

Amendment No. 1

Date: 23/06/2014

Subject: Amendment to the Tender Enquiry Document

**Ref: NIT ref.: HLL/PCD/GNCTD/09/LNH/14-15 dated 04/06/2014
Tender ID in GNCTD e-Procurement portal: 2014_HFWD_58813_27**

The following changes have been incorporated in the referred tender.

SECTION VI

Existing:

Part II: Required Delivery Schedule:

a) For Indigenous goods or for imported goods if supplied from India:

60 days from date of Notification of Award to delivery at consignee site. The date of delivery will be the date of delivery at consignee site (Tenderers may quote earliest delivery period).

Installation and commissioning shall be done within two weeks of receipt of the stores/ goods at site or within two weeks of handing over the site for installation, whichever is later.

b) For Imported goods directly from foreign:

60 days from the date of opening of L/C. The date of delivery will be the date of Bill of Lading/Airway bill. (Tenderers may quote the earliest delivery period).

Installation and commissioning shall be done within two weeks of receipt of the stores/ goods at site or within two weeks of handing over the site for installation, whichever is later.

For delayed delivery and/ or installation and commissioning liquidated damages will get applied as per GCC clause 23.

Amended as (for item at sl no 27 only):

Part II: Required Delivery Schedule:

a) For Indigenous goods or for imported goods if supplied from India:

90 days from the date of opening of L/C of Direct Imported items as stated in para b) below. (Tenderers may quote the earliest delivery period).

Installation and commissioning shall be done within two weeks of receipt of the stores/ goods at site or within two weeks of handing over the site for installation, whichever is later.

b) For Imported goods directly from foreign:

90 days from the date of opening of L/C. The date of delivery will be the date of Bill of Lading/Airway bill. (Tenderers may quote the earliest delivery period).

Installation and commissioning shall be done within 60 days of receipt of the stores/ goods at site or within 60 days of handing over the site for installation, whichever is later.

For delayed delivery and/ or installation and commissioning liquidated damages will get applied as per GCC clause 23.

Section – VII Technical Specification

Item No. 27

3.0 Tesla MRI System

1. Existing specifications-

Para 4 e: The operating frequency should cover 1H and 31P nucleus (for multinuclear spectroscopy 1H and 31P)

Read as:

Para 4 e: The operating frequency should cover **23Na, 13C and 31P** nucleus (for multinuclear spectroscopy **3Na, 13C** and 31P)

2. Existing specifications-

Para 5 a: Patient table should be fully motorized **and dockable** with computer controlled table movements in vertical and horizontal directions. (Specify the patient load capacity)

Read as:

Para 5 a: Patient table should be fully motorized with computer controlled table movements in vertical and horizontal directions. (Specify the patient load capacity)

3. Existing specifications-

Para 5 d: Table technology - Bolus chasing with automatic/ continuous moving table should be offered and should be available with fluoro triggered MR angiography for manual and fast switchover in less than 1 sec for CE-MRA. **Latest table technology available with the vendor (globally) should be offered (eg. TIM-CT, etc.)**

Read as:

Para 5 d: Table technology - Bolus chasing with automatic/ continuous moving table should be offered and should be available with fluoro triggered MR angiography for manual and fast switchover in less than 1 sec for CE-MRA.

4. Existing specifications-

Para 7 a: Largest Field of View should be at least **48 cm** in all three axis. Specify the highest FOV and minimum FOV.

Read as:

Para 7 a: Largest Field of View should be at least **45 cm** in all three axis. Specify the highest FOV and minimum FOV.

5. Existing specifications-

Para 8 i: Multichannel Head coil with at least **16** channels for routine brain imaging.

Read as:

Para 8 i: Multichannel Head coil with at least **15** channels for routine brain imaging.

6. Existing specifications-

Para 8 ii: Multichannel Head coil with 32 channels or more for EPI/DTI application.

Read as:

Para 8 ii: Multichannel Head coil with 32 channels or more for EPI/DTI & fMRI application.

7. Existing specifications-

Para 8 ix: Dedicated Knee Coil - at least 8 channels

Read as:

Para 8 ix: Dedicated Knee Coil - at least **12 Channels or more transmit & receive coil.**

8. Existing specifications-

Para 8 xii: Small flex coil for pediatric applications.

