Amendment No. 2

Date: 24/12/2014

Sub: Amendment to Tender Enquiry Document.

Ref: NIT No. HLL/PCD/GNCTD/16/GTBH/14-15 dated 21/10/2014 read with its Amendment No.1 dated 11/12/2014

The following changes have been incorporated in the referred NIT.

Section – VII
Technical Specification

Item No.01
Fully Automatic Biochemistry for EPC

Existing Para 1: Fully automated, Random Access, continuous loading with stat facility, discrete wet Biochemistry analyser no refurbished floor model
Read as:- Fully automated **Open system**, Random Access, continuous loading with stat facility, discrete wet Biochemistry analyser no refurbished floor model.

Existing Para 25: Should provide 2 satisfactory installation with documentry proof therof, of the equipment in any Govnt., non-Govnt Hospitalof the similar bed strength in the Delhi/NCR region. such certificates much be issued by the Head of the user department.
Read as:- Deleted.

Item No.03
Combined generator of ultrasonic & advanced radio frequency energy for cutting & coagulation in surgery

Existing Para 4:- system should have the ability for software update via USB memory stick**.**
Read as: - system should have the ability for software update via USB memory stick/**communication cable.**

Existing Para 6:- system should be a single unit that provides ultrasonic energy and advanced RF energy technology for soft tissues dissection and vessel sealing.
Read as:- system should be a single/**Dual unit** that provides ultrasonic energy and advanced RF energy technology for soft tissues dissection and vessel sealing.

Existing Para 22:- System should be able to power advanced RF energy hand instruments of 5 mm shaft diameter for both open & laproscopic procedures with round tip 5 mm width in the following shaft lengths (14 cm, 25 cm & 35 cm) and should be both hand & foot activated.
Read as:- System should be able to power advanced RF energy hand instruments of 5 mm shaft diameter for both open & laproscopic procedures with round tip 5 mm width in the following **shaft lengths (10 – 45 cm)** and should be both hand & foot activated.

Existing Para 23.1:- 9 cm shaft, curved, tapered tip for precis dissection, seal 5 mm vessels as well as lymphatic with 16 mmm active blade & 240 degree activation triggers support multiple hand position.
Read as:- 9-**10** cm shaft, curved, tapered tip for precis dissection, seal 5 mm vessels as well as lymphatic with **16 – 20 mm** active blade & 240 degree activation triggers support multiple hand position.

Existing Para 23.2:- 17 cm shaft, curved, tapered tip for precis dissection, seal 5 mm vessels as well as lymphatic with 16 mm active blade & 240 degree activation triggers support multiple hand position.
Read as:- 17 -**20** cm shaft, curved, tapered tip for precis dissection, seal 5 mm vessels as well as lymphatic with **16- 20 mm** active blade & 240 degree activation triggers support multiple hand position.

Existing Para 23.4:- Curved blade having telescoping shaft (10 cm - 14 cm) with intigrated hand activation control buttons
Read as:- Curved blade having telescoping shaft **(10 /20 cm)** with intigrated hand activation control buttons.

Existing Para 23.5:- Dissecting hook having telescoping shaft 10 cm to 14 cm with integrated hand activation hand control buttons.
Read as:- Dissecting hook/other shears having telescoping shaft 10 cm to 14 cm with integrated hand activation hand control buttons.

Existing Para:- Laparoscopic surgery Instruments
Para:-1. 5 mm lap hand activated curved coagulation shears capable of sealing blood vessels upto 5 mm in diameter 36 cms and 45 cms shaft length ergonomic handle.- 6 pc
Para:-2. 5 mm lap dissecting hook 32 cm long.- 3 pc

Read as:- Para:-1. 5 mm lap hand activated curved coagulation shears capable of sealing blood vessels **upto 7 mm** in diameter **20 - 35 cms** shaft length ergonomic handle. .- 6 pc
Para:-2. 5 mm lap dissecting hook **32 - 35 cm** long.- 3 pc.

