

AMENDMENT NO.1 DATED 01.07.2026

Ref: Tender No: HLL/PSD/2026-27/25 & GeM Bid No. GEM/2026/B/7652313 DT: 11.06.2026

The following amendments have been incorporated in the ATC documents of the above mentioned tender invited for Supply and Installation of 1.5 T MRI machine at Various District Hospitals across the country-

ATC Section F- Technical Specification

Clause Number	Existing Specification	Amended Specification
I. General Requirements	1. System Tier: High-Performance 1.5 Tesla MRI System for advanced clinical and vascular diagnostics.	1. System Tier: High-Performance 1.5 Tesla MRI System for advanced clinical, Cardiac, Neurology, Oncology vascular and Whole body applications.
	4. Artificial Intelligence: Deep Learning for both SNR and Resolution enhancement must be provided.	4. Artificial Intelligence: 2D and 3D deep learning sequences for SNR, resolution enhancement for Neuro imaging cardiac imaging, abdominal imaging, onco imaging, MSK imaging and angiography should be provided. The complete package available with the vendor should be offered.
II. Magnet System	2. Dimensions: Magnet length (cover to cover) should be less than 160 cm	2. Dimensions: Magnet length (cover to cover) should be less than 180 cm
	3. Bore: 60 cm patient bore with flared opening.	3. Bore: 60 cm or more patient bore with flared opening.
	4. Field of View: 50 cm x 50 cm x 50 cm.	4. Field of View: At least 50 cm x 50 cm x 45 cm
	5. Homogeneity: < 3.5 ppm over 40 cm DSV.	5. Homogeneity: < 1 ppm over 40 cm DSV
	6. Zero boil off helium technology.	6. Zero Helium boil off / Sealed magnet with no helium refill technology
III. Shim & Advanced Sensing Technology	2. Advanced Sensing Technology: Must include, Respiratory Sensor, Local Coil Shimming, and Automated Slice Adjustment.	2. Advanced Sensing Technology: Must include, Respiratory Sensor, First order shimming and Automated Slice Adjustment

Clause Number	Existing Specification	Amended Specification
IV. Gradient System	1. Gradient Performance: Actual maximum gradient strength of 20 mT/m.	1. Gradient Performance: Actual maximum gradient strength of 30 mT/m or more
	2. Slew Rate: Actual slew rate of 40 T/m/s.	2. Slew Rate: Actual slew rate of 100 T/m/s or more
	3. Capability: Simultaneous gradient performance on all axes.	3. Capability: Simultaneous/Independent gradient performance on all axes
V.RF System	3. Channel Capacity: Maximum channels in single FOV: 16.	3. Channel Capacity: Maximum channels in single FOV: 16 channel or equivalent channel independent.
VI. Patient Table	2. Position accuracy +/- 1.0 mm; Load capacity 140 kg.	2. Position accuracy +/- 1.0 mm; At least Load capacity 140 kg.
VII. Coil System	1. Spine Coil: High-Channel Density Spine coil with 12 elements.	1. Spine Coil: High-Channel Density Spine coil with 24 elements or more.
	2. Body Coil: 9-channel anterior body coil.	2. Body Coil: 12-channel or more anterior body coil
	4. Extremity Coils: 8-element Knee; 3-element Shoulder	4. Extremity Coils: At least 8-element Knee; at least 8-element Shoulder
	5. Specialty Coils: 8-element Breast coil; Small and Large 4-element Flex coils	5. Specialty Coils: At least 8-element Breast coil; Small and Large at least 8-element Flex coils
VIII. Application Sequences	38. For T1, T2, PD imaging, perfusion, regular diffusion values (at least 5b, 3 directions) EPI FLAIR, EPI-1R, EPI FLAIR diffusion tensor, EPI MT FLAIR, tensor diffusion and diffusion studies. Suitable artifact/ fat suppression techniques to be incorporated in the sequences to have optimum image quality.	38. For T1, T2, PD imaging, perfusion, regular diffusion values (at least 5b, 3 directions) EPI FLAIR, EPI-IR, EPI FLAIR & EPI Diffusion Tensor. EPI MT FLAIR or equivalent sequence for tissue characterization, tensor diffusion and diffusion studies