Read as:

Para 8 xii: Small flex coil – **8 Channel or more coil for Neonatal Head and Neck imaging.**

9. Existing specifications-

Para 8 xiii: Endo-rectal coil (10 nos) price of each to be quoted

Read as:

Para 8 xiii: Endo-rectal coil (**disposal part only**) pack of 5nos – 2packs to be offered as standard. Unit price of each pack to be offered separately and Price of which will be fix for five years. The separate price will not consider for price comparison.

10. Existing specifications-

Para 8 xiv: Carotid coil

Read as:

Para 8 xiv: Dedicated carotid coil capable of assessing of lumen wall & plaque (RAPID or Matchnet) – Optional - price to be offered separately.

11. Existing specifications-

Para 8 xvii: Dedicated Cardiac Coil

Read as:

Para 8 xvii: Suitable coil/coil combination dedicated for cardiac application.

12. Existing specifications-

Para i (page 86): Imaging pulse sequences: i : All standard and special pulse sequences available at the time of quote/delivery should be offered and quoted in the bid. Fat suppression for high quality images both inversion recovery and Dixon method/ IDEAL/ 3D Dual Echo/ m-Dixen. The system should acquire motion artifact free images in T2 studies of the brain in restless patients (Propeller, Multivane, Blade, etc.). Dynamic study for pre and post contrast scans and time intensity studies.

Read as:

Para i (page 86): Imaging pulse sequences: i : All standard and special pulse sequences available at the time of quote/delivery should be offered and quoted in the bid. Fat suppression

for high quality images both inversion recovery and Dixon method/ IDEAL/ 3D Dual Echo/ m-Dixen. The system should acquire motion artifact free images in T2 studies of the brain in restless patients (Propeller/ Multivane-**XD / Blade**, etc.). Dynamic study for pre and post contrast scans and time intensity studies.

13. Existing specifications-

Para a (page 88): Neuro Applications: ix: The system should have the option of integrating binocular eye-tracker, and should give good quality MR compatible eye-trackers (binocular), along with eye-tracking software at the console (on a separate PC/laptop)

Read as:

Para a (page 88): Neuro Applications: ix: The system should have **the complete hardware & software for visual simulation with facility for generating all paradigm. (optional - price to be offered)**

14. Existing specifications-

Para a (page 88): Neuro Applications: 4: Susceptibility weighted imaging I SWANI Venus BOLD.

Read as:

Para a (page 88): Neuro Applications: 4: Susceptibility weighted imaging **with phase information SWI/SWIp/eSWAN**

15. Existing specifications-

Para b (page 89): Cardiac applications: 1: Advanced Cardiac Applications: VCG gating, Morphology/wall motion; Cine perfusion imaging; Myocardial viability imaging; Arrhythmia rejection techniques, Advanced Cardiac Ventricular Measurement Analysis; Cine Cardiac Tagging Techniques; Coronary artery techniques; real time interactive imaging, 2D/3D fast field echo/balanced/steady state techniques. Myocardial tagging, STIR for cardiac use, stress perfusion, 3D acquisition of whole heart in one breath hold. **Complete cardiac evaluation package to be included on the workstation, besides the main console.**

Read as:

Para b (page 89): Cardiac applications: 1: Advanced Cardiac Applications: VCG gating, Morphology/wall motion; Cine perfusion imaging; Myocardial viability imaging; Arrhythmia rejection techniques, Advanced Cardiac Ventricular Measurement Analysis; Cine Cardiac Tagging Techniques; Coronary artery techniques; real time interactive imaging, 2D/3D fast field echo/balanced/steady state techniques. Myocardial tagging, STIR for cardiac use, stress perfusion, 3D acquisition of whole heart in one breath hold.

16. Existing specifications-

Para b (page 89): Cardiac applications: 2: T1, T2, T2 quantification. Tools for evaluation in real time with automated guidance

Read as:

Para b (page 89): Cardiac applications: 2: T1, T2, T2* imaging.
Added Para b 3: Tools for automatic evaluation of iron in Heart muscles. MSK etc. (Optional - price to be offered)

17. Existing specifications-

Para c (page 89): Musculoskeletal: 3: Whole body screening imaging studies for metastasis.