Existing Para:- RF Energy:-
Para-1- Hand probes two each of 5 mm shaft diameter for both open & laproscopic procedures with round tip 5 mm tip width in the following shaft length 14 cm, 25 cm & 35 cms and should be both hand and foot activated. Both open and lap devices should be able to simultaneously cut and coagulation tissue.
Read as:- Hand probes two each of 5 mm shaft diameter for both open & laproscopic procedures with round tip 5 mm tip width in the following shaft **length 10- 45 cms** and should be both hand and foot activated. Both open and lap devices should be able to simultaneously cut and coagulation tissue.

Item No.04
<u>High definition system for laparoscopy surgery</u>

Existing Para:- 1.Flat screen monitor:
Para:- LED display with digital video signal inputs.
Read as:- Flat screen monitor:
LED/LCD display with digital video signal inputs.

Existing Para:- 3 chip full HD camera with zoom:
Para:- 1080p 60 technology.
Para:- Camera head dimensions 43 x 53 x 75 mm
Para:- Cou dimension 305 x 89 x 305 mm.
Para:- CF camera.
Para:- Endolense focus length 13 - 32 mm

Read as:- 3 chip full HD camera with zoom:
Para:- 1080p **CCD (Charge Couple devise).**
Para:- Deleted.
Para:- Deleted.
Para:- Deleted.
Para:- Endolense focus length **15 - 28 mm.**
Added Para - Auto cleavable camera Head

Existing Para 5:- Straight telescope, 0 degree, size 10 mm rod lense system, length 32 mm minimum, autoclavable fiber optic transmission incorporated - one in number.
Read as:- Straight telescope, 0 degree, size 10 mm rod lense system**, length 29 -33 cm** minimum, autoclavable fiber optic transmission incorporated - one in number.

Existing Para 6. straight telescope, 30 degree, size 10 mm rod lense system, length 32 mm minimum, autoclavable fiber optic transmission incorporated - one in number.
Read as:- straight telescope, 30 degree, size 10 mm rod lense system, **length 29 -33 mm** minimum, autoclavable fiber optic transmission incorporated - one in number.

Existing Para 7. straight telescope, 0 degree, size 5 mm rod lense system, length 32 mm minimum, autoclavable fiber optic transmission incorporated - one in number.
Read as:- straight telescope, 0 degree, size 5 mm rod lense system, **length 29 -33 mm** minimum, autoclavable fiber optic transmission incorporated - one in number.

Existing Para 8. Straight telescope, 30 degree, size 5 mm rod lense system, length 32 mm minimum, autoclavable fiber optic transmission incorporated - one in number.
Read as:- Straight telescope, 30 degree, size 5 mm rod lense system, **length 29 -33 mm** minimum, autoclavable fiber optic transmission incorporated - one in number.

Existing Para 9. straight telescope, 30 degree, size 10 mm rod lense system, length 45 mm minimum, autoclavable fiber optic transmission incorporated - one in number.
Read as:- straight telescope, 30 degree, size 10 mm rod lense system, **length 41-45 mm**, autoclavable fiber optic transmission incorporated - one in number.

Existing Para:-30. Reusable clip applier handle 10mm with 360 degree rotation for use with multifier cartridges of medium large clips, length 370mm- one in number.
Read as:- Reusable clip applier handle 10mm with 360 degree rotation for use with multifier cartridges of medium large clips, **length 300- 370mm-** one in number.

Existing Para:-31. Reusable clip applier **handle** 5 mm with 360 degree rotation for use with multifier cartridges of medium large clips, length 370mm- one in number.
Read as:- Reusable clip applier 5 mm with 360 degree rotation for use with multifier cartridges of medium large clips, **length 300- 370mm-** one in number.

Existing Para:-32. Needle holder, ergonomical axial handle single squeeze ratchet mechanism, straight jaws with tungsten carbide insert 5 mm length 31cm –one in number.
Read as:- Needle holder, ergonomical axial handle single squeeze ratchet mechanism, straight jaws with tungsten carbide insert 5 mm **length 30- 33 cm** –one in number.