Clause Number	Existing Specification	Amended Specification
	50. For peripheral moving table angiography should be offered covering hip to limbs to be examined in one go with high resolution and high SNR.	50. For peripheral moving table angiography should be offered covering neck to toe to be examined in one go with high resolution and high SNR and whole body Angiography should be possible in one go without repositioning.
	58. Zoom IT/ Resolve or equivalent, Application for high resolution for small FOV diffusion imaging (to be part of pre bid discussion)	58. ZOOMIT/FOCUS/Zoom/equivalent. Diffusion & RESOLVE/PROGRESS/EPIC / Equivalent. High Resolution Diffusion with b value upto 2500 for whole body especially prostate diffusion.
	68. Radial/Spiral pulse sequences for ultrafast imaging.	68. Radial/Spiral pulse sequences for ultrafast imaging. Dynamic Contrast Enhanced Imaging should be provided.
	85. Proton MRS Sequences for single-voxel acquisition, with selectable fat /lipid saturation bands, options of water saturation (eg. VAPOR, CHRSS, etc) with all post-processing software,	85. Proton MRS Sequences for single-voxel acquisition, with selectable fat /lipid saturation bands, options of water saturation with all post-processing software
	90. Licences of all the post processing and evaluation packages should be provided for the main and additional console/Workstation.	90. Licenses of all the post processing and evaluation packages should be provided for the main console and additional Workstation.
	119. The complete package of with AI based algorithm like Deep Resolve Boost/Air Recon DL/ Precise Image	119. The complete package of AI based algorithm available with the vendor with 2D, 3D, EPI, Fat Sat, motion correction deep learning sequences for SNR, resolution enhancement for Neuro imaging cardiac imaging, abdominal imaging, onco imaging, MSK imaging and angiography should be provided.
IX. Work station & Computing	2. Advanced post-processing for Cardiac and DTI.	2. All the post-processing applications including advanced post-processing for Cardiac and DTI should be included in both Main console and in additional Workstation

Clause Number	Existing Specification	Amended Specification
X. Site Modification & Infrastructure	1. RF Cabin: Prefabricated Stainless Steel Modular RF Cabin.	1. RF Cabin: Prefabricated Stainless Steel / GI material / Copper Modular / customized RF Cabin.
	3. HVAC: 25 TR system with standby redundancy.	3. HVAC: 22 TR (11+11 TR) system with standby redundancy.
1. Civil Works	11. Wall tile shall be provided in the patient preparation room and waiting-area to the height of 180cms.	11. Wall tiles up to 180cm height will be considered only for patient preparation room, Toilet and waiting area. All other rooms such as console room, and UPS room, battery room & change room will be provided with floor tiles and 100mm tile skirting. The walls will be finished with 2 coats of Plastic emulsion paints.
	21. LED backlighting ceiling (skylight) should be provided in MRI room for patient comfort.	21. LED backlighting ceiling (skylight of size 8ft X 4 ft) should be provided in MRI room for patient comfort.
	33. Metal detector doors of width at least 90 cms to be installed at the entrance point of the magnet room.	Clause deleted
	34. Non magnetic patient transfer trolley – 2 nos	34. MR Compatible non magnetic patient transfer trolley – 2 nos
	35. Non magnetic wheel chair – 2 nos	35. MR Compatible non magnetic wheel chair – 1 nos

