

AMENDMENT-VI

Ref.: IFB No. HSCC/SJH/Medical Equipment/2016/26 Dated 04.01.2017

Sub.: Procurement of Medical Equipment for New Emergency Block & Super- Speciality Block at Safderjung Hospital, New Delhi.

Due to inadequate response of item no 3 and 4. the bid submission date extended from 07.03.2017 to 14.03.2017. Item no 1 and 2 extended from 07.03.2017 to 14.03.2017

Technical Amendment:

Item No. 1

BRAINSUITE INTRAOPERATIVE MRI 1.5T – Technical Amendments

Existing As : MRI manufacturer will be the main vendor and he will be responsible for coordinating with other companies to hand over it in the functional state. This will be executed on the turnkey basis.

Competitive bids (Technical and price separately) are invited for a state of the art neuro – surgical operating room complex with fully integrated high resolution actively shielded 1.5T MR imaging system with intra operative neuronavigation with automatic image registration facility. MR compatible head fixation with parallel imaging. Functional imaging, imaging for Gamma Knife planning required for the New Super Speciality Block in Safdarjung Hospital. New Delhi, Only manufacturers of 1.5 Tesla MRI machine who are represented directly in India and who can integrate with the other vendors to provide the complete integrated solutions satisfying all the tender requirements can participate in the bid. The bidding company will be solely responsible for the supply and maintenance of the system and all the components of the bid. The system should also include floor mounted operating microscope & microscope based neuro-navigation, anaesthesia work station. Monitors and additional anaesthesia related equipment, electrophysiological monitoring. OR Lighting , ceiling, suspended high resolution image display and with all accessories. **It should be possible to perform real time MR guided brain biopsy/catheter placement & deep brain stimulation.** All components should be MR compatible & integrated to ensure smooth work flow. The system should permit intra –operative imaging control as well as routine MR imaging and should be designed & executed on turnkey basis in the designated area of the New Super Speciality Block in Safdarjung Hospital. New Delhi. The area construction involves modification of the existing structure with an extension on side as designated by the authorities of New Super Speciality Block in Safdarjung Hospital. New Delhi. On site inspection by the potential bidders before submission of the technical

/financial bid is encouraged. The setup should offer all surgical procedure to be performed with standard surgical instruments immediately outside of the 5 gauss field line of the MR Scanner or in the regular OT away from MR.

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1. 1.5 Tesla MRI for Intraoperative Imaging (DR):

Existing as: b. :- High Performance gradient system with minimum gradient strength of 33mT/M or better with slew rate 120 Mt/m/ms

Amended as: :- High Performance gradient system with minimum gradient strength of **44mT/M** or better with slew rate **200 Mt/m/ms** or more

Existing As : f. Digital RF Transmit and Receive System with 16 independent RF channels to permit PAT factors up to 4 (one direction) or more to help increase speed acquisitions.

Amended as : Digital RF Transmit and Receive System with **32 or more** independent RF channels to permit PAT factors up to 4 (one direction) or more to help increase speed acquisitions.

Existing As : g. :- Head Coil with frame should be minimum 8 Channels and should have minimum 3 fixation points, can be used for image acquisition and intra-operative applications in Prone, spine & lateral positions.

Amended as : Head Coil with frame should be minimum 8 Channels and should have minimum 3 fixation points, can be used for image acquisition and intra-operative applications in Prone, spine & lateral positions.

- **AMENDED Intraoperative head Coil** with frame should be minimum 6 Channels and should have minimum 3 fixation points, can be used for image acquisition and intra-operative applications in Prone, spine & lateral positions

Amended as Should have the imaging coil i.e Head / neck coil(20 Channel or more), spine coil (32 Chanel) , Body coil(18 Channel or more) 2 flex coil for supports systems for imaging brain, spine & rest of body.

4. Compatible ceiling mounted OR lights :

a. .: Operating Room should have high-end surgical OR lights with 2-arm system with single /multi bulb technology with High illumination intensity at least 130000 lux. For attachment to roof Part should be provided.

Amended as : Operating Room should have high-end surgical OR lights with **4-arm** system with single /multi bulb technology with High illumination intensity at least 130000 lux. For attachment to roof Part should be provided.

New Points Added in MR Compatible Items: (G)

- 1.RF Cabin: The system should be supplied with the imported RF cabin with RF room shielding, RF Door screen, and interiors for the same should be carried out suitably.
2. Dual/triple Head MRI-Compatible Pressure Injector (minimum 2000 cost line) with 500 sets of syringes (Two syringes &connecting tubing per set). It should be compatible with 10, 15, 20 & 30 ml pre-filled contrast syringes and 50 ml syringes for both saline and contrast.
3. Non-magnetic I/V stands (2 Nos.)
4. Water Chiller for Cold Head and Gradients
5. 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)
6. Fire Fighting System, Detectors and 6 Fire Extinguishers (MR Compatible) to be provided
7. Hand held metal detectors - 4 Nos
8. Closed circuit CCD camera for patient observation.Phantoms for image quality audits to be provided.
9. MR Compatible Infusion Pump (2000 Gauss Line) 5 Nos.
10. Patient positioning accessories with hand held alarm & look-out mirror.
- 11.MR Compatible Transport Ventilator. (1000 Gauss Line)
- 12.Two laptops with 1 TB storage, 4 GB RAM & Windows 10 operating system (of reputed make) with laser Printer, UPS & Dictaphone.
13. 2 Metal Detector to be provided.

6. Compatible equipment:-

Existing As : 7 :-OT Table :OT Table high end, top of which to should be MR Compatible and top should be slide on to trolley to be taken to MRI room. MR compatible 3 pin head fixation system should be supplied with 6 spare pins set and table attachments.

Amended as :: OT Table high end **with wheels and brakes**, top of which to should be MR Compatible and top should be slide on to trolley to be taken to MRI room. MR compatible 3 pin head fixation system should be supplied with 6 spare pins set and table attachments.

Training :

- a. **Existing As:** Training for surgeons, Radiographers, Nurses & Technicians should be done onsite & other centres where brain suit exist by the supplier for two continuous weeks followed by repeat trainings of one weeks each at 6 months & 12 months from the day of going clinical.

Amended as: Training for 3 surgeons, 3 Radiographers, 3 Nurses & 2 Technicians should be done onsite 3 surgeons to be trained on other centres where brain suit exist by the supplier for two continuous weeks followed by repeat trainings of one weeks at 6 months from the day of going clinical.

Warrantee: :-5 Year warranty with 95 % up time maintenance.

Existing As : At the end of Assembly of intraoperative MRI Neuro Navigation and other things needed for the Brain suit should be complete and system should be able to perform the surgery on the patient in the brain suite.

Amended as : The complete system should be integrated and various sub components should be compatible and work in sync. with each other .

The Site layout plan of Brain Suit is enclosed