Existing Para:-33. Needle holder, ergonomical axial handle single squeeze ratchet mechanism, left curved jaws with tungsten carbide insert 5 mm length 31cm –one in number.
Read as:- Needle holder, ergonomical axial handle single squeeze ratchet mechanism, left curved jaws with tungsten carbide insert 5 mm length **length 30- 33 cm** –one in number.

Added Para:- One numbers Fibre Optic Cable of 4.5mm diameter or higher with minimum 250cm working length.

Item No. 5
LED Modular OT Light system

Existing Para:- Intensity at 1 Mtr distance : 1,60,000 - 1,25,000 Lux.
Read as:- Both dome should have **1,60,000 - 1,60,000 Lux intensity.**

Existing Para:- Colour temperature : adjusted from 3600 K to 5600 K.
Read as:- Single colour temp 4400 K or above.

Existing Para:- LED life span 40,000 Hrs approx.
Read as:- LED life span 40,000 Hrs **or above.**

Existing Para:- Key pad on light housing with following functions
Para 2. Laser pointer.
Para 5 – Changing of Colour temperature
Read as:- Key pad on light housing with following functions
Para 2 - Deleted.
Para 5 – Deleted

Existing Para:- Twin dome Light: dome should be **circular** and 360 degree rotatable.
Read as:- Twin dome light: Both domes should be 360 degree rotatable.

Existing Para:- Sizes: 20-32 cm & 17-28 cm should be circular.
Read as:- Size : **both Should be above 20cm .**
Added Para – The light should be European CE/USFDA approved model.

Item No.07
Ortho OT Table Electro Hydraulic

Existing Specification:
Name of the Item : Ortho OT Table **Electro Hydraulic**
Read as:
Name of the Item : **Ortho OT Table**

Existing Specification:
Para : **Electro hydraulic** / powered table with battery backup with manual operating control in case of handset failure
Read as:
Para : Powered table with battery backup **and Two control hand set**

Existing Specification:
Para : Guide rail /Tunnel system below the seat plate for X-ray cassette for radiography
Read as:
Para : **Deleted**

Existing Specification:
Para : Height adjustment between 650 -1150 mm without mattress (approx.)
Read as:
Para : Height adjustment between 650 -1150 mm **(± 30 mm)** without mattress (approx.)

Existing Specification:
Para : Should have weight bearing capacity of around 200kg
Read as:
Para : Should have weight bearing capacity of **minimum 250kg or more**

Added Para:
The handset should offer Trend./Reverse Trend. Lateral Tilt/ Reverse Lateral Tilt, Flexion/Extension, Height Up/Down functions, Break-up / Break-down, and 'Zero' Position.

Item No.08
C-Arm Mobile Image Intensifier

Existing Specification:
Para X-Ray Generator : High Frequency **50 Khz** X-ray Generator with power output 6KW or more should be provided
Read as:
Para X-Ray Generator : High Frequency X-ray Generator with power output 6KW or more should be provided

Existing Specification:
Para X-Ray Generator : Fluoroscopic mA output upto 5 mA or more in normal fluoroscopy and upto 15 mA in boosted fluoroscopy
Read as:
Para X-Ray Generator : Fluoroscopic mA output **upto 4 mA** or more in normal fluoroscopy and upto **12 mA in** boosted fluoroscopy

Existing Specification:
Para High Resolution Imaging Chain: The Acquisition should be made at 14 bits
Read as:
Para High Resolution Imaging Chain: The Acquisition should be made at **12 bits or more**

Existing Specification:
Para Other requirement 1 : good performance certificate from at least 3 govt./reputed pvt. having similar installations

Read as:
Para Other requirement 1.: **Deleted**

Item No.09
Digital Radiography system with Single Flat panel Detector

Existing Specification:
Para 5: Detector should be of minimum 35 cms x40 cms size (14" X 17") size film
Read as:
Para 5: Detector should be of minimum **43 cms x43 cms size (17" X 17") or more** size film

Existing Specification:
Para 13: The X-Ray tube should be mounted on a 3D column to support full range of general radiographic applications.
Read as:
Para 13: The X-Ray tube should be mounted on a 3D column c**eiling suspended** column to support full range of general radiographic applications.

