory **or preset** for output settings.

3. Existing Para 3.11: Should be usable with laparoscopic monopolar and bipolar instruments, for which programs and accessories must be available.

Read as: Should be usable with laparoscopic monopolar and bipolar instruments, for which accessories must be available **(Optional unit price for reusable laparoscopic monopolar and bipolar instruments to be quoted separately)**

4. Existing Para 4.2.a: trolley, qty 01.

Read as: Indigenous trolley, qty 01

5. Added Para: Leakage current on the patient should be less than 10µA.

6. Added Para: Bidder should submit IEC-60601-1-1-2; latest edition certificate for the quoted model.

Item SI No. 25

Surgical Operating Microscope for Neurology

1. Existing Para Title: 'Optional Accessories':

Read as: Standard Accessories:

**Item No. 28:
Endoscopic Ultrasound system with accessories**

1. **Existing Para: Ultrasonic Gastro videoscope (Radial): One in number (Optional - price of this item to be offered separately)**
b) Endoscopic features: - 2. Direction of view should be forward.
Read as: Ultrasonic Gastro videoscope (Radial): One in number (Optional - price of this item to be offered separately)
b) Endoscopic features: - 2. Direction of view should be forward or 55 Degree forward oblique.
2. **Existing Para: Ultrasound Processor with Color Doppler Function: One nos.**
High Definition dynamic tissue Harmonic Imaging should be available.
Read as:-
Ultrasound Processor with Color Doppler Function: One nos.
Tissue Harmonic Imaging should be available.
3. **Existing Para: Ultrasound Processor with Color Doppler Function: One nos.**
Possibility to retrieve images through USB port and DVD-RW to record.
Read as:-
Ultrasound Processor with Color Doppler Function: One nos.
Possibility to retrieve images through USB port and DVD-RW (**internal or external**) to record.
4. **Existing Para: Light Source (Xenon short arc Ozone free 300 Watt lamp): One in Number**
Equipped with high intensity Xenon Light source (100W) with atleast 500 hours life.
Read as:
Light Source: Equipped with high intensity Xenon Light source (100W) with atleast 500 hours life.
5. **Existing Para: Flat Screen Monitor- One in number**
Resolution max: 1920×1200
Read as: Flat Screen Monitor- One in number
Resolution max: **1920×1080i or 1920x1080p.**

**Item No. 29:
Argon Plasma Coagulation System**

1. Existing Para:

General/ Compatible electrosurgical unit: Bipolar coagulation probe – 01 in number.

Read as:

General/ Compatible electrosurgical unit: Bipolar coagulation **forceps – 01 no.**

2. Existing Para:

General/ Compatible electrosurgical unit: HF power limitations: 350-400 Watt or more for monopolar cut, **100W or more** for both monopolar and bipolar coagulation with option of change in steps.

Read as:

General/ Compatible electrosurgical unit: HF power limitations: **300-400 Watt or more** for monopolar cut, 100W or more for both monopolar and bipolar coagulation with option of change in steps.

3. Existing Para:

APC Unit: Option of flushing with flushing duration of 5 seconds or less.

Read as:

APC Unit: Should have option of flushing.

4. Existing Para:

APC probes: Prices for the probes should be fixed for next 7 years.

Read as:

APC probes: Prices for the probes should be fixed **during warranty period.**

5. Existing Para:

Trolley and Other components: Compatible trolley for mounting all components of APC unit to make the system mobile.

Read as:

Trolley and Other components: Compatible trolley **of same make** for mounting all components of APC unit **along with 5 ltr. Argon gas cylinder 2 nos.** to make the system mobile.

6. Existing Para:

Para 6: Nonsticky bipolar forceps – 2 Nos.

Read as:

Para 6: Nonsticky bipolar forceps **with cable** – 2 Nos.

7. Added Para: Bidder should submit IEC-60601-1-2: latest edition certificate for the quoted model.

**Item No. 30:
C Arm for ERCP**

1. **Existing Para:**

Fully counter balanced isocentric C Arm.

Read as:

Fully counter balanced C Arm.

2. **Existing Para:**

Para b: Angulation: Atleast 135 degrees.

Read as:

Para b: Angulation: At **120 degrees or more.**

3. **Existing Para:**

Para 2. X-Ray Parameters: d. The x-ray tube should have a stationary anode.

Read as:

Para 2. X-Ray Parameters: d. The x-ray tube should have a **stationary or rotating** anode.

4. **Existing Para:**

Para 2. X-Ray Parameters: f. The x-ray generator should have the facility of Half Dose.

Read as:

Para 2. X-Ray Parameters: f. **Deleted.**

5. **Existing Para:**

Para 2. X-Ray Parameters: h. Digital radiography mode: 40-110kv, minimum 21mA.

Read as:

Para 2. X-Ray Parameters: h. Digital radiography mode: 40-110kv, **minimum 12mA.**

6. **Existing Para:**

Para 3. TV System: c. The camera gain and iris collimator should be computer controlled.

Read as:

Para 3. TV System: c. The camera gain and iris collimator should be computer controlled **or controlled from control panel.**

7. **Existing Para:**

Para 3. TV System: d. The system should have atleast 17 TFT/LCD monitors with brightness of atleast 400 cd/m².

Read as:

Para 3. TV System: d. The system should have atleast 17 TFT/LCD monitors with brightness of atleast **250 cd/m² or more.**

8. **Existing Para:**

Para 4. Image Processing: a. Automatic dose level selection.

Read as:

Para 4. Image Processing: a. Automatic dose level selection / **Automatic dose control.**

9. **Existing Para:**

Para 4. Image Processing: c. Image storage of minimum 1, 00,000 images in a 1K x 1K Matrix.

Read as:

Para 4. Image Processing: c. Image storage of minimum **50,000 or more** images (internal /external storage) in a 1K x 1K Matrix.

Added Para:

1. Imaging table should have following specifications:

- a. 3 axis floating top table with carbon fiber top, stain free, radiolucent with minimum attenuation.
- b. The table should have electromagnetic locks.
- c. Length of table top: At least 240mm.
- d. Width of table top: At least 460mm
- e. Longitudinal travel: ± 300 mm or more
- f. Transverse travel: ± 100 mm or more
- g. Up / down movement: 200 mm or more
- h. Height of table top: 850-1075mm.

2. Bidder should submit IEC 60601 certificate for electrical safety latest edition for the quoted model of imaging table.

All other contents of the tender enquiry including terms & conditions remain unaltered.

Note: Prospective Bidders are also advised to check the website regularly prior to the closing date and time of online submission of bids