HSCC (I) Ltd

Amendment –IV Dated 05.10.2020

Ref. IFB No: HSCC/SJH/Medical Equipment/2020/45 Dated : 21.08.2020

Amendment & Extension of Bid submission Date :

Commercial Amendments:

Sr. No.	Existing As	Amended as
1	New Point Added	Bidders must quote custom duty & IGST in Indian Rupees (INR) only. Those Bidders quoting custom duty & IGST in other currency or in percentage (%), their bids will be rejected.
2	New Point Added	In case Bidder quote CMC Charges as Nil or Zero in the price scheduled format, their bid will be rejected.
3	New Point Added	Bidders should submit copies of the supply orders as mentioned in the past five year's performance statement in their Techno-commercial bid. However, HSCC/Purchaser can ask for the past 05 years Order Copies from the bidder from the date of tender opening not mentioned in the past Performance Statement.
4	New Point Added	MSME Circulars dt. 20.09.2016 enclosed. Start-ups & MSME firm should submit past 5 years order copies & performance certificates for similar equipments supplied. (Circular Enclosed)
5	The bidders/ firms identifying as MSME and or start-up firms are exempted from fulfilling criteria at Sr. No. 2 (a) and 2 (b) of section- IX (Qualification Criteria) . However, this does not exempted any bidder /firm/manufacturer from fulfilling the quality requirements.	Point Deleted
6	New Point Added	Format for registration of Bidders from countries which share land borders with India enclosed

The detail of amendments & Site layout plan PET/CT and Dual Head Gamma Camera are given below:-

EMD Existing As:

Item No. 5	Positron Emission Tomography (PET/CT)	1 no.	For Nuclear Medicine in Super-Specialty Block	Rs.21,00,000/-

EMD Amended As

Item No. 5	Positron Emission Tomography (PET/CT)	1 no.	For Nuclear Medicine in Super-Specialty Block	Rs. 38,00,000/-

EMD Existing As:

Item No. 4	Dual Head Gamma Camera	1 no.	For Nuclear Medicine in Super-Specialty Block	Rs.10,00,000/-

EMD Amended As

Item No. 4	Dual Head Gamma Camera	1 no.	For Nuclear Medicine in Super-Specialty Block	Rs.18,00,000/-

The turnkey work including Installation, Testing, Commissioning of equipment should be completed within 5 months of handover of site and power.

All other terms and conditions of the tender enquiry documents including Amendments issued so far shall remain unchanged.

Technical Amendment:

Item No. 4 .

DUAL HEAD GAMMA CAMERA INTEGRATED WITH SPECT AND 16 - SLICE CT SCANNER

Tendered Specifications	To be Read As
16-Slice SPECT/CT Scanner	**Corrigendum**
Primary vendor shall be responsible for:	
A. Site Preparation Design, planning, interiors and furnishing "on turn-key basis', adhering to all the AERB prescribed safety guidelines, regulations and as per AERB approved drawings. Vendor has to coordinate with institute team to get all construction done to avoid duplicity of work. If any modification required in the existing AERB approved structure as per current/new AERB guidelines then it will be the responsibility of Vendor	A. Site Preparation Design, planning, interiors and furnishing "on turn-key basis', adhering to all the AERB prescribed safety guidelines, regulations and as per AERB approved drawings. Vendor has to coordinate with institute team to get all construction done to avoid duplicity of work. If any modification required in the existing AERB approved structure as per current/new AERB guidelines then it will be