Existing Specification:
Para 23: Of the generator, tube and detector at least 2 should be from the same vendor.
Read as:
Para 23: Of the **X- Ray generator**, tube and detector at least **1 should be from the Principal manufacturer**

Existing Specification:
Para 27: Should have easy up and down movement with electromechanical locking for height.
Read as:
Para 27: Should have easy up and down movement with electromechanical locking for height & **tilting to various angles from -15 Degree or more to +90 Degree.**

Existing Specification:
Para 30: The table should have a fixed base with low X-Ray absorption floating table top.
Read as:
Para 30: The **Mobile X-Ray table** should be low X-Ray absorption **with 4 way** floating table top.

Existing Specification:
Para 41: The Digital Radiography system offered should have the following:
European CE/FDA or equivalent certification
Read as:
Para 41: The Digital Radiography system offered should have **European CE and USFDA approval**

Existing Specification:
Para 45: The complete system including the tube and the detector is to be guaranteed for 5 years and labour AMC subsequent 5 years ie: 6th to 10th year. Further CMC including X Ray tube detector, other parts should be offered separately for 6th to 10th year
Read as:
Para 45: **Deleted**

Note: For warranty and CMC, GCC clause no. 15 and as stated in the list of requirement in Section VI with related Clause elsewhere in the Tender Enquiry shall be applicable

Existing Specification:
Para Turnkey
Read as:
Para Turnkey : Minor alterations in the Existing X-Ray room like civil, Electrical, Air conditioning (if required) & plumbing in consultation with HOD Radiology

Item No 10
300mA X-ray machine

Existing Para:- X-ray tube: Anode heat storage capacity of tube should be more than 150KHU or equivalent to Jule.
Read as:- X-ray tube: Anode heat storage capacity of tube should be more than **130KHU or equivalent to Jule.**

Item No. 11
Color Dolppler Ultrasound Machine

Existing Para:- The system should an integrated high resolution TFT/LCD of 18" or more with facility of tilt and swivel. It should have minimum 1024X768 pixels.
Read as:- The system should an integrated high resolution TFT/LCD of **17" or more** with facility of tilt and swivel. It should have minimum 1024X768 pixels.

Existing Para:- The system should have contrast harmonic imaging with quantification available with convex probe.
Read as:- The system should have **tissue** harmonic imaging

Existing Para:- The system should have a very high dynamic range of 170 db or more and should independently selectable in B & M mode, color doppler, power doppler mode.
Read as:- The system should have a very high dynamic range of **200 db or more** and should independently selectable in B & M mode, color doppler, power doppler mode.

Existing Para:- The system should be USFDA/European CE approved.
Read as:- The system should be **USFDA and European CE** approved.

Item No.14
Phacoemulsification system

Existing Para: - Anterior vitrectomy probe with variable cutting & maximum cutting rate more than 600 cuts per minute.
Read As: Anterior vitrectomy probe with variable cutting & maximum cutting rate **at least** 600 cuts per minute

Existing Para: Display -> 8" wide colour LCD display of Phaco Emulsification power & vacuum rates
Read As: At least **7" wide** colour **Touch screen** LCD display of Phaco Emulsification power & vacuum rates

Existing Para: Anterior vitrectomy probe with variable cutting & maximum cutting rate more than 600 cuts per minute. Probe to be reusable oscillating/ guillotine style and autoclavable.
Read As: Anterior vitrectomy probe with variable cutting & maximum cutting rate more than 600 cuts per minute. Probe to be **autoclavable/ ETO sterile.**

Existing Para: Max Vacuum range to more than 500mm Hg.
Read As: Max Vacuum range **at least** 500mm Hg**.**

Added Para: Hand piece should be included in warranty.
Number of Phaco hand pieces to be supplied: 4 Nos.
The system should be European CE and/or USFDA approved.

