Amendment No. 1

25-10-2017

Sub: Amendment to the Bidding Document

Ref.: Notice Inviting Bid ref. HITES/PCD/NCI-AIIMS/03/17-18 dated: 22.09.2017

The following changes have been authorised and are being incorporated in the above referred Bidding Document.

Sl. No.	Rfx/ Event number	Short Description of goods	Existing Quantity	Amended Quantity	Existing Bid Security (BS) (Rs.)	Amended Bid Security (BS) (Rs.)
2	3000002256	128-Slice PET/ CT Scanner	1	2	30,00,000	60,00,000
Description			Exis	ting	Amend	led as.
Last date and time of tender			25.10.2017		14.11.2017	
downloading			at 6:00 pm		at 6:00 pm	
Last date and time of online			26.10.2017		15.11.2017	
submission of tender			at 12:0	0 noon	at 12:0	0 noon
Last date and time of physical						
submission of EMD, Tender			26.10	.2017	15.11	.2017
processing Fee, any other document			at 2:0	00 pm	at 2:0	0 pm
specified in the Bidding Document						
Date of tender Opening			26.10 at 2:3	.2017 80 pm	15.11 at 2:3	.2017 0 pm

<u>SECTION – I</u> NOTICE INVITING BIDS (NIB)

SECTION - III SPECIAL INSTRUCTIONS TO BIDDERS (SIB)

Qualification Criteria (Ref. GIB Clause 30.1)

The Purchaser reserves the right to ask for a free demonstration of the quoted equipment after giving reasonable time to the bidder at a pre-determined place acceptable to the purchaser or at site (in case of non-portable and heavy equipment) for technical acceptability as per the bidding document specifications, before the opening of the Price Bid.

Comparison of Bids (Ref. GIB Clause 33 & 34)

In case of item at sl. no. 3 (i.e. Rfx no. 3000002257) Net Present Value (NPV) of the Comprehensive Annual Maintenance Contract Charges (CAMC) quoted for 15 years after

the warranty period shall be added to the bid price for evaluation and will be calculated after discounting the quoted price by a discounting factor of 10% per annum."

The comparison of bids will be based on GIB Clause 33, 34 and if any, as specified in the Technical specification(s). However, at the time of award of contract, the value of award (<u>bid value/contract value</u>) shall be limited to the upfront charges payable by the exchequer for Supply, Installation, Testing & Commissioning value only on DDP basis which is inclusive of warranty (for number of years specified at section VI; List of Requirement, Part I) and any other item(s)/services detailed for upfront purchase in the technical specifications. The cost of any other parameters like CAMC price beyond the warranty period, cost of any Consumables, any other recurring expenditure, etc. which have been considered for ranking of bids or for freezing of rates shall not be part of tender/award/bid/contract value.

SECTION- VI

Sl. No.	Rfx/ Event number	Short Description of goods	Existing Quantity	Amended Quantity	Existing CAMC period after warranty	Amended CAMC period after warranty
2	3000002256	128-Slice PET/ CT Scanner	1	2	05 years	05 years
3	3000002257	Dual Particle Cyclotron	1	1	05 years	15 years

LIST OF REQUIREMENTS

Part II: Required Delivery Schedule:

Existing:

Part I:

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

90 days from date of Notification of Award to delivery at consignee site. The date of delivery will be the date by when it is to be delivered at consignee site. Bidders may quote earliest delivery period.

Installation and Commissioning shall be done at the earliest but not later than 45 days of delivery of goods at site or date 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. (Bidders may quote the earliest delivery period).

Installation and Commissioning shall be done at the earliest but not later than 45 days of delivery of goods at site or date 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 Indigenous or Imported goods:

Supply, Installation and Commissioning to be completed within 120 days for Items at sl. nos. 1 & 2 (i.e. for Rfx nos. 3000002255 & 3000002256) and within 270 days for Item at sl. no. 3 (i.e. for Rfx no. 3000002257) from the date of NOA or date of opening of LC or date of approval of layout drawing, whichever is later.

(In case of LC opening, necessary documents like valid Performance Security and Proforma Invoice are to be submitted within 30 days from the date of release of NOA. In case layout drawing approval is applicable, it should be submitted by the supplier within 21 days from the date of release of NOA.)

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

SECTION - VII

TECHNICAL SPECIFICATION AND GENERAL POINTS

A. TECHNICAL SPECIFICATION:

Item sl. no. 01

16-Slice SPECT / CT Scanner

Existing	Page 44. Para 4: AERB Registration and site approval.
Amended	Page 44. Para 4 : AERB Registration and site approval- Vendor has to
as	provide the drawings and support in getting the AERB approval.
Existing	Pg 45. Collimators, Pt. v. : Following high precision collimators with
	collision sensor to do all clinically possible examinations along with proper
	storage carts and With Automatic collimator change.
Amended	Pg 45. Collimators, Pt. v. : Following high precision collimators with
as	collision sensor to do all clinically possible examinations along with proper
	storage carts and With Automatic / Semi-Automatic collimator change.
Existing	Pg 45. Collimators, Pt. v. : Leap collimator -1 Pair.
Amended as	Pg 45. Collimators, Pt. v. : Leap collimator -1 Pair or LEHR / MEGP for Lu-177.
Existing	Pg 46. i. Acquisition Workstation, Pt. vii. : One acquisition station
	independent of main processing unit capable of data acquisition in static,
	dynamic, list, multi- gated, whole body scanning , SPECT and Gated SPECT.