Clause Number	Existing Specification	Amended Specification
<p>3. HVAC WORKS</p>	<p>2. Supply, installation, testing and commissioning (SITC) of 2 No's 25 TR or higher capacity air cooled ductable split air conditioner with ceiling suspended IDU and all standard fittings, IDU SS drain pan, as per specifications complete with suitable capacity drive motor, air cooled condenser with all accessories, hermetically sealed scroll twin compressor, Evaporator coil have integrally finned copper tubes. The compressor should have independent refrigerant circuits, expansion devices , HP/LP cut off, electronic microprocessor pendant controller with digital display, first charge refrigerant gas, vibration isolator pads, structural supports for fixing IDU/ ODU as shown in the drawing, safety devices including thermal protector, pressure relief valve, over load relays single phase preventor, wired remote control etc, power wiring(max 3m from isolator) and control cabling(indoor to outdoor),thermostat wiring, high-low pressure cut out, suitable for three phase 440V supply etc complete as required. The 2 compressors shall work together when the heat load is high and when low the compressors shall work alternatively.</p>	<p>2. Supply, installation, testing and commissioning (SITC) of 2 No's 11 TR (total 22 TR) or higher capacity air cooled ductable split air conditioner with ceiling suspended IDU and all standard fittings, IDU SS drain pan, as per specifications complete with suitable capacity drive motor, air cooled condenser with all accessories, hermetically sealed scroll twin compressor, Evaporator coil have integrally finned copper tubes. The compressor should have independent refrigerant circuits, expansion devices , HP/LP cut off, electronic microprocessor pendant controller with digital display, first charge refrigerant gas, vibration isolator pads, structural supports for fixing IDU/ ODU as shown in the drawing, safety devices including thermal protector, pressure relief valve, over load relays single phase preventor, wired remote control etc, power wiring(max 3m from isolator) and control cabling(indoor to outdoor),thermostat wiring, high-low pressure cut out, suitable for three phase 440V supply etc complete as required. The 2 compressors shall work together when the heat load is high and when low the compressors shall work alternatively.</p>

Following specification are added additionally

Additional Specifications:-

Clause No.	Additional Specifications
VI. Patient Table	3. The Scannable coverage of whole body should be possible in one go without patient re-positioning.
VIII. Application Sequences	121. Diffusion & Tractography Imaging should be provided. Free-breathing cardiac MRI acquisitions should be provided.
X. Site modifications & Infrastructure	7. Should supply independent dual Syringe Pressure injector of reputed make with following features; Non-ferrous, automatic syringe size detection, performs single/dual phase contrast injections, provides Saline flush delivery and allows timed contrast delivery. 100 nos compatible syringes with connectors should be provided. Must be able to observe progress of injection and view injection result
	8. Dry Imager with resolution of 500 dpi or more and 2 online trays should be supplied. Two packets of 100 films each shall be supplied.
	9. Walk through Ferro magnetic Detection System (FMDS) with multiple fluxgate sensors with approaching ferro magnetic hazard detection and with door ignore function to be installed at entry of MRI Scanner Room (Zone III type) - 01 no. Must have continuous detection or alert capability following MRI door opening, or following preceding alert. Must allow passage of patient trolley.
	10. MRI CONDITIONAL ANAESTHESIA MACHINE with integrated electronic ventilator, 2 vaporizer, inbuilt suction circle absorber. The rate for MR compatible Anaesthesia workstation shall be offered separately as an optional item in the uploaded financial statement and this rate will not be considered for financial bid evaluation. The offered rate shall be valid for three years.
	11. The rate for MR compatible Desktop model pulse oxymeter with plethysmograph shall be offered separately as an optional item in the uploaded financial statement and this rate will not be considered for financial bid evaluation. The offered rate shall be valid for three years.

Clause No.	Additional Specifications
XI. Training	Training to Doctors and Technicians on equipment in clinical aspects for operating and maintaining the equipment and especially related to the various MRI applications for a period of at least 4 weeks. The training shall be provided in multiple instalments of few days to weeks at a time, as per the convenience of user department and centre/ hospital. The details of training done shall be provided to HLL with acknowledgement from hospital authorities
1. Civil Works	41. MRI Compatible O2 cylinders - 2 Nos.
	42. The works shall be executed as per the regulatory requirements of Clinical Establishment Act. Necessary Safety Zone and warning signs shall be provided as part of turnkey works.