	the responsibility of Vendor
B. Supply, Installation, Commissioning (functional delivery) on Site Modification Basis.	B. Supply, Installation, Commissioning (functional delivery) on Site Modification Basis.
C. AERB Registration and site approval - Vendor has to provide the drawings and support in getting the AERB approval.	C. AERB Registration and site approval - Vendor has to provide the drawings and support in getting the AERB approval.
D. Any improved modifications or updated versions of the system should be included in the quotations	D. Any improved modifications or updated versions of the system should be included in the quotations
A latest technology dual headed variable angle SPECT/CT system for commissioning by the company on site modification basis.	A latest technology dual headed variable angle SPECT/CT system for commissioning by the company on site modification basis.
1. GENERAL	
i. The 16 slice SPECT CT model quotes should be top-of-line model available with the manufacturer, meeting the technical specifications.	**The 16 slice SPECT CT model quotes should be top-of-line model available with the manufacturer, meeting the technical specifications. The quoted model should not be older than 5 years. There must be at least 2 installations of same / similar model in India.**
ii. System should be capable of performing all Planar dynamic, SPECT, Gated Cardiac SPECT and whole body imaging applications.	System should be capable of performing all Planar dynamic, SPECT, Gated Cardiac SPECT and whole body imaging applications.
iii. System should be capable to perform CT image based attenuation correction on same patient table for nuclear medicine images and functional anatomical image fusion.	System should be capable to perform CT image based attenuation correction on same patient table for nuclear medicine images and functional anatomical image fusion.
iv. System should be supplied along with image fusion software and hardware.	System should be supplied along with image fusion software and hardware.
v. All the Application, Operating and Service Manuals in duplicates should be provided by the vendor at the time of handing over the machine. At least one of these manual set to be provided in computer readable format, preferably as MS Word for Windows format document.	All the Application, Operating and Service Manuals in duplicates should be provided by the vendor at the time of handing over the machine. At least one of these manual set to be provided in computer readable format, preferably as MS Word for Windows format document.
2. GANTRY	**2. GANTRY**
i. Unobstructed wide open gantry with clockwise and anticlockwise movement	Unobstructed wide open gantry with clockwise and anticlockwise movement
ii. Should be capable of variable angle including 90° and 180° detector configuration for SPECT, Horizontal and vertical upright for static views	Should be capable of variable angle including 90° and 180° detector configuration for SPECT, Horizontal and vertical upright for static views
iii. Gantry should have emergency stop buttons	Gantry should have emergency stop buttons
iv. Gantry motion controlled by remote control handset and via user defined programs.	Gantry motion controlled by remote control handset and via user defined programs.
v. Persistence scope (LCD Color Display) mounted on the gantry or wall for continuous display of patient position and gentry parameters,	Persistence scope (LCD Color Display) mounted on the gantry or wall for continuous display of patient position and gentry parameters,
vi. Integrated CT hardware option for transmission attenuation correction and functional- anatomical image fusion	Integrated CT hardware option for transmission attenuation correction and functional- anatomical image fusion
3. DETECTORS	**4. DETECTORS**
i. Large field of view and rectangular detectors having UFOV of at least 530x 380 mm	Large field of view and rectangular detectors having UFOV of at least 530x 380 mm
ii. Crystal thickness should be 9.5 mm (3/8").	Crystal thickness should be 9.5 mm (3/8").
iii. Number of PMT should be 55 or more per detector with	Number of PMT should be 55 or more per detector

