

**Corrigendum**  
**In tender document**  
**Tender Enquiry No. 24/Nuclear Med/353/2018-Rish(Admn)**

Dated: 07-07-2018

As per schedule, Pre- Bid meeting of "Tender for Establishment of PET/CT Facility of Department of Nuclear Medicine" was held on 06-06-2018 at 03.00 PM, in the tender opening room.

After consideration by Store Purchase and Technical evaluation committee following modification (deletions/additions/replacements) additions for Tender Enquiry 24/Nuclear Med/353/2018-Rish(Admn)" has been made.

- EMD in above tender is also accepted in form of Bank Guarantee.

**Down Time Penalty of point Srl no. 37 at page no. 06: -**

- If breakdowns more than 48 hours' warrantee of the equipment will be enhanced one week for further 24 hours. This will have ceiling up to 4 weeks (96 hours) after that Institute will get it repaired from other vendors on cost of equipment supplier which shall be first raised for deposit said repair amount and then in non-responding will be recovered from security deposit 10% of cost of equipment from L1 bidder, with the penalty upto 10% of repair amount. If such thing repeated in next time, bidder will be debarred with forfeiting of security deposit.
- Delivery period of the equipment will be 90 days from opening of Letter of Credit.

**Payment Term for Imported Goods: -**

- Letter of Credit (LC) will be opened on 100% Cost of equipment. However, it will be released 75% on shipment & 25% after successful and satisfied installation report.

**Payment Term for Site Modification: -**

- Site modification is Turnkey and payment will be released after due measurement by Engineering Department and recommendation of indenting department.

**Following Technical points are being changed: -**

<b>A</b>	<b>Nomenclature</b>
	A high resolution state- of- art <b>Positron Emission Tomography – Computed Tomography (PET-CT)</b> scanner solid state CT detectors with <b>acquisition or generation of 128 slices per rotation</b> with <b>time of flight</b> technology. Quantity : 01 in number, introductory year should be latest.
<b>C</b>	<b>General</b>
1	A latest technology DICOM ready state of art whole body Positron emission Tomography system integrated <b>with spiral CT system with acquisition or generation of 128 slices per rotation.</b> Designed for providing volume measurement of metabolic and physiologic processes using positron emitters as well as producing accurate structural and anatomical fusion images and making attenuation maps for CT based attenuation correction.
<b>D</b>	<b>Gantry and Detector</b>
4	PET crystal thickness should be $\geq 20$ mm (please specify in mm) to give system sensitivity of $\geq 5.5$ cps/KBq standard (without TOF)
<b>E</b>	<b>Detector Performance ( Please mention as per NEMA )</b>
1	System sensitivity atleast $\geq 5.5$ CPS/KBq
8	Axial & Transverse spatial resolution at 1 cm & 10 cm from the central axis of the gantry should be $\leq 7$ mm FWHM
<b>F</b>	<b>CT Specifications</b>
2	<del>CT should have 64 physical rows of detectors with minimum 38mm width of detector (deleted )</del>
4	<del>Low contrast detectability should be at least 4 mm @ 0.3% on 20 cm CATPHAN phantom-(remove)</del> <b>Specify the low contrast detectability and associated dose.</b>
<b>G</b>	<b>Patient Bed</b>
2	It should be able to bear $\geq 195$ kg or more of patient weight ( Please Specify).
<b>H</b>	<b>Data acquisition and reconstruction workstations</b>
1	One high performance multi-tasking Acquisition Workstation independent of main processing unit. The workstation should have a minimum 2TB HDD storage, high processor speed, and high resolution (1024 x 1024 or more) antiglare flat panel Dual LCD monitor of minimum <b><math>\geq 21</math>" size</b> . The workstation should be of latest specifications at the time of shipment.
4	<b>Four</b> high performance multi-tasking post processing workstations having minimum 32 GB RAM, 3 GHz processor speed, minimum 1 GB graphic card, 2 TB