Amended	Pg 46. i. Acquisition Workstation, Pt. vii.: One acquisition station
as	independent of main processing unit capable of data acquisition in static,
	dynamic, multi- gated, whole body scanning, SPECT and Gated SPECT.
Existing	Pg 46. ii Acquisition Workstation. Pt. viii: High performance PC of latest
0	specifications with multi tasking operating system. It should have a
	minimum of 32 GB RAM, 2.6 GHz or more processor speed, 2 TB or more
	SCSI hard drive and high resolution (1024x 1024 or more) antiglare flat
	panel square LCD monitor of minimum of 19"" size. It should also have CD
	and DVD combo drive preferably with writer facility."
Amended	Pg 46. ii Acquisition Workstation, Pt. viii: High performance PC of latest
as	specifications with multi tasking operating system. It should have a
	minimum of 4 GB RAM, 2.6 GHz or more processor speed, 600 GB or more
	SCSI hard drive and high resolution (1024x 1024 or more) antiglare flat
	panel square LCD monitor of minimum of 19° size. It should also have CD
	and DVD combo drive preferably with writer facility.
Existing	Page 47. ii. Processing Workstation, Para viii : Minimum of 32 GB RAM ,
	2.8 GHz or more processor speed and minimum 2TB SCSI hard drive
	logically divided in to 3-4 partitions.
Amended	Page 47. ii. Processing Workstation, Para viii : Minimum of 4 GB RAM,
as	2.8 GHz or more processor speed and minimum 600GB SCSI hard drive
	logically divided in to 5-4 partitions.
Existing	Page 47. iii . Processing Workstation, Para viii. : A 20 TB online server
	with all necessary software to store and archive the data
Amended	Page 47. 111 . Processing Workstation, Para vill. : DELETED
as	
Existing	Page 47. Ix. Processing Workstation, Para viii. : One auxiliary
	processing work station with all the standard and third party software
A	should also be supplied and connected with the online server.
Amended	Page 47. IX. Processing workstation, Para viii. : One additional
as	should also be supplied and connected with the online server
	should also be supplied and connected with the online server.
D : /:	
Lxisting	rage 51. XXI. Fara XII. Accessories and UC Utility: One Canister for
Amondod	Bago 51 wij Doro wij Accessorion and OC Utility DELETED
as	rage of AAN rata AII. Accessories and QC ounity: DELETED
40	
Existing	Page 51. xxvii .Para xii.Accessories and OC Utility : Two digital ion meter
8	(Rotem only)
Amended	Page 51. xxvii .Para xii.Accessories and QC Utility : Two digital ion meter
as	(Rotem or equivalent only)

Existing	Page 51. xxxviii. Para xii. xii. Accessories and QC Utility : Mobile lead glass shield.
Amended	Page 51. xxxviii. Para xii. xii. Accessories and QC Utility : Mobile lead
as	glass shield , size: 6 feet x 4 feet.
Existing	Page 51. Xxxix. Para xii. Accessories and QC Utility : One laminar Flow Unit (vertical).
Amended	Page 51. Xxxix. Para xii. Accessories and QC Utility : One laminar Flow
as	Unit (vertical) with HEPA filter : Microbiological use.
Existing	Page 51. xii. Accessories and QC Utility. Para xvi. AERB clearance shall be the responsibility of the vendors after completion of the site modification and installation of the equipment. The institute will render all necessary help and provide needed documents. NEMA QC during installation in the scope of vendor.
Amended	Page 51. xii. Accessories and QC Utility. Para xvi. AERB clearance :
as	The vendor will render all necessary help and provide needed
	documents. The vendor has to provide all supporting documents , site
	plan, NEMA QC equipment details and drawings to facilitate AERB
	clearance after completion of the site modification works and
	installation of the equipment.
Existing	Page 51. xii. Accessories and QC Utility. Para xviii. : Future up
	gradation/ revision of the software versions shall be done by the vendors
	without any additional cost.
Amended	Page 51. xii. Accessories and QC Utility. Para xviii. : Future updates /
as	revision of the software versions shall be done by the vendors without any
	additional cost.
Existing	Page 51. xii. Accessories and QC Utility. Para xix. : In case the SPECT-
	CT break down after the acquisition or injection to the patient then vendor
	should be responsible for arrangement for the study (SPECT-CT) of injected
	patient elsewhere in the city and the cost of which shall be borne by the
	vendor.
Amended	Page 51. xii. Accessories and QC Utility. Para xix. : DELETED.

Added para:

SITE MODIFICATION – 16-Slice SPECT / CT Scanner
1. Supplier shall ensure that the equipment model quoted is commissioned within the designated area of NCL without major structural changes to the building
 The Site drawing of the Institute can be obtained from the Project office of NCI -
AIIMS, room no. 161, 1st floor, DBRAIRCH, AIIMS campus, New Delhi.