Item No.15
Specifications of Operating Microscope Ophthalmic

Existing Para 4 in Microscope: - Binocular Tube: Tiltable tube with integrating image inverter.
Read as: - Binocular Tube: Tiltable tube with **integrating/External** image inverter.

Existing Para 1 in Illumination: - Sterio Coaxial illumination for unique detail recognition, high contrast & stability of red reflex even for strongly pigmented, declared and ametropic eye.
Read as: - Good red reflex either Stereo coaxial illumination or red reflex enhancer or C Red 900 for high contrast & stability of Red reflex even or strongly pigmented, declared and ametropic eye.

Existing Para 7 in Microscope: - Deep View, Depth of field management system for optimal depth perception & maximum light transmission.
Read as: - Should have good depth of field for optimal depth perception & maximum light transmission.

Existing Para 1 in Suspension System: - Image inversion facility **on foot control**.
Read as: - Image inversion facility

Existing Para 4 in Suspension system:- Stand should have touch screen LCD display with programming facility for setting of XY, Zoom and focus and foot pedal.
Read as: - Stand should have **Integrated/External** touch screen LCD display with programming facility for setting of XY, Zoom and focus and foot pedal

Existing Para 1 CCTV attachment: - CCD lightweight camera with integrated camera control unit in the floor stand & programming through LCD display in the floor stand.
Read as: - 3 chip CCD lightweight camera with **integrated/External** camera control unit in the floor stand & programming through LCD display in the floor stand

Added Para: The system should be European CE and/or USFDA approved.

Item No.17
High Definition OCT

Existing Para: - OCT Scanning - San speed 27000 A - Scan per second.
Read As: OCT Scanning - San speed 27000 **or more** A - Scan per second

Existing Para: Computer: Internal an External
Read As: Computer: Internal **and/or** External

Existing Para: On-Line UPS is must.
Read As: On-Line UPS **with one hour backup.**

Added Para: The system should be European CE and/or USFDA approved.

Item No.19
Digital OPG Machine

Existing Para: - Tube Voltage: 60-90KV.
Read As: Tube Voltage: **55-80KV**

Existing Para: Tube current in range of 2-16mA
Read As: Tube current in range of **2-10mA or more**

Existing Para 2: It should be in compliance with AERB guidelines**.**
Read As: The unit should be AERB Type Approved.

Added Para: Fully digital OPG machine with flat panel detectors- CCD/CMOS type with further upgrade to 3D imaging possibility.

Item No.21
Digital OPG X-Ray machine

Existing Para 1 System: - Digital OPG X-Ray System with all flat panel or multi-linear CCD, Separate Sensors for OPG and Ceph, DICOM Compliant.
Read As: Digital OPG X-Ray System with for all flat panel or multi-linear CCD, **fixed** Separate Sensors for OPG and Ceph **components**, DICOM Compliant

Existing Para 18 X Ray Machine: Future Software up gradation up to 5 years must be made available free of charge to keep the CBCT to its maximum potential
Read As: Future Software up gradation up to 5 years must be made available free of charge to keep the **Digital OPG** to its maximum potential

Item No.22
Neonatal Ventilators

Existing Para 9; Spare with each Ventilator: - Oxygen Cell – 2 Each.
Read As: 2 extra oxygen cells to be provided; permanent/ consumable type

Existing Para 9; Spare with each Ventilator: Flow/ Pressure Sensor - 20 each
Read As: Flow/ Pressure Sensor **(reusable)** - 20 each

Existing Para 9; Spare with each Ventilator: Sensor cable - 20 Nos.
Read As: Sensor cable **(reusable)** - **05** Nos**.**

Added Para:

- **Display: Minimum 10" screen colour LCD/LED/TFT display with touch screen interface, as complete user interface**
- **Display: Display of loops & graphs required.**
- **Proximal flow sensor required.**
- **Specialized modes CPAP and APRV are required.**

Item No.24
Anesthesia Monitor

Existing Para 3: - Should have minimum 8 Channels of Waveforms with minimum 18" Colour Touch Screen Display with Vertical & Horizontal Cursors.
Read As: Should have minimum 8 Channels of **reforms of** Waveforms with minimum 18" Colour Touch Screen Display with **Menu/** Vertical & Horizontal Cursors.