Read as:

Para c (page 89): Musculoskeletal: 3: Whole body screening imaging studies for metastasis. **(PET type of imaging on MR)**

18. Existing specifications-

Para d (page 89): Hepatobiliary and abdominal system: 1: High resolution Abdominal and Liver imaging in breath hold and free breathing modes with respiratory triggered volume acquisitions with navigation, liver iron quantification and liver fat quantification software, and spectroscopy

Read as:

Para d (page 89): Hepatobiliary and abdominal system: 1: High resolution Abdominal and Liver imaging in breath hold and free breathing modes with respiratory triggered volume acquisitions with navigation and liver fat quantification software, and spectroscopy **(Standard)**

(Optional - price to be offered for Liver iron quantification)

19. Existing specifications-

Para e (page 89): Vascular Imaging: 4: Time resolved angiography with contrast kinetics like 4D TRACKS/ 4D BLISS/ KTblast or equivalent.

Read as:

Para e (page 89): Vascular Imaging: 4: Time resolved angiography with contrast kinetics like 4D TRAKS / TWIST/TRICKS 15

Added Para e 4a : Fast acquisition and reconstruction approach like KT Blast/mSense & GRAPPA/ ARC & ASSET for phase contrast velocity mapping

20. Existing specifications-

Para e (page 89): Vascular Imaging: 5: Perfusion study in organ systems like kidney, brain, heart etc. with T1 perfusion with permeability maps, and quantification of rCBF/ rCBV, MTT, etc, with color maps..

Read as:

Para e (page 89): Vascular Imaging: 5: Perfusion study in organ systems like kidney, brain, heart etc. quantification of rCBF/ rCBV, MTT, etc, with color maps.

Added Para e 6: T1 perfusion with permeability quantification maps – (Optional - price to be offered)

21. Existing specifications-

Para f (page 89): Breast Imaging : Advance package including diffusion, spectroscopy and perfusion with time intensity curve.

Read as:

Para f (page 89): Breast Imaging : Advance package including diffusion, spectroscopy and perfusion with time intensity curve.

Added Para - MR breast imaging with simultaneous view of both breast fat suppression SPAIR & visualization of rapid contrast uptake: 4D bliss/Views/Vibrant XV.

22. Existing specifications-

Para h (page 90): Spectroscopy: The system should have the Hydrogen, Single Voxel spectroscopy, Multivoxel, Multislice & Multi-angle 2D, 3D Spectroscopy and Chemical Shift imaging in 2D / 3D. The complete processing / Post processing software including color metabolite maps should be available on main console and the workstation and each of the five clients. Complete prostate, breast, liver spectroscopy hardware and applications should be provided.

Read as:

Para h (page 90): Spectroscopy: The system should have the Hydrogen, Single Voxel spectroscopy, Multivoxel, Multislice & Multi-angle 2D, 3D Spectroscopy and Chemical Shift imaging in 2D / 3D. The complete processing / Post processing software including color metabolite maps should be available on main console and the workstation and each of the **two clients**. Complete prostate, breast, liver spectroscopy hardware and applications should be provided.

23. Existing specifications-

Para h (page 90): Spectroscopy: Spectroscopy phantom for important short echo time neurometabolites, breast and prostate

Read as:

Para h (page 90): Spectroscopy: Deleted

24. Existing specifications-

Para i (page 90): Prostate Imaging with Parametric cards (Ktrans, Kep, Ve, Vp)

Read as:

Para i (page 90): Prostate Imaging with Parametric cards (Ktrans, Kep, Ve, Vp) - **(Optional price to be offered)**

25. Existing specifications-

Para j (page 90): Productivity improvement Techniques with availability of "Previous Scans" such as Smart Exam/ Auto Align /Ready for Brain, breast, joints including shoulder, hip, knee etc. to be provided. Integrated exam planning should be possible. All filming, viewing and export options should be possible.

Read as:

Para j (page 90): Productivity improvement Techniques with availability of "Previous Scans" such as Smart Exam/ Auto Align /Ready for Brain etc. to be provided. Integrated exam planning should be possible. All filming, viewing and export options should be possible. **(Standard)**

Only breast, MSK, joints including shoulder, hip, knee etc. - (optional price to be offered)

26. Existing specifications-

Para 10 (page 90): Optional software and hardware (price to be mentioned separately)

i : Multi Nuclear Spectroscopy: Facility of P31 Imaging & Spectroscopy. Double tuned surface coil for P31 and H1 Imaging and spectroscopy for liver, calf muscle, heart, etc.

ii : Double tuned head coil for 31P and 1H spectroscopy

iii : MR elastography.

iv : MRI- HIFU complete system with application for fibroid, prostate, bone etc.

v : "Silent MRI" sequence package

Read as:

Para 10 (page 90): Additional optional software and hardware (price to be mentioned separately)

i : Multi Nuclear Spectroscopy: Facility of P31 Imaging & Spectroscopy. Double tuned surface coil for P31 and **C13, 23Na** Imaging and spectroscopy for liver, calf muscle, heart, etc.

ii : Double tuned head coil fo 31P and **C13, 23Na** spectroscopy

iii : MR elastography **with quantification.**

iv : **Deleted**

v : "Silent MRI" sequence package **as close to ambient without any lose of image quality on all sequences.**

27. Existing specifications-

Para 11 (page 90): Additional workstation :Client server architecture-server with 5 concurrent clients (Dexus, Intelligence Portal, Syngo.via, etc. or higher) capable of rendering 40000 images at peak performance. Workstation hardware should be industry standards, and should be the latest with the vendors, as per their globally launched product catalogue.

Read as:

Para 11 (page 90): Additional workstation :Client server architecture-server with 5 concurrent clients (Dexus, Intelligence Portal, Syngo.via, etc. or higher) capable of rendering **20000** images at peak performance. Workstation hardware should be industry standards, and should be the latest with the vendors, as per their globally launched product catalogue.

28. Existing specifications-

Para 11 (page 91): Additional workstation:

c: The offered System is to be networked with the existing "Department Network" including PACS and appropriate anti-virus protection to be provided by the Vendor.
The vendor should provide picture storage and archival system, to store and retrieve MR images.

d: The system should have DICOM 3.0 compliant interface and enabled for networking connectivity to Linux/ Windows based servers/ clients with patient ID labelling and integration to generic hospital information system/ PACS

e: To be quoted optionally, facility to view images/reports on mobile services (through VPN) and web clients. 2D/3D image viewing with basic image manipulation tools to be quoted.

The package should permit 5concurrent usersto view images.

One broadband connection with Static IP(2MBPS) and one server to be provided for VPN.

The monthly recurring expense for broadband / VPN to be provided by Vendor. The hardware for 5 clients to be provided. **Price to be quoted separately.**

f: To be quoted separately, three RIS software / licences for registration, DICOM worklist, integrated with offered PACS, with registration, sticker printing, scheduling and appointment modules, and corresponding hardware for RIS also should be included.

Module for scheduling and imaging

Modality, exam date and time will be fixed during scheduling of the exam

Appointment letter with patient instructions will be printed from RIS and given to patient for OPD patients, ward patients, critical patients and VVIPs

DWL licences to plan, perform and document examinations

Statistics of exams, etc.

g: Comprehensive Radiology reporting software having normal reports of MRI and CT of various body parts.

i: It should be possible to edit the reports and generate customized reporting formats

ii: It should be able to assign a unique ID for each report

iii: It should be possible to search for the reports upto at least one year by entering patient details/ date of examination, etc.

iv: It should be possible to sort out the reports on daywise basis for purpose of archiving them on CD/DVD

Read as:

Para 11 (page 91): Additional workstation:

c: Deleted

d: The system should have DICOM 3.0 compliant interface and enabled for networking connectivity to Linux/ Windows based servers/ clients with patient ID labelling and integration to generic hospital information system/ PACS – **Integration with existing network.**

e: The monthly recurring expense for broadband / VPN to be provided by Vendor during warranty & CMC period. The hardware for 5 clients to be provided.

f: Deleted

g: Deleted

29. Added Para:

The offered Model should be USFDA approved.

30. Existing specifications-

Para 13 (page 92): Accessories: h: Two Non-ferromagnetic MR compatible patient transfer trollies of international make should be provided. **(in case of dockable table, one extra trolley to be supplied)**

Read as:

Para 13 (page 92): Accessories: h: Two Non-ferromagnetic MR compatible patient transfer trollies of international make should be provided

31. Added Para(Page 93) A:

MRI COMPATIBLE ANAESTHESIA MACHINE SPECIFICATIONS:

Para xxvi: Anesthesia workstation should be USFDA approved

32. Existing specifications-

Para (page 96): WARRANTY PERIOD: i: The equipment should have 60months warranty from the date of handing over the fully functional unit of all coils and the accessories supplied (such as UPS, AC, Generator, etc) to the hospital against manufacturing defects of material and workmanship. The Helium Supply and cold head repairs (including replacement. If needed) should be included in the warranty period. The vendor should take care of the day-to- day running of the UPS, AC generator, etc. on 24 hr basis with manpower. **The vendor should provide the cost of manpower separately for the 5+5 year period**

Read as:

Para (page 96): WARRANTY PERIOD: i: The equipment should have 60months warranty from the date of handing over the fully functional unit of all coils and the accessories supplied (such as UPS, AC, Generator, etc) to the hospital against manufacturing defects of material and workmanship. The Helium Supply and cold head repairs (including replacement. If needed) should be included in the warranty period. The vendor should take care of the day-to- day running of the UPS, AC generator, etc. on 24 hr basis with manpower. **The man power cost to be included in warranty and CMC period.**

33. Existing specifications-

Para (page 96): POST GAURANTEE ANNUAL COMPREHENSIVE MAINTENANCE CONTRACT (CMC): iii: The insurance should be done by the bidder to cover the losses, if any, due to force major conditions. **The rate of post-warranty comprehensive CMC should be offered for at least five years by the bidder and be offered in Indian Rupees only.**

Read as:

Para (page 96): POST GAURANTEE ANNUAL COMPREHENSIVE MAINTENANCE CONTRACT (CMC): iii: The insurance should be done by the bidder to cover the losses, if any, due to force major conditions **till the equipment is delivered to the Hospital.**

34. Existing specifications-

Para (page 98): Site Preparation Work: b: Electrical work & Air conditioning: The firms shall be required to specify the total load requirements for the entire equipment the air-conditioning units, room lighting and for the accessories if any. The load will be provided by the Institute to the distribution panel. The distribution's panel should have switch gear of Siemens / L& T makes and shall be provided by the vendor. (Any specific requirement of any kind if required shall be the responsibility of the tendering firm).

Read as:

Para (page 98): Site Preparation Work: b: Electrical work & Air conditioning: The firms shall be required to specify the total load requirements for the entire equipment the air-conditioning units, room lighting and for the accessories if any. The load will be provided by the Institute to the distribution panel. The distribution's panel should have switch gear of Siemens/ L& T makes and shall be provided by the vendor. (Any specific requirement of any kind if required shall be the responsibility of the tendering firm). **Power Cable shall be provided by the Institute to the Distribution panel up to MRI Electrical/UPS Room**

35. Existing specifications-

Para (page 99): Site Preparation Work: d: Furniture: vi: View box (Planilux or equivalent make) for at least four 14 x 17" fibres - 6 in numbers

Read as:

Para (page 99): Site Preparation Work: d: Furniture: vi: View box - **ultra slim with LED light with uniform illumination and rotary control** (Planilux or Mex or equivalent make) for at least four 14 x 17" fibres - 6 in numbers.

36. Existing specifications-

Para (page 99): Site Preparation Work: e: Miscellaneous: iii: The vendor will provide manpower for utility security & operation on 24x7, 365 days basis during 5 year guarantee period and subsequently the cost to be included in CMC being offered.

Read as:

Para (page 99): Site Preparation Work: e: Miscellaneous: iii: The vendor will provide manpower for utility security & operation of **(D.G. & Equipment accessories)** on 24x7 for 365 day basis during 5 year guarantee period and subsequently the cost to be included in CMC being offered.

37. Existing-

Para (page 101): 1. Warranty: b) 98% up time Warranty of complete equipment with extension of Warranty period by double the downtime period on 24 (hrs) X 7 (days) X 365 (days) basis.

Read as:

Para (page 101): 1. Warranty: b) 95% up time Warranty of complete equipment with extension of Warranty period by double the downtime period on 24 (hrs) X 7 (days) X 365 (days) basis.

38. Existing-

Para (page 101): 4. Annual Comprehensive Maintenance Contract (CMC) of subject equipment with Turnkey: e) There will be 98% uptime warranty during CMC period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend CMC period by double the downtime period.

Read as:

Para (page 101): 4. Annual Comprehensive Maintenance Contract (CMC) of subject equipment with Turnkey: e) There will be 95% uptime warranty during CMC period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend CMC period by double the downtime period.

Note: 1. Price for optional items to be quoted separately in given price format and not to be mixed with main equipment offer quoted as standard.

2. Price for 'Buy-back' offer of existing system as mentioned in para 15 of the tendered specification to be given in any standard format in a separate price sheet, on Lump sum and 'as is where is basis'. Any applicable tax liabilities will be to the purchaser's account.

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