	<p>or more HDD (if less, another SDD may be included) logically divided into 3-4 partitions, Optical Mouse, Key-board and high resolution anti-glare flat panel dual view LCD monitor <b>of ≥ 21"</b> size with minimum resolution of (1280 x 1024). It should also have CD and DVD combo drive with writer facility. It should have both, serial and USB ports. The graphical user inter-face (GUI) should be identical to that of the acquisition unit. The computer workstation should be of latest specifications at the time of shipment</p> <p><b>( OR )</b></p> <p><b>Four High performance Multitasking workstations with Server in Client Server Environment with 4 concurrent Permanent licences . Server should have at least 128 GB RAM and with concurrent streaming of 40 K slice processing capacity &amp; at least 20 TB storage capacity. Workstations should have 16 GB RAM with 21' monitors for review. Optical Mouse, Key-board and high resolution anti-glare flat panel dual view LCD monitor <b>of ≥ 21"</b> size with minimum resolution of (1280 x 1024).</b></p> <p><b>Redundant or mirror server.</b></p>
<b>J</b>	<b>Data acquisition software</b>
10	<del>Scatter Correction: Scatter correction must be provided based on scan of the actual patient whose scan is being corrected and processed automatically ( removed).</del> Please Specify method of scatter correction. Latest scatter correction protocols must be provided .
11	<b>Continuous bed motion with multiparametric imaging ( *Optional)</b>
<b>K</b>	<b>Clinical Application Software</b>
19	<del>All future software upgrades including associated hardware during warranty period and CMC shall be free of cost.-( deleted)</del> <b>All future software updates during warranty period and CMC shall be free of cost.</b>
16.	Software for quantification of metabolic parameters for Oncology application, including SUV volume, SUV standardized for BMI, SUV peak, SUV-L, Glycotic index and latest software to calculate metabolic tumor volume (Threshold based, Gradient based, Iterative & Region growing method or equivalent) & for Radiation dose assessment (e.g OLINDA/EXM or equivalent). If not available now, Vendors shall be able to provide by the time of installation.
15	Dedicated licensed latest version of Emory Cardiac Toolbox including optional software (3.05 suite / latest version) <b>16 or equivalent</b>
<b>L</b>	<b>Peripherals and Hot Lab Accessories</b>
4	Required Phantoms for CT & PET Quality Assurance and system calibration and Quality control set as required ( Including <b>NEMA Phantom</b> ).
33	<del>One dose drawing module for F-18 FDG ( removed, as-duplicated)</del>

<b>N</b>	<i>FDG Supply: 200 doses of FDG/ 2 years, whichever is later, calibrated to 100 mCi delivery at our doorstep. <del>Rates to be quoted separately ( deleted)</del></i>
<b>O</b>	<p><i>One '<b>Automatic synthesis module</b>' (Self shielded type) along with required safety cabinet / hot cell for Gallium-68 radiopharmaceuticals - Rates should be quoted separately</i></p> <p><i>One 68 Germanium / 68 Gallium Generator of 25mCi capacity per year for next 2 years, with delivery at doorsteps - Rates should be quoted separately.</i></p> <p><i>PSMA-11 (10mg) &amp; DOTANOC (10mg) alongwith radiolabelling Kits &amp; supplies to meet 200 runs of each (GMP/IP/EP approved) - <del>Rates should be quoted separately ( deleted)</del></i></p>
<b>Q</b>	<b>Turnkey works</b>
5	<p>As the unit will be installed on site-modification basis. The vendor should inspect the site before quoting and ensure that the unit can be installed in the available space without any functional compromise. Complete layout site map and details of work (BOQ) should be part of technical bid. Provisions should be made for PET-CT equipment room, UPS room, reception, patient waiting area (non-active), PET examination room , Physician rooms -2, Dose Admin room, Post dose admin uptake room with a capacity for 6 patients and atleast 2 Active toilets, Hot lab cum Radiopharmacy room, Technologist room, Radioactive source storage room, Radioactive waste Store , post scan active waiting room, Console area, Reporting room, seminar room with a capacity to house 25 people at a time, pantry &amp; printer locations. It should also include Lead lined door with lead glass peeping window, radiation warning indicators and signage's, Aluminium false ceiling, GVT floor tiles and full height wall tiles. All site modification should comply with specified standards of the hospital (sequence changed)</p>
<b>Addendum</b>	Credit shall be given to previous experience of the vendor(s) in execution of same project(s) at other Reputed Private / Government Institutes.
	<b>ADDITIONAL SCOPE FOR HIGH DOSE 131-I RADIOIODINE ISOLATION WARD FOR 4 PATIENTS</b>
	Tender to be floated separately

*\*All other contents of technical specification of the Bidding Document remain unaltered.*