COMMERCIAL TERMS & CONDITIONS		
ATC Section & Clause Number	Existing Specification	Amended Specification
Section A; 5	HLL A/c Details for payment of EMD (Payment mode: NEFT / RTGS)	HLL A/c Details for payment of EMD (Payment mode: NEFT / RTGS/ Bank Guarantee)
Section A	General Instruction to bidders; Clause no 6&7	As the bid value is more than Rs.200 Crores, Make In India clauses are not applicable.
Section B; E.3	Bidder shall have the following experience : - The Bidder must have successfully supplied and installed same or similar model of equipment for which the bids are invited, in last three years ending 31st March 2026. The bidders are required to furnish supply order copies and corresponding performance certificates, and the equipment shall be satisfactorily functioning in India. The bidders are also required to furnish performance certificates of the same / similar model of equipment supplied in the past 3 financial years for 20% of the quantity (10 Nos) of equipment invited. Bidders quoting should be a manufacturer/	As per GeM Bid Document clause no. 6; Past Performance: The Bidder or its OEM {themselves or through re-seller(s)} should have supplied same or similar Category Products (MRI Machine) for 20% of bid quantity, in at least one of the last three Financial years before the bid opening date to any Central / State Govt Organization / PSU. Copies of relevant contracts (proving supply of cumulative order quantity in any one financial year) to be submitted along with bid in support of quantity supplied in the relevant Financial year. In case of bunch bids, the category related to primary product having highest bid value should meet this criterion.

COMMERCIAL TERMS & CONDITIONS		
ATC Section & Clause Number	Existing Specification	Amended Specification
	<p>authorized/ direct importer having experience on its own or through their OEM shall have successfully supplied and installed the same or similar equipment.</p> <p>The order shall be awarded to the responsive qualified bidder, who quotes the lowest amount in total. Copies of work orders and satisfactory work completion reports issued by the Client/Authority concerned shall be submitted in proof of the same.</p>	
Section B; E.13	Dully filled Self-Declaration – Make in India Preference as per item no. 4 of Section G	Not Applicable
Section C; 11b	The supplier shall ensure continuous service support and availability of all kinds of spares for a period of 15 years from the date of manufacture of the machine	The supplier shall ensure continuous service support and availability of all kinds of spares for a period of 10 years from the date of manufacture of the machine.
Section D; 5	After sales service center should be available at 24 (hrs) X 7 (days) X 365 (days) basis. An undertaking by the Manufacturer shall accompany the tender that the spares for the equipment shall be available for at least 1 year + 14 years defect liability period from the date of supply	After sales service center should be available at 24 (hrs) X 7 (days) X 365 (days) basis. An undertaking by the Manufacturer shall accompany the tender that the spares for the equipment shall be available for at least 1 year + 09 years defect liability period from the date of supply
Section L; 8	It is agreed that___will provide preventive maintenance call at least one visit in four months and the gap between any two Preventive Maintenance should not be less than 90 days and not more than 115 days and attend all breakdown calls, within the time limit prescribed in the tender. In addition, all breakdown calls shall be attended	It is agreed that___will provide preventive maintenance call at least one visit in four months and the gap between any two Preventive Maintenance should not be less than 90 days and not more than 115 days and attend all breakdown calls, within the time limit prescribed in the tender. In addition, all breakdown calls shall be attended

COMMERCIAL TERMS & CONDITIONS

ATC Section & Clause Number	Existing Specification	Amended Specification
	to immediately and all major repairs shall be rectified within 7 calendar days from the date of intimation, as per tender, failing which, a penalty of Rs.50,000/- per day thereof is leviable until the equipment is repaired and commissioned to the satisfaction of the end user, For this purpose you shall carry sufficient inventories to assure prompt replacement of defective parts as per tender	to immediately and all major repairs shall be rectified within 5 calendar days from the date of intimation, as per tender, failing which, the CAMC period shall be extended to double the breakdown period, For this purpose you shall carry sufficient inventories to assure prompt replacement of defective parts as per tender

All other technical specifications of the original tender document remain unchanged

All relevant clauses of the tender document are to be read in accordance with the above change and in case if any bids were already submitted, if required you may resubmit the documents in compliance of the above amendment.

All other terms and conditions of the original tender document shall remain unchanged.

Vice President (PS) & GH (HCS)