1ADC per PMT (True digital detector).	with 1ADC per PMT (True digital detector).
iv. The detector should be equipped with automatic body contouring (ABC)	The detector should be equipped with automatic body contouring (ABC)
v. System should have facility for automatic correction for energy, linearity and uniformity.	System should have facility for automatic correction for energy, linearity and uniformity.
vi. Performance parameters should conform NEMA NU 1-2007/2012 standards or the latest specifications the time of supply of equipment and clearly mentioned with literature support	Performance parameters should conform NEMA NU 1-2007/2012 standards or the latest specifications the time of supply of equipment and clearly mentioned with literature support
vii. New Point Added	**System planar sensitivity with LEHR/LEHRS collimator should be ≥190cpm/uCi**
4. CT SPECIFICATIONS	**4. CT SPECIFICATIONS**
i. 16 slices or more CT scanner.	16 slices or more CT scanner.
ii. Integrated CT hardware for transmission attenuation correction and lesion localization for all applications	Integrated CT hardware for transmission attenuation correction and lesion localization for all applications
iii. Anatomical and functional data co-registration software for exact image localization (SPECTICT fusion software) The thickness of the CT reconstruction image should be at least 5 mm.	Anatomical and functional data co-registration software for exact image localization (SPECTICT fusion software)The thickness of the CT reconstruction image should be at least 5 mm.
5. COLLIMATORS	
Following high precision collimators with collision sensor to do all clinically possible examinations along with proper storage carts and with Automatic/Semi-Automatic collimator change.	Following high precision collimators with collision sensor to do all clinically possible examinations along with proper storage carts and with Automatic/Semi-Automatic collimator change.
i. Low Energy High Resolution (LEHR)- One pair	Low Energy High Resolution (LEHR)- One pair
ii. High Energy General Purpose (HEGP)-One pair.	High Energy General Purpose (HEGP)-One pair.
iii. Leap collimator -1 Pair or LEHR/MEGP for Lu-177.	**MEGP collimator -1 Pair**
6. PATIENT TABLE	**6. PATIENT TABLE**
i. Single universal table for all studies i.e. Planer, SPECT. Whole body imaging and CT images.	Single universal table for all studies i.e. Planer, SPECT. Whole body imaging and CT images.
ii. Table top should be composed of low attenuation material, preferably, Carbon fibre. It should be covered with mattress pad and straps.	Table top should be composed of low attenuation material, preferably, Carbon fibre. It should be covered with mattress pad and straps.
iii. Table should be able to withstand at least 180 Kg of body weight.	Table should be able to withstand at least 180 Kg of body weight.
iv. Whole body imaging covering should not be less than 190 cm.	Whole body imaging covering should not be less than 190 cm.
v. Table should move to home position automatically	Table should move to home position automatically
vi. Table should have facility for lowering the height to facilitate easy patient transfer and should be movable to permit imaging for sitting, standing, and stretcher/wheel chair patients	Table should have facility for lowering the height to facilitate easy patient transfer and should be movable to permit imaging for sitting, standing, and stretcher/wheel chair patients
vii. Paediatric pallet, adjustable head positioning pallets, injection arm rest, cardiac arm rest, leg support, Velcro straps for patient restraint and support.	Paediatric pallet, adjustable head positioning pallets, injection arm rest, cardiac arm rest, leg support, Velcro straps for patient restraint and support.
7. Acquisition Workstation	
i. One acquisition station independent of main processing unit capable of data acquisition in static, dynamic, multi gated, whole body scanning, SPECT and Gated SPECT	One acquisition station independent of main processing unit capable of data acquisition in static, dynamic, multi gated, whole body scanning, SPECT and Gated SPECT
ii. High performance PC of latest specifications with multitasking operating system. It should have a	**High performance PC of latest specifications with multitasking 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 (1024x1024 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	**minimum of 4 GB RAM, 2.6 GHz or more processor speed, 600 GB or more hard drive and high resolution (1024x1024 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**
iii.	Fully integrated CT system capable of acquiring X-ray transmission data along with nuclear emission data. SPECT and CT data acquisition should be on the same console	Fully integrated CT system capable of acquiring X-ray transmission data along with nuclear emission data. SPECT and CT data acquisition should be on the same console
iv.	Image acquisition and data display should be from 64x64 matrix up to 256 x 1024 matrix	Image acquisition and data display should be from 64x64 matrix up to 256 x 1024 matrix
v.	Acquisition termination by pre-set time, pre-set count with ability to manually pause, resume and stop all types of acquisitions.	Acquisition termination by pre-set time, pre-set count with ability to manually pause, resume and stop all types of acquisitions.
vi.	Pre-defined acquisition protocols as well as facility for user to configure customized protocols.	Pre-defined acquisition protocols as well as facility for user to configure customized protocols.
vii.	Zoom and rotate features.	Zoom and rotate features.
viii.	Online live display of acquired data and imaging parameters during acquisition. Cinematic display of dynamic MUGA and all multiframe studies	Online live display of acquired data and imaging parameters during acquisition. Cinematic display of dynamic MUGA and all multiframe studies
ix.	Should provide system compatible ECG Gating Device with all leads and cables for MUGA/Gated Data acquisition. There should be ECG and R-to-R Histogram display during acquisition. Indicate frames per R-R interval and maximum frame rate capability.	Should provide system compatible ECG Gating Device with all leads and cables for MUGA/Gated Data acquisition. There should be ECG and R-to-R Histogram display during acquisition. Indicate frames per R-R interval and maximum frame rate capability.
x.	Acquisition software should include camera quality control activities including Centre of rotation (COR) correction, Uniformity correction maps, Energy, Sensitivity and linearity maps, Daily/weekly QC including Gentry calibration, Energy spectrum histogram (PHA) display, QC for Whole Body Acquisition, QC for Balancing sensitivity of both Detector heads.	Acquisition software should include camera quality control activities including Centre of rotation (COR) correction, Uniformity correction maps, Energy, Sensitivity and linearity maps, Daily/weekly QC including Gentry calibration, Energy spectrum histogram (PHA) display, QC for Whole Body Acquisition, QC for Balancing sensitivity of both Detector heads.
xi.	Acquisition console should allow universal networking via DICOM ready local and wide area networks. It should also be connected to network laser color printer	Acquisition console should allow universal networking via DICOM ready local and wide area networks. It should also be connected to network laser color printer
8 Processing Workstation		
i.	High performance PC latest specification multitasking readiness for image transfer printer, PC with full DICOM.	High performance PC latest specification multitasking readiness for image transfer printer, PC with full DICOM.
ii.	**Minimum of 4 GB RAM, 2.5 GHz or more processor speed and minimum 600 GB SCSI hard drive logically divided into 3-4 partitions**	**Minimum of 4 GB RAM, 2.5 GHz or more processor speed and minimum 600 GB hard drive logically divided into 3-4 partitions**
iii.	Antiglare high resolution high resolution (1024x1024 or more) flat panel square LCD monitor of minimum 19" size.	Antiglare high resolution high resolution (1024x1024 or more) flat panel square LCD monitor of minimum 19" size.
iv.	The graphic user interface (GUI) should be identical to that of the acquisition unit.	-deleted-
v.	Predefined and user configurable protocols for standard studies for rapid recall	Predefined and user configurable protocols for standard studies for rapid recall
vi.	**Workstation should support functions like SPECT, CT and SPECT-CT Image reconstruction correction, film**	**Workstation should support functions like SPECT, CT and SPECT-CT Image, film documentation,**