Existing Para 4: Battery backup for minimum two hours should be provided as standard (Li-ion battery)
Read As: Battery backup for minimum **one** hour should be provided as standard (Li-ion battery/ **through UPS). (UPS Battery should also be covered under warranty)**

Existing Para 10: Anaesthesia Depth Monitoring by Entropy.
Read As: Anaesthesia Depth Monitoring by **Entropy/BIS.**

Existing Para 11: It should be US FDA approved **/ European CE**
Read As: Anaesthesia monitor should be **USFDA** approved

Existing Para; Scope of Supply with each Monitor: Entropy Sensor set (Complete) – 25 Nos
Read As: Entropy/**BIS** Sensor set (Complete) – 25 Nos

Item No.25
Anesthesia Workstation

Existing Para 3: - Anaesthesia machine should have minimum 60 min. Battery backup.
Read As: Anaesthesia machine should have minimum **30** min. Battery backup **and should be covered under warranty**

Existing Para 5: Anaesthesia Work Station should be **European CE/** US FDA Certified.
Read As: Anaesthesia Work Station should be **USFDA** Certified.

Existing Para 6; Gas delivery system: Should have pin Index yokes, One for Oxygen and One for Nitrous Oxide besides separate connections for Central Gas Supply for Oxygen, Nitrous Oxide and Air.

Read As: Should have pin Index yokes, **Two** for Oxygen and **Two** for Nitrous Oxide besides separate connections for Central Gas Supply for Oxygen, Nitrous Oxide and Air.

Existing Para 7; Flow meter: Dual Cascade type Flow Meter tubes for Oxygen and N2O. Range 20 ml /min to 10 LPM, Calibrated in multiple scales. Single tube for Air 100 ml to 14L/min
Read As: Dual Cascade type Flow Meter tubes for Oxygen and N2O. Range **100 ml** /min to 10 LPM. Calibrated in multiple scales, Single tube for Air 100 ml to 14L/min

Existing Para 10; Ventilator: IE Ratio: 3: 1 to 1:3
Read As: IE Ratio: **2: 1** to 1:3

Existing Para 10; Ventilator: PEEP: 0 – 20 m Bar
Read As: PEEP: **3** – 20 m Bar

Existing Para 10; Ventilator: Tidal Volume: 20-1500ml
Read As: Tidal Volume: 20-**1400ml**

Existing Para 11; Airway monitoring: Integrated Monitor (Colour Display) for Electronic Monitoring and Display of following set and measured values
Read As: Integrated Monitor (**8" or more** Colour Display) for Electronic Monitoring and Display of following set and measured values

Existing Para 14; Monitor (ii): Should have minimum 8 channels of waveforms with minimum 18" touch screen display **with** vertical and horizontal cursors
Read As : - Should have minimum 8 channels of waveforms with minimum 18" touch screen display/vertical and horizontal cursors

Existing Para 14; Monitor (iii): Battery backup for minimum two hours should be provided as standard (Li-ion battery).
Read As: Battery backup for minimum **one** hour should be provided as standard (Li-ion battery/ **through UPS). (UPS Battery should also be covered under warranty)**)

Existing Para 14; Monitor (ix): Anaesthesia Depth Monitoring by Entropy.
Read As: Anaesthesia Depth Monitoring by **BIS**

Existing Para 14; Monitor (x): It should be US FDA approved / **European CE**
Read As: It should be **USFDA** approved

Existing Para 15; Scope of supply with each machine: Entropy Sensor set (Complete) – 25 Nos
Read As: BIS Sensor set (Complete) – 25 Nos

Added Para (in Ventilator): Screen size: 8" or more colour display

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 tenders.