	3. The vendor should inspect the site at NCI, Jhajjar, before quoting and ensure
	that the unit can be installed in the available space without any functional
	compromise.
	4. Complete equipment layout site plan and details of work (BOQ) should be part
	5 Provisions should be made for placing the various accessories in console room
	work-station and printer locations
	6 It should also include Lead lined door with lead glass peeping window radiation
	warning indicators and signages. Aluminium false ceiling GVT floor tiles and
	full height wall tiles.
	7. All site modification works should comply with specified standards of the
	hospital.
	The SCOPE OF WORK for SITE MODIFICATION OF SPECT CT SYSTEM shall
	consist of the following rooms:
a.	SPECT CT Examination Room
b.	Console room
с.	SPECT CT equipment / UPS room.
	The area considered for Site Modification for item: SPECT CT SYSTEM is
	indicated in the site plan attached as Annexure 1.
	Civil work
a)	Civil construction work including construction/ modification / demolition of brick
	wall if any, plastering, flooring as per the approved plan and equipment layout plan.
b)	Additional strengthening of floor / Concrete bed of SPECT CT and equipment area,
	if required
c)	Platform for unloading and shifting the SPECT CT should be provided if necessary.
d)	Cable tray, trench & channel – necessary trenches, cable tray and channels at
-)	required location would be provided.
e)	All the construction work to be done as per the final plan approved by NCI Jnajjar
I)	Celling-to-wall ceramic tiling in SPECT CT examination room.
a)	Flooring
1	Framination room
2	5mm-Vinul flooring in SPECT CT equipment / UPS room
 b)	Painting
	Two coats Plastic Emulsion Paint over 2 coats of wall putty including primer in
	Console SPECT CT equipment / UPS room
c)	False Ceiling
1	Aluminum, acoustical-treated, powder coated tile for ceiling supported on grid or
	finished seamless with support above ceiling. Ceiling height to suit the equipment
	mount and clearances.
d)	Electrical work
1	The supplier shall be required to specify the total load requirements for the SPECT
	CT including the load of air conditioning, room lighting and for the accessories if
	any. The supply line will be provided by the Institute up to one point within the
	SPECT CT Scan area. The distribution panel for UPS, SPECT CT shall be provided
	by the vendor. Few lights in each room shall be connected to the UPS to provide
	emergency lighting.
2	The electrical work shall include the following:
a.	Wiring – All interior electrical wiring- with main distribution panel board, necessary
	MCBs, DB, joint box, switch box etc. the wires shall be of copper of different

	capacity as per the load and should be	renowned make as listed below.	
b.	Switches light and power points should	l be of modular type and of standard make as	
	listed below.		
с.	General lights –LED light fittings with	minimum 500 Lux Illumination	
3	AIR CONDITIONING: 15 TR capacity. Unit rate to be quoted.		
	Duct-able package air conditioners and	a split air conditioners may be used according	
	to room as well as equipment requirem	ent and suitability. Humidity control should	
	be effective to eliminate moisture conde	ensation on equipment surface.	
	The outdoor units of AC should have g	rill coverings to prevent theft and damage.	
2	Environment specifications:		
a)	Relative Humidity range: To be maintain	ined between 60% and 80% in all areas	
	except equipment room, which shall be	e as per requirement of the equipment?	
b)	Temperature ranges: 22± 2° C in all are	eas except equipment room which shall be as	
,	per requirement of the equipment.		
c)	Air conditioning load: The heat load ca	lculations and maintaining the desired	
,	temperature and humidity shall be the	responsibility of the bidder.	
4	Fire detection system – shall compris	se of fire panel, smoke / heat detectors.	
	Furniture:		
a)	Revolving chairs height adjustable, me	dium-back with hand-rest – 8 NO.S	
c)	Cupboard with laminate door shutters	for storage of spare parts and accessories	
,	and records as per requirement. – 3 No	S I I S.	
d)	Drug trollevs - 1 Nos.		
e)	Patient trolley with rubber foam mattre	ess - 1 Nos.	
f)	Name boards for all rooms		
g)	Tables for Workstation - 5 Nos.		
i)	Dustbins: 10 Nos.		
/	All furniture items should be of standa	rd make as mentioned in the table below.	
	Miscellaneous:		
1	LED X-ray Film viewer with adjustable	brightness; capable of holding 3 films of	
	14"x17" size. – 2 no.s		
2	Fire extinguisher ABC type- 5kg - 3 No	08.	
	LIST OF ITEMS AND SUGGESTED MA	ANUFACTURERS.	
SL	ITEMS	DEFEDDED MAKES	
NO	IIEMS	FREFERRED MARES	
А	FLOORING VITRIFIED TILES	-Somany, Kajaria , H&R Johnson,	
	RAK india		
В	PAINT	- Dulux, Asian Paints , Nerolac	
С	PLUMBING	- Kohler, Jaguar , Grohe , Roca	
E	ELI	ECTRICAL	
1	CABLES	- Finolex, Havells ,V-Guard	
2	SWITCHES	- Legrand, L&T, Crabtree , Roma	
3	DISTRIBUTION BOX, MCB	- Legrand, L&T, Siemens, Havels	
4	LIGHT FITTINGS	- Philips / Crompton /	
	Wipro/Syska		
F	AIR CONDINTIONING	- Daikin, Hitachi, Blue Star, Voltas,	
G	FURNITURE	- Hermen Miller , Godrej ,	
	Featherlite,Geeken.		

Item sl. no. 02

128-SLICE PET - CT SCANNER

Existing	Page 44 , Primary vendor shall be responsible for: D) AERB Registration and site approval.
Amended as	Page 44 , Primary vendor shall be responsible for: D) AERB Registration and site approval. : Added para : Vendor has to provide the drawings and support in getting the AERB approval.
Existing	Page 53. 128-SLICE PET - CT SCANNER: A latest technology whole body Positron Emission Tomography system with 128 slices per rotation , DICOM ready and isotropic volume acquisition spiral CT scanner designed for providing volume measurements of metabolic and physiological processes using positron emitters, as well as for producing accurate structural and anatomical fusion images and making attenuation maps for CT based attenuation correction.
Amended	Page 53. 128-SLICE PET - CT SCANNER: A latest technology whole body
as	Positron Emission Tomography system with 128 slices acquisition per rotation , DICOM ready and isotropic volume acquisition spiral CT scanner designed for providing volume measurements of metabolic and physiological processes using positron emitters, as well as for producing accurate structural and anatomical fusion images and making attenuation maps for CT based attenuation correction.
Fristing	Page 54 2) Gantry and Detector Para 2 h · The separation (center to
LAISting	center) between slices acquired simultaneously without any axial motion should be : 55 mm .
Amended as	Page 54. 2) Gantry and Detector, Para 2.h : The separation (center to center) between slices acquired simultaneously without any axial motion should be : 5 mm or better .
Existing	Page 54. Para 3.a Multi detector CT having minimum 64 rows of detectors.
Amended as	Page 54. Para 3.a Multi detector CT having minimum 64 rows of detectors acquiring 128 slices per rotation.
Existing	Page 54. 3) CT Specifications : Para 3.e: Detector coverage should be at least 24 mm.
Amended as	Page 54. 3) CT Specifications: Para 3.e: Detector coverage should be at least 38 mm or higher.
D • • •	
Existing	Page 54. 3) CT Specifications: Para 3.f : Low contrast detectability should be at least 4 mm @ 0.3% on 20 cm CATPHAN phantom.
Amended as	Page 54. 3) CT Specifications: Para 3.f Low contrast detectability should be at least 5 mm @ 0.3% on 20 cm CATPHAN phantom.

Existing	Page 55. 4) Performance Specifications: Para 4.a All specifications must comply with NEMA Standards Publication NU 2-2007 or latest performance measurements without altering instrument parameters. QC Software to measure these parameters must be available in the system.
Amended as	Page 55. 4) Performance Specifications: Para 4.a All specifications must comply with NEMA Standards Publication NU 2-2012 or latest performance measurements without altering instrument parameters. QC Software to measure these parameters must be available in the system.
Existing	Page 55. Performance Specifications: Para 4.b Axial & Transverse spatial resolution at 1cm & 10 cm from the central axis of the gantry should be: ≥ 6.5 mm FWHM.
Amended as	Page 55. Performance Specifications: Para 4.b Axial & Transverse spatial resolution at 1cm & 10 cm from the central axis of the gantry should be: ≤ 5 mm FWHM.
Existing	Page 55. 4) Performance Specifications: Para 4.d System Energy Resolution should be ≥ 14.0 %
Amended as	Page 55. 4) Performance Specifications: Para 4.d System Energy Resolution should be ≤ 14.0 % .
Existing	Page 6) Workstation (Data Acquisition, Processing & Management) 56 Para 6.c : The processing workstation should be high performance CPU with multi tasking operating system having minimum of 32 GB RAM, 3 GHz processor speed, minimum 1GB graphic card, 2TB or more SCSI hard drive (if less, another HDD may be included), Optical Mouse, Key-board and high resolution flat panel dual view LCD monitor of minimum 19"" size with minimum resolution of 1280 x 1024. It should also have CD and DVD combo drive preferably with writer facility.
Existing Amended as	 Page 6) Workstation (Data Acquisition, Processing & Management) 56 Para 6.c : The processing workstation should be high performance CPU with multi tasking operating system having minimum of 32 GB RAM, 3 GHz processor speed, minimum 1GB graphic card, 2TB or more SCSI hard drive (if less, another HDD may be included), Optical Mouse, Key-board and high resolution flat panel dual view LCD monitor of minimum 19"" size with minimum resolution of 1280 x 1024. It should also have CD and DVD combo drive preferably with writer facility. Page 56 6) Workstation (Data Acquisition, Processing & Management) Para 6.c : The processing workstation should be high performance CPU with multi-tasking operating system having minimum of 8 GB RAM, 2.5 GHz processor speed, minimum 1GB graphic card, 300 GB storage capacity or more, Optical Mouse, Key-board and high resolution flat panel dual view LCD monitor of minimum 19" size with minimum resolution of 1280 x 1024. It should also have CD and DVD combo drive preferably with writer facility.
Existing Amended as	 Page 6) Workstation (Data Acquisition, Processing & Management) 56 Para 6.c : The processing workstation should be high performance CPU with multi tasking operating system having minimum of 32 GB RAM, 3 GHz processor speed, minimum 1GB graphic card, 2TB or more SCSI hard drive (if less, another HDD may be included), Optical Mouse, Key-board and high resolution flat panel dual view LCD monitor of minimum 19"" size with minimum resolution of 1280 x 1024. It should also have CD and DVD combo drive preferably with writer facility. Page 56 6) Workstation (Data Acquisition, Processing & Management) Para 6.c : The processing workstation should be high performance CPU with multi-tasking operating system having minimum of 8 GB RAM, 2.5 GHz processor speed, minimum 1GB graphic card, 300 GB storage capacity or more, Optical Mouse, Key-board and high resolution flat panel dual view LCD monitor of minimum 19" size with minimum resolution of 1280 x 1024. It should also have CD and DVD combo drive preferably with writer facility.
Existing Amended as Existing	 Page 6) Workstation (Data Acquisition, Processing & Management) 56 Para 6.c : The processing workstation should be high performance CPU with multi tasking operating system having minimum of 32 GB RAM, 3 GHz processor speed, minimum 1GB graphic card, 2TB or more SCSI hard drive (if less, another HDD may be included), Optical Mouse, Key-board and high resolution flat panel dual view LCD monitor of minimum 19"" size with minimum resolution of 1280 x 1024. It should also have CD and DVD combo drive preferably with writer facility. Page 56 6) Workstation (Data Acquisition, Processing & Management) Para 6.c : The processing workstation should be high performance CPU with multi-tasking operating system having minimum of 8 GB RAM, 2.5 GHz processor speed, minimum 1GB graphic card, 300 GB storage capacity or more, Optical Mouse, Key-board and high resolution flat panel dual view LCD monitor of minimum 19" size with minimum resolution of 1280 x 1024. It should also have CD and DVD combo drive preferably with writer facility. Page 56. 6) Workstation (Data Acquisition, Processing & Management) Para 6.c : The processing workstation should be high performance CPU with multi-tasking operating system having minimum of 8 GB RAM, 2.5 GHz processor speed, minimum 1GB graphic card, 300 GB storage capacity or more, Optical Mouse, Key-board and high resolution flat panel dual view LCD monitor of minimum 19" size with minimum resolution of 1280 x 1024. It should also have CD and DVD combo drive preferably with writer facility. Page 56. 6) Workstation (Data Acquisition, Processing & Management). Para 6.e: Reconstruction filters - Shepp-Logan, Hanning, Hamming Parzen, Ramp, Butterworth and all other latest available filters with the company for PET applications.
Existing Amended as Existing Amended as	 Page 6) Workstation (Data Acquisition, Processing & Management) 56 Para 6.c : The processing workstation should be high performance CPU with multi tasking operating system having minimum of 32 GB RAM, 3 GHz processor speed, minimum 1GB graphic card, 2TB or more SCSI hard drive (if less, another HDD may be included), Optical Mouse, Key-board and high resolution flat panel dual view LCD monitor of minimum 19"" size with minimum resolution of 1280 x 1024. It should also have CD and DVD combo drive preferably with writer facility. Page 56 6) Workstation (Data Acquisition, Processing & Management) Para 6.c : The processing workstation should be high performance CPU with multi-tasking operating system having minimum of 8 GB RAM, 2.5 GHz processor speed, minimum 1GB graphic card, 300 GB storage capacity or more, Optical Mouse, Key-board and high resolution flat panel dual view LCD monitor of minimum 19" size with minimum resolution of 1280 x 1024. It should also have CD and DVD combo drive preferably with writer facility. Page 56. 6) Workstation (Data Acquisition, Processing & Management). Para 6.e: Reconstruction filters - Shepp-Logan, Hanning, Hamming Parzen, Ramp, Butterworth and all other latest available filters with the company for PET applications. Page 56. 6) Workstation (Data Acquisition, Processing & Management). Para 6.e. Reconstruction filters - latest available filters with the company for PET applications.

Existing	Page 56. Para 6.h The workstation should be accessible remotely by at-least
	5 concurrent workstations for PET and CT each and two extra laptop based processing station.
Amended	Page 56. Para 6.h The workstation should be accessible remotely by at-least
as	5 concurrent workstations for PET and CT each.
Existing	Page 56. 7) Software: Para 7.b 4D CT Scanning facility: 4D CT Scan software with 4D phantom for QA shall be provided and separately there shall be 4D CT Respiratory Gating hardware to be provided.
Amended as	Page 56. 7) Software: Para 7.b) 4D CT Scanning facility: 4D CT Scan software with 4D phantom for QA shall be provided and separately there shall be 4D CT Respiratory Gating hardware to be provided. 4D CT Respiratory Gating hardware to be quoted as option. Price for 4D gating to be quoted separately.
Fristing	Page 57 2 Clinical Application Software : Para 2 h) Neuro quantification
Existing	software including assessment of dementia using SUV values, quote as option item with detailed specification.
Amended	Page 57. 2. Clinical Application Software : Para 2.b) Neuro quantification
as	software including assessment of dementia using SUV values. Provide detailed specification of s/w quoted.
D : /:	
Existing	upgrades including associated hardware during warranty period and CMC shall be free of cost.
Amended	Page 57. 2. Clinical Application Software: Para 2.k) All future software
as	updates including associated hardware during warranty period and CMC shall be free of cost.
Existing	Page 58. Para: 7. Software: .
Existing	1) The CT Simulation workstation should be fully integrated and networked with the treatment planning system for 3D CRT, IMRT/IGRT and with portal imaging workstation at the linac console.
Existing	m) It should have capabilities for 3D viewing of images along with tools for constructing and display of high resolution (512 X 512 pixels) DRRs and MPRs.
Existing	n) Tools for auto-contouring of normal structures along with manual contouring of normal structures and target volumes should be included. Editing, copy and paste of structures.
Existing	o) 30 margin tools from GTV to CTV to PTV should be available.
Existing	p) Should have capability to do online CT simulation (while patient remains on CT couch) and also offline CT simulation at physician's workstation.
Existing	q) Tools for beam pla cement including MLC of any make and isocentre determination should be included. The tracking laser system should be linked to the virtual simulation software

Existing	r) The supplier will be responsible for complete networking and integration between the CT Simulation workstation, Treatment Planning System and portal
Existing	imaging workstation for import and export of image and data.
Existing	s) Should be a fully DICOM RT ""plug and play"" system for import and export of CT/MRI/PET images, RT structures and
Amended as	Page 58. 7. Software: points - Para: 1) & m) & n) & o) & p) & q) & r) & s) : DELETED.
Existing	Page 59. 9) Others , Para 9.b : Two latest editions PET CT Atlas for image interpretation of PET CT.
Amended as	Page 59. 9) Others , Para 9.b : DELETED.
Existing	Pg 59. 9) Others , Para 9) d : Fume hood for PET and SPECT CT Radio pharmacy.
Amended as	Pg 59. 9) Others , Para 9) d : Fume hood for PET Radio pharmacy.
Existing	Page 59. 9) Others Para 9) h : Dose calibrator for all PET & SPECT radiotracers: 2 no.
Amended as	Page 59. 9) Others Para 9) h : DELETED.
Existing	Page 59. 8) Peripherals / Accessories . Para 8.o. : One digital ion meter (Rotem).
Amended as	Page 59. 8) Peripherals / Accessories . Para 8.0. : : One digital ion meter (Rotem or equivalent).
Existing	Page 59. 8) Peripherals / Accessories. Para 8.p : Two digital –mSv / hr range GM based survey-cum-contamination monitors (Rotem).
Amended as	Page 59. 8) Peripherals / Accessories. Para 8.p : Two digital -mSv / hr range GM based survey-cum-contamination monitors (Rotem / equivalent).
Existing	Page 59. 9)Others , Para 9.h : Dose calibrator for all PET & SPECT radiotracers: 2 no.
Amended as	Page 59. 9)Others , Para 9.h : DELETED.

Existing	Page 60. 9) Others , Para.9.0 : Two physicians and two technologists to be trained for three weeks each by the vendor Optional.	
Amended	Page 60. 9) Others , Para.9.0 : Four Physicians to be trained onsite for 4	
as	weeks and Two technologist to be trained onsite for 4 weeks.	
Existing	Page 60. Para 11 : AERB clearance shall be the responsibility of the vendors after completion of the site modification works and installation of the equipment. The institute will render all necessary help and provide needed documents.	
Amended as	Page 60. Para 11 : AERB clearance : The vendor will render all necessary help and provide needed documents. The vendor has to provide all supporting documents, site plan , equipment details and drawings to facilitate AERB clearance after completion of the site modification works and installation of the equipment.	
Existing	Page 60. Para 12: Custom clearances if any would be the responsibility of the vendors.	
Amended as	Page 60. Para 12: DELETED. Clause in this regard under GIB & GCC of tender document shall prevail.	
Existing	Page 60. Para 14. : Future upgradation / revision of the software versions shall be done by the vendors without any additional cost.	
Amended as	Page 60. Para 14. : Future updates / revision of the software versions shall be done by the vendors without any additional cost.	
Existing	Page 58 , 8) Peripherals / Accessories: para : b) Latest dual head pressure injector compatible with CT and 100 disposable CT syringes with tubing and connector.	
Amended as	Page 58, 8) Peripherals / Accessories: para : b) DELETED.	
Existing	Page 60. Para 17 : Vendor shall be responsible for upgradation of all software to the latest available throughout the warranty period.	
Amended as	Page 60. Para 17 : Vendor shall be responsible for updates of all software to the latest available throughout the warranty period.	

Added para:

	SITE MODIFICATION - 128-SLICE PET - CT SCANNER		
	 Supplier shall ensure that the equipment model quoted is commissioned within the designated area of NCI, without major structural changes to the building. The Site drawing of the Institute can be obtained from the Project office of NCI - AIIMS, room no. 161, Ist floor, DBRAIRCH, AIIMS campus, New Delhi. 		
	3. Complete equipment layout site plan and details of work (BOQ) should be part of technical bid		
	4. Provisions should be made for placing the various accessories in console room,		
	work-station and printer locations.		
	warning		
	6. indicators and signages, Aluminium false ceiling, GVT floor tiles and full height		
	wall tiles.		
	The SCOPE OF WORK for SITE MODIFICATION OF PET CT SYSTEM shall		
	consist of the following rooms:		
a.	PET CT Examination Room		
b.	Console room		
с.	PET CT equipment / UPS room.		
	The area considered for Site Modification for item: PET CT SYSTEM is indicated in the site plan attached as Annexure 1.		
1	Civil work		
a)	Civil construction work including construction/ modification / demolition of brick wall if any, plastering, flooring as per the approved plan and equipment layout plan.		
b)	Additional strengthening of floor / Concrete bed of CT and equipment area, if required		
c)	Platform for unloading and shifting the PET CT should be provided if necessary.		
d)	Cable tray, trench & channel – necessary trenches, cable tray and channels at required location would be provided.		
e)	All the construction work to be done as per the final plan approved by NCI Jhajjar		
f)	Ceiling-to-wall ceramic tiling in PET CT examination room.		
a)	Flooring		
i)	600 x 600 mm glazed vitrified (GVT) tiles with 100mm tile skirting in PET CT Examination room.		
ii)	5mm-Vinyl flooring in PET CT equipment / UPS room.		
b)	Painting		
i)	Two coats Plastic Emulsion Paint over 2 coats of wall putty including primer in Console, PET CT equipment / UPS room.		
c)	False Ceiling		
i)	Aluminum, acoustical-treated, powder coated tile for ceiling supported on grid or finished seamless with support above ceiling. Ceiling height to suit the equipment mount and clearances.		
2	Electrical work		

i)	The supplier shall be required to specify the total load requirements for the PET CT		
-,	including the load of air conditioning, room lighting and for the accessories if any.		
	The supply line will be provided by the Institute up to one point within the PET CT		
	Scan area. The distribution panel for UPS, PET CT shall be provided by the vendor.		
	Few lights in each room shall be connected to the UPS to provide emergency lighting.		
ii)	The electrical work shall include the following:		
a.	Wiring - All interior electrical wiring- with main distribution panel board, necessary		
	MCBs, DB, joint box, switch box etc. the wires shall be of copper of different capacity		
	as per the load and should be renowned make as listed below.		
b.	Switches light and power points should be of modular type and of standard make as		
	listed below.		
с.	General lights –LED light fittings with minimum 500 Lux Illumination		
3	AIR CONDITIONING: 15 TR capacity. Unit rate to be quoted.		
a)	Duct-able package air conditioners and split air conditioners may be used according		
	to room as well as equipment requirement and suitability. Humidity control should be		
b)	effective to eliminate moisture condensation on equipment surface.		
D)	The outdoor units of AC should have grill coverings to prevent their and damage.		
() ()	Deletive Upwidity represents to be maintained between 60% and 80% in all areas areant		
1)	Relative Humidity range: To be maintained between 60% and 80% in all areas except		
	The second state of the second s		
11)	Temperature ranges: $22\pm 2^{\circ}$ C in all areas except equipment room which shall be as		
,	per requirement of the equipment.		
111)	Air conditioning load: The heat load calculations and maintaining the desired		
	temperature and numberly shall be the responsibility of the bidder.		
4	Fire detection system – shall comprise of fire panel, smoke / heat detectors.		
5	Furniture:		
a)	Revolving chairs height adjustable, medium-back with hand-rest – 8 Nos.		
b)	Cupboard with laminate door shutters for storage of spare parts and accessories and		
	Descrite the second sec		
C)	Drug trolleys - 1 Nos.		
d)	Patient trolley with rubber foam mattress - 1 Nos.		
e)	Name boards for all rooms		
f)	Tables for Workstation - 5 Nos.		
g)	Dustbins: 10 Nos.		
h)	All furniture items should be of standard make as mentioned in the table below.		
6	Miscellaneous:		
a)	Fire extinguisher ABC type- 5kg - 3 Nos.		
	LIST OF ITEMS AND SUGGESTED MANUFACTURERS.		
S1. No.	ITEMS PREFERRED MAKES		
Α	FLOORING VITRIFIED TILES -Somany, Kajaria , H&R Johnson,		
	RAK india		
В	PAINT - Dulux, Asian Paints , Nerolac		
C	PLUMBING - Kohler, Jaguar , Grohe , Roca		
Е	ELECTRICAL		

1	CABLES	- Finolex, Havells ,V-Guard
2	SWITCHES	- Legrand, L&T, Crabtree , Roma
3	DISTRIBUTION BOX, MCB	- Legrand, L&T, Siemens, Havels
4	LIGHT FITTINGS	- Philips / Crompton /
	Wipro/Syska	
F	AIR CONDINTIONING	- Daikin, Hitachi, Blue Star, Voltas,
G	FURNITURE	- Hermen Miller , Godrej ,
	Featherlite,Geeken.	-

Item sl. no. 03

Dual Particle Cyclotron

Existing Page 61 : MEDIUM ENERGY CYCLOTRON: The Cyclotron energy m least 18 MeV in order to allow production of conventional (F18-, 110		
	H4, 13 NH3, O15, F2-18) and non-conventional radioisotopes (I-124,I-123, 64Cu, 89Zr, 86V) with liquid gas and solid targets	
Amondod	Dece 61 : MEDIUM ENERGY CYCLOTRON: The Cycletron energy must be at	
Alliellueu	Fage 01 : MEDIUM ENERGY CICLOIRON: The Cyclotron energy must be a loss 18 MeV or higher in order to allow production of conventional (E1?)	
as	11002 110 H4 12 NH2 015 F2 18) and non conventional radioisotopes (
	$124 \downarrow 123$ 64Cu 807r 86V) with liquid gas and solid targets	
Existing	Existing Page 61, A. (ii) : It must be an auto-ejectable cassette system that will be	
U	installed in one hot cell with four mini- hotcells for synthesis of	
	radiopharmaceuticals.	
Amended	Page 61, A. (ii) : It must be a manual or auto-ejectable cassette system that	
as	will be installed in one hot cell with four mini- hotcells for synthesis of	
	radiopharmaceuticals.	
Existing	Page 64. A1. 1(vi.) : The cyclotron should be equipped with minimum two	
	proton sources.	
Amended	ded Page 64. A1. 1(vi.) : The cyclotron should be equipped with minimum one	
as	number proton source.	
Existing	Page 62. BUILDING ENGINEERING FILE RELATED TO RADIOPHARMACEUTICAL PRODUCTION:	
Amended	Added Para . : Prospective bidders may contact NCI Office, Room No 160	
as	DBRAIRCH, AIIMS, New Delhi for drawings.	
Existing	Page 63. WARRANTY : The offer should state what contractual obligations the	
	Supplier can make concerning remedy, guarantee and service. As a minimum,	
	the Supplier shall provide a full warranty (excluding consumables) for a period	
	of at least TEN YEARS on all equipment, including such provided by third	
	party suppliers.	
Amended	Page 63. WARRANTY: The offer should state what contractual obligations the	
as	Supplier can make concerning remedy, guarantee and service. As a minimum,	
	the Supplier shall provide a full warranty (excluding consumables) for a period	
1		
	of at least FIVE YEARS on all equipment, including such provided by third	

B. GENERAL POINTS:

1. Warranty:

<u>Existing:</u>

c) During the Warranty period, desired Uptime of 95% of 365/366 (Leap Year) days (24 hrs), if downtime more than 5%, the warranty period/CAMC period will be extended by double the downtime period. In addition a penalty equal to amount of 0.25 % of the total cost of equipment per day will be liveable for the excess downtime period. Complaints should be attended properly, maximum within 8 hrs.

Amended as:

c) During the Warranty period, desired Uptime of 95% of 365/366 (Leap Year) days (24 hrs), if downtime more than 5%, the warranty period/CAMC period will be extended by double the downtime period. Complaints should be attended properly, maximum within 8 hrs.

4. Comprehensive Annual Maintenance Contract (CAMC) of subject equipment:

<u>Existing:</u>

e) During the CAMC period, desired Uptime of 95% of 365/366 (Leap Year) days (24 hrs), if downtime more than 5%, the warranty period/CAMC period will be extended by double the downtime period. In addition a penalty equal to amount of 0.25 % of the total cost of equipment per day will be liveable for the excess downtime period. Complaints should be attended properly, maximum within 8 hrs.

Amended as:

e) During the CAMC period, desired Uptime of 95% of 365/366 (Leap Year) days (24 hrs), if downtime more than 5%, the warranty period/CAMC period will be extended by double the downtime period. Complaints should be attended properly, maximum within 8 hrs.

5. <u>Uptime & Downtime Penalty Clause:</u>

Existing:

b) During the Warranty period and CAMC period, desired Uptime of 95% of 365/366 (Leap Year) days (24 hrs), if downtime more than 5%, the warranty period/CAMC period will be extended by double the downtime period. In addition a penalty equal to amount of 0.25 % of the total cost of equipment per day will be liveable for the excess downtime period. Complaints should be attended properly, maximum within 8 hrs.

<u>Amended as:</u>

b) During the Warranty period and CAMC period, desired Uptime of 95% of 365/366 (Leap Year) days (24 hrs), if downtime more than 5%, the warranty period/CAMC period will be extended by double the downtime period. Complaints should be attended properly, maximum within 8 hrs.

All other contents of the Bidding Document including terms & conditions remain unaltered.