	documentation, and other Nuclear Medicine protocols for organ specific quantitation.	**and other Nuclear Medicine protocols for organ specific quantitation.**
vii.	There should be provision for data transfer to external storage device (CD/DVR/External Hard Disk) for mass data storage and achieving. Both processed data (reports etc. s vell as raw (acquired images) should be amenable to such data transfer and storage. CD/DVR archiving facility should be available on main console.	There should be provision for data transfer to external storage device (CD/DVR/External Hard Disk) for mass data storage and achieving. Both processed data (reports etc. s vell as raw (acquired images) should be amenable to such data transfer and storage. CD/DVR archiving facility should be available on main console.
viii.	**One additional processing work station to be supplied with all the standard and third party software and licenses as in the primary post processing workstation, and it should be connected with online server.**	**One additional processing work station to be supplied with all the standard and third party software and licenses as in the primary post processing workstation**
9. Clinical Applications Software		
i.	All standard SPECT, Whole body imaging and Planer such as general static, dynamic clinical applications package including Display Analysis software, 3-D volume rendering display with Maximum intensity projection (MIP). Cine review capability, curve generation, and image manipulation tools	All standard SPECT, Whole body imaging and Planer such as general static, dynamic clinical applications package including Display Analysis software, 3-D volume rendering display with Maximum intensity projection (MIP). Cine review capability, curve generation, and image manipulation tools
ii.	**Filtered back projection and Iterative reconstruction, Wide beam and 3D-OSEM reconstruction algorithm software for SPECT studies**	**Filtered back projection and Iterative reconstruction and 3D-OSEM reconstruction algorithm software for SPECT studies**
iii.	The image profile curve should be possible in all the acquired images with a possibility to draw FWHM of the profile curve.	The image profile curve should be possible in all the acquired images with a possibility to draw FWHM of the profile curve.
iv.	Image subtraction and addition software should be available for all types of images,	Image subtraction and addition software should be available for all types of images,
v.	Image output format should include JPEG, TIFF, AVI and multimedia reporting tool with self-executable CD creation software	Image output format should include JPEG, TIFF, AVI and multimedia reporting tool with self-executable CD creation software
vi.	Complete Renal processing software including Transplant Evaluation, Diuretic Renography, and Package for GFR, ERPF, Renal Extraction Fraction or Renal Processing protocol, Deconvolution analysis.	Complete Renal processing software including Transplant Evaluation, Diuretic Renography, and Package for GFR, ERPF, Renal Extraction Fraction or Renal Processing protocol, Deconvolution analysis.
vii.	Thyroid Uptake and Thyroid Volumes	Thyroid Uptake and Thyroid Volumes
viii.	Technetium- Thallium/MIBI subtraction for Parathyroid Scintigraphy,	Technetium- Thallium/MIBI subtraction for Parathyroid Scintigraphy,
ix.	Gall Bladder Ejection Fraction	Gall Bladder Ejection Fraction
x.	Condensed dynamic image programme for Gastric transit studies	Condensed dynamic image programme for Gastric transit studies
xi.	Lung perfusion and ventilation, Left to Right Lung ratio.	Lung perfusion and ventilation, Left to Right Lung ratio.
xii.	Bone Static, Three Phase and SPECT with 3-D display	Bone Static, Three Phase and SPECT with 3-D display
xiii.	3-D bone reconstruction programme.	3-D bone reconstruction programme.
xiv.	Whole body SPECT processing software	Whole body SPECT processing software
xv.	Complete cardiac packing including First Pass EF and Cardiac Shunt quantification studies, Gated equilibrium, MUGA SPECT, Myocardial perfusion (planar and SPECT including Bulls eye)	Complete cardiac packing including First Pass EF and Cardiac Shunt quantification studies, Gated equilibrium, MUGA SPECT, Myocardial perfusion (planar and SPECT including Bulls eye)
xvi.	Dedicated licensed cardiac software Emory Cardiac Toolbox / Corridor 4DM /Cedars for gated cardiac SPECT quantification	Dedicated licensed cardiac software Emory Cardiac Toolbox / Corridor 4DM /Cedars for gated cardiac SPECT quantification

xvii.	Brain, both planar and SPECT with attenuation correction and choice of different filters	Brain, both planar and SPECT with attenuation correction and choice of different filters
xviii.	Advanced licensed neuro software or equivalent	Advanced licensed neuro software or equivalent
xix.	Brain quantification program for CBF calculation	Brain quantification program for CBF calculation
xx.	Transmission attenuation correction software to generate map. Flexibility to manually adjust the transmission attenuation map as per requirements	Transmission attenuation correction software to generate map. Flexibility to manually adjust the transmission attenuation map as per requirements
xxi.	Anatomical and functional data co-registration software (SPECT/CT/MRI fusion software). It should also work for the imported anatomic imaging data	Anatomical and functional data co-registration software (SPECT/CT/MRI fusion software). It should also work for the imported anatomic imaging data
xxii.	**Latest collimator detector response - Resolution recovery algorithm software with necessary hardware if required that enables hall dose ha acquisition time in SPECT including Cardiac SPECT, BONE SPECT and planar images should be offered as standard feature**	**Latest collimator detector response - Resolution recovery algorithm software with necessary hardware if required that enables half dose half acquisition time in SPECT including Cardiac SPECT, BONE SPECT and planar images should be offered as standard feature**
xxiii.	Whole body dosimetry software, fully integrated to be supplied along with Olinda Software	Whole body dosimetry software, fully integrated to be supplied along with Olinda Software
xxiv. SPECT SUV must be offered as standard. Quantitative volumetric analysis for SUV calculation: Automated organ definition & segmentation on SPECT & CT combined Images		**SPECT SUV must be offered as standard. Quantitative volumetric analysis for SUV calculation: on SPECT & CT combined Images**
10. Warranty / Other		**10. Warranty / Other**
i.	The radiation equipment offered against this tender shall duly conform to the prescribed international national standards and norms of radiation safety, AERB type approval certificate /NOC should be attached	The radiation equipment offered against this tender shall duly conform to the prescribed international national standards and norms of radiation safety, AERB type approval certificate /NOC should be attached
ii.	Equipment is to be installed as per AERB requirements. Qualified personnel from the company should install and Commission the camera	Equipment is to be installed as per AERB requirements. Qualified personnel from the company should install and Commission the camera
iii.	Cordoning off of the acquisition terminal with lead and appropriate sized lead glass is to be done.	Cordoning off of the acquisition terminal with lead and appropriate sized lead glass is to be done.
iv.	Comprehensive warranty of the equipment including crystals & CT tube and all accessories as well as batteries of the UPS and Air conditioning units should be for Five years after the satisfactory commissioning and handing over of the system. Warranty will include all the accessories as well as electronic/electrical consumables cable/ leads etc., and third party items.	Comprehensive warranty of the equipment including crystals & CT tube and all accessories as well as batteries of the UPS and Air conditioning units should be for Five years after the satisfactory commissioning and handing over of the system. Warranty will include all the accessories as well as electronic/electrical consumables cable/ leads etc., and third party items.
v.	Rates for Five years comprehensive maintenance contract (CMC) after the expiry of warranty with uptime as per the tender terms. CMC will include the crystal, CT tube, batteries of the UPS, Air-conditioning units. All the accessories supplied with the main equipment as well as electronic/electrical consumables/cable/leads etc. will also be part of GMC	Rates for Five years comprehensive maintenance contract (CMC) after the expiry of warranty with uptime as per the tender terms. CMC will include the crystal, CT tube, batteries of the UPS, Air-conditioning units. All the accessories supplied with the main equipment as well as electronic/electrical consumables/cable/leads etc. will also be part of GMC
vi.	Atleast 95% uptime should be maintained during warranty as well as CMC period.	Atleast 95% uptime should be maintained during warranty as well as CMC period.
vii.	The acceptance tests for the verification of different performance parameters of the system will be carried out by department with the help of the company service	The acceptance tests for the verification of different performance parameters of the system will be carried out by department with the help of

	engineers	the company service engineers
viii.	Hands on onsite training for physician, physicist and technologist to be provided by trained engineer and application specialist for at least three working weeks	Hands on onsite training for physician, physicist and technologist to be provided by trained engineer and application specialist for at least three working weeks
11. Accessories and QC Utility		
i.	System compatible indigenous online UPS with maintenance free batteries for the whole system with 30 min back up time. The cardiac stress room electric points and few ordinary lights will also need to be connected through this UPS	System compatible indigenous online UPS with maintenance free batteries for the whole system with 30 min back up time. The cardiac stress room electric points and few ordinary lights will also need to be connected through this UPS
ii.	High resolution network Laser Color Paper printer compatible with the processing workstation (MS Windows) with 5 sets of all cartridges.	High resolution network Laser Color Paper printer compatible with the processing workstation (MS Windows) with 5 sets of all cartridges.
iii.	**Co-57 flood source of at least 15mCi strength for rectangular field of the size adequate for the camera**	**Co-57 flood source of at least 10mCi strength for rectangular field of the size adequate for the camera**
iv.	**Cs-137 calibration source of at least one mCi strength for dose calibrator.**	**Cs-137 calibration source of at least 200uCi strength for dose calibrator.**
v.	Four Quadrant Bar Phantom for rectangular detector of size not less than the UFOV of the detector	Four Quadrant Bar Phantom for rectangular detector of size not less than the UFOV of the detector
vi.	SPECT (Jaszczak) phantom 5 chamber	SPECT (Jaszczak) phantom 5 chamber
vii.	CT quality assurance phantom for contrast resolution, radiation safety and image uniformity and pixel noise etc.	CT quality assurance phantom for contrast resolution, radiation safety and image uniformity and pixel noise etc.
viii.	**Two dose calibrator (Capintec-CRC25 R) including Moly assay canister.**	**Two dose calibrator (Capintec-CRC55 TR or equivalent) including Moly assay canister.**
ix.	One PC based 12 lead ECG monitor having at least 15"color monitor and compatible TMT system. TMT and ECG monitor should be from the same manufacturer. 20 boxes of ECG paper for the quoted ECG monitor also to be supplied	One PC based 12 lead ECG monitor having at least 15"color monitor and compatible TMT system. TMT and ECG monitor should be from the same manufacturer. 20 boxes of ECG paper for the quoted ECG monitor also to be supplied
x.	One No.: vital sign multipara meter patient vital signs monitor, 15 inch monitor (standard make) : 5 parameters - ECG, SPO2, NIBP, Respiration, Temperature. with ECG/Resp: 5 Lead ECG Cable with clip-2 sets. NIBP: Adult cuff & Paediatric cuff- 2nos each. Reusable SPO2: Adult SPO2 sensor with cable-two nos. Paediatric SPO2 sensors-two nos. skin temperature probe-one no.	One No.: vital sign multipara meter patient vital signs monitor, 15 inch monitor (standard make) : 5 parameters - ECG, SPO2, NIBP, Respiration, Temperature. with ECG/Resp: 5 Lead ECG Cable with clip-2 sets. NIBP: Adult cuff & Paediatric cuff- 2nos each. Reusable SPO2: Adult SPO2 sensor with cable-two nos. Paediatric SPO2 sensors-two nos. skin temperature probe-one no.
xi.	One single syringe infusion pump (Schiller/ASCOR/AITECS/B-Braun / Fresenius)	One single syringe infusion pump (Schiller/ASCOR/AITECS/B-Braun / Fresenius)
xii.	One Defibrillator (standard make)	One Defibrillator (standard make)
xiii.	One Radiation Fume Hood for installation in the hot lab with laminar Flow Unit (vertical) and HEPA filter 100% exhaust for Microbiological use. Should be sliding window type with built-in double wall socket 220V, and water fitting with drainage basin. Size approx. 1200mm (W) x 820mm (D) x 2620 mm (H) Materials: The fume hood should be constructed of stainless steel (Type 304). Inner chamber finished in chemical -resistant Epoxy paint and work surface covered with thick non glossy stainless steel sheet.	One Radiation Fume Hood for installation in the hot lab with laminar Flow Unit (vertical) and HEPA filter 100% exhaust for Microbiological use. Should be sliding window type with built-in double wall socket 220V, and water fitting with drainage basin. Size approx. 1200mm (W) x 820mm (D) x 2620 mm (H) Materials: The fume hood should be constructed of stainless steel (Type 304). Inner chamber finished in chemical -resistant Epoxy paint and work surface covered with thick non glossy

	Filter: Charcoal filters. PVC ducting Exhaust to be laid to suitable height as per radiation safety standards laid by AERB, Mumbai	stainless steel sheet. Filter: Charcoal filters.PVC ducting Exhaust to be laid to suitable height as per radiation safety standards laid by AERB, Mumbai
xiv.	One side by side domestic refrigerator of minimum 550 litre capacity for storing radiopharmaceutical kits.	One side by side domestic refrigerator of minimum 550 litre capacity for storing radiopharmaceutical kits.
xv.	Four lead lined waste bins of at least 4 mm thickness for Tc99m waste.	Four lead lined waste bins of at least 4 mm thickness for Tc99m waste.
xvi.	60 interlocking painted lead bricks and 12 painted lead comers.	60 interlocking painted lead bricks and 12 painted lead comers.
xvii.	Two 15" sized L- Bench with glass for Tc-99m radio-pharmacy work.	Two 15" sized L- Bench with glass for Tc-99m radio-pharmacy work.
xviii.	Three stainless steel syringe carriers having lead lining of minimum 4 mm thickness.	Three stainless steel syringe carriers having lead lining of minimum 4 mm thickness.
xix.	Two 2 ml syringe shield and two 5 ml syringe shields	Two 2 ml syringe shield and two 5 ml syringe shields
xx.	Long handled tongs and forceps-five each.	Long handled tongs and forceps-five each.
xxi.	Two sets of straight and curved forceps	Two sets of straight and curved forceps
xxii.	Two syringe needle destroyer	Two syringe needle destroyer
xxiii.	One hot plate	One hot plate
xxiv.	One decontamination kit.	One decontamination kit.
xxv.	Two digital ion meter (Rotem or equivalent only)	Two digital ion meter (Rotem or equivalent only)
xxvi.	Two digital 11Sv/hr range GM based survey cum-contamination monitors (Rotem or equivalent)	Two digital 11Sv/hr range GM based survey cum-contamination monitors (Rotem or equivalent)
xxvii.	**Two light weight (imported) vinyl Lead Apron of 5 mm equivalence.**	**Two light weight vinyl Lead Apron of 5 mm equivalence.**
xxviii.	Two X-ray LCD illuminators for minimum 2 film view,	Two X-ray LCD illuminators for minimum 2 film view,
xxix.	Multimedia projection system with XVGA resolution OR 56" LED Display	Multimedia projection system with XVGA resolution OR 56" LED Display
xxx.	One stainless steel side trolley in the gamma camera room.	One stainless steel side trolley in the gamma camera room.
xxxi.	One Crash cart side trolley in the cardiac stress lab	One Crash cart side trolley in the cardiac stress lab
xxxii.	Three decappers	Three decappers
xxxiii.	One height scale.	One height scale.
xxxiv.	Lead line syringe carrier-one quantity	Lead line syringe carrier-one quantity
xxxv.	Two digital electric weighing machines	Two digital electric weighing machines
xxxvi.	**Mobile lead glass shield, size: 6 feet x 4 feet.**	**Mobile lead shield, size: 4 feet x 4 feet.**
xxvii.	LED X-ray Film viewer with adjustable brightness capable of holding 3 films of 14"X17" size – 2nos	LED X-ray Film viewer with adjustable brightness capable of holding 3 films of 14"X17" size – 2nos
12.	Automatic /semi-automatic collimator change may be included as essential	Automatic /semi-automatic collimator change may be included as essential
13.	**Olinda or equivalent dosimeter software to be provided**	**-deleted-**
14.	BOQ for the site modification work to be submitted by the vendors after the survey and consultation with the institute.	BOQ for the site modification work to be submitted by the vendors after the survey and consultation with the institute.
15.	AERB clearance: 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	AERB clearance: 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
16.	The offered warranty shall commence from the sale of satisfactory handing over of the equipment (functional delivery) and start of its clinical use.	The offered warranty shall commence from the sale of satisfactory handing over of the equipment (functional delivery) and start of its clinical use.

17. Future updates/revision of the software versions shall be done by the vendors without any additional cost	**Future updates of the software versions shall be done by the vendors without any additional cost**
18. Vendor shall provide preventive maintenance of the equipment every month at the convenience of the Institute	**Vendor shall provide preventive maintenance of the equipment every quarter or as per requirement of equipment**
19. INSTALLATION	**19. INSTALLATION**
i. The scope of work for site modification for SPECT CT shall include area as per **Annexure-1.**	The scope of work for site modification for SPECT CT shall include area as per **Annexure-1.**
ii. 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 console room, changing room wash basin, work-station and printer locations. 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. All site-modification should comply with specified standards of the hospital	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 console room, changing room wash basin, work-station and printer locations. 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. All site-modification should comply with specified standards of the hospital
iii. Necessary furniture and fixtures for comfortable working conditions, storage of system components and consumable stand for protective aprons and gonad shields, etc. should be provided.	Necessary furniture and fixtures for comfortable working conditions, storage of system components and consumable stand for protective aprons and gonad shields, etc. should be provided.
iv. Power and Air-conditioning requirement must be mentioned. AC of adequate capacity should be provided. Power supply by the institute will be terminated at existing point. All electrical provisions including earthing etc. will be vendor's responsibility	Power and Air-conditioning requirement must be mentioned. AC of adequate capacity should be provided. Power supply by the institute will be terminated at existing point. All electrical provisions including earthing etc. will be vendor's responsibility
v. The site should be rendered pest/rodent free.	The site should be rendered pest/rodent free.
SITE MODIFICATION	**SITE MODIFICATION**
1. Supplier shall ensure that the equipment model quoted is commissioned within the designated area of institute, without major structural changes to the building	Supplier shall ensure that the equipment model quoted is commissioned within the designated area of institute, without major structural changes to the building
2. The Site drawing of the Institute can be obtained from the HSCC office	The Site drawing of the Institute can be obtained from the HSCC office
3. The vendor should inspect the site before quoting and ensure that the unit can be installed in the available space without any functional compromise.	The vendor should inspect the site 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 of technical bid.	Complete equipment layout site plan and details of work (BOQ) should be part of technical bid.
5. Provisions should be made for placing the various accessories in console room, work-station and printer locations.	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.	**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. Tiles size 600x600mm**
7. All site modification works should comply with specified standards of the hospital	7. All site modification works should comply with specified standards of the hospital
The SCOPE OF WORK for SITE MODIFICATION OF SPECT CT SYSTEM	**The SCOPE OF WORK for SITE MODIFICATION OF SPECT CT SYSTEM**

The area considered for Site Modification for item SPECT CT SYSTEM is indicated in the site plan attached as **Annexure 1.**	The area considered for Site Modification for item SPECT CT SYSTEM is indicated in the site plan attached as **Annexure 1.**
Civil work	**Civil work**
Civil construction work including construction/modification/demolition of brick wall if any, plastering, flooring as per the approved plan and equipment layout plan	Civil construction work including construction/modification/demolition of brick wall if any, plastering, flooring as per the approved plan and equipment layout plan
Additional strengthening of floor / Concrete bed of SPECT CT and equipment area, if required	Additional strengthening of floor / Concrete bed of SPECT CT and equipment area, if required
Platform for unloading and shifting the SPECT CT should be provided if necessary	Platform for unloading and shifting the SPECT CT should be provided if necessary
Cable tray, trench & channel - necessary trenches, cable tray and channels at required location would be provided	Cable tray, trench & channel - necessary trenches, cable tray and channels at required location would be provided
All the construction work to be done as per the final plan approved by institute/HSCC Ltd **Ceiling-to-wall ceramic tiling in SPECT CT examination room**	**All the construction work to be done as per the final plan approved by institute/HSCC Ltd** **Ceiling-to-wall vitrified tiling (600mmx600mm) in SPECT CT examination room**
Flooring	**Flooring**
600 x 600 mm glazed Vitrified (GVT) tiles with 100mm tile skirting in SPECT CT Examination room	600 x 600 mm glazed Vitrified (GVT) tiles with 100mm tile skirting in SPECT CT Examination room
5mm-Vinyl flooring in SPECT CT equipment/ Radiopharmacy	5mm-Vinyl flooring in SPECT CT equipment/ Radiopharmacy
Painting	**Painting**
Two coats Plastic Emulsion Paint over 2 coats of wall putty including primer in Console, SPECT CT equipment / UPS room.	Two coats Plastic Emulsion Paint over 2 coats of wall putty including primer in Console, SPECT CT equipment / UPS room.
All the doors (with lead sheet wherever required as per AERB approved map) should be provided with necessary fittings. Other doors with hydraulic type door closures (DORMA / equivalent Make) and with Mortised locks of Godrej / equivalent reputed make.	All the doors (with lead sheet wherever required as per AERB approved map) should be provided with necessary fittings. Other doors with hydraulic type door closures (DORMA / equivalent Make) and with Mortised locks of Godrej / equivalent reputed make.
Plumbing work The waste pipes and accessories should be of centrifugally cast iron of ISI make and the connection of existing main hole in the public health shafts shall be done. All water pipes shall be Galvanized iron of TATA / equivalent make and filling shall be SUW / UF/ UNIK make. The grating shall be chrome plated. All CP fittings shall be of EBONY / Jaguar / ESSCO (ISI/BIS).	**Plumbing work** The waste pipes and accessories should be of centrifugally cast iron of ISI make and the connection of existing main hole in the public health shafts shall be done. All water pipes shall be Galvanized iron of TATA / equivalent make and filling shall be SUW / UF/ UNIK make. The grating shall be chrome plated. All CP fittings shall be of EBONY / Jaguar / ESSCO (ISI/BIS).
False Ceiling	**False Ceiling**
Aluminium, acoustic 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	Aluminium, acoustic 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
Electrical work	**Electrical work**
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.	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.
The electrical work shall include the following:	The electrical work shall include the following:
A distribution panel of standard make and appropriate capacity shall be provided for main equipment with complete cabling, terminal, earthing etc. and any other items to complete the work.	A distribution panel of standard make and appropriate capacity shall be provided for main equipment with complete cabling, terminal, earthing etc. and any other items to complete the work.
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.	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.
Switches light and power points should be of modular type and of standard make.	Switches light and power points should be of modular type and of standard make.
General lights-LED light fittings with minimum 500 Lux illumination	General lights-LED light fittings with minimum 500 Lux illumination
CCTV system for patient waiting areas with control in console room. Music and Public Address system for calling / informing the patients in the patients in the waiting areas.	CCTV system for patient waiting areas with control in console room. Music and Public Address system for calling / informing the patients in the patients in the waiting areas.
Air Conditioning: minimum 15 TR capacities. 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 effective to eliminate moisture condensation on equipment surface.	**Air Conditioning: minimum 15 TR capacities.** 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 effective to eliminate moisture condensation on equipment surface.
The outdoor units of AC should have grill coverings to prevent theft and damage.	The outdoor units of AC should have grill coverings to prevent theft and damage.
Environment specifications	**Environment specifications**
Relative Humidity range To be maintained between 60% and 80 % in all areas except equipment room, which shall be as per requirement of the equipment	Relative Humidity range To be maintained between 60% and 80 % in all areas except equipment room, which shall be as per requirement of the equipment
Temperature ranges 22+2 °C in all areas except equipment room which shall be as per requirement of the equipment	Temperature ranges 22+2 °C in all areas except equipment room which shall be as per requirement of the equipment
Air conditioning load the heat load calculations and maintaining the desired temp. and humidity shall be responsibility of the bidder.	Air conditioning load the heat load calculations and maintaining the desired temp. and humidity shall be responsibility of the bidder.
Fire detection system-shall comprise of fire panel, smoke /heat detectors	Fire detection system-shall comprise of fire panel, smoke /heat detectors
	Defect liability of turnkey works a.The turnkey work including installation / commissioning of all the turnkey items should be completed within **5**months of handover of site and power. b.Certification to the effect that the work has been executed as per the specifications incorporated in the above document will be by the HSCC Ltd. / and Safdarjung Hospital.
Furniture	**Furniture**
Revolving chairs height adjustable, medium-back with hand-rest-8 NOS	Revolving chairs height adjustable, medium-back with hand-rest-8 NOS
Cupboard with laminate door shutters for storage of spare parts and accessories and records as per requirement – 3 No's	Cupboard with laminate door shutters for storage of spare parts and accessories and records as per requirement – 3 No's

Drug trolley- 1 No's	Drug trolley- 1 No's
Patent trolley with rubber foam mattress-1 No's	Patent trolley with rubber foam mattress-1 No's
Name boards for all rooms	Name boards for all rooms
Tables for Workstation-5 No's	Tables for Workstation-5 No's
Dustbins 10 No's	Dustbins 10 No's
All furniture items should be of standard make	All furniture items should be of standard make

Item No. 5 Positron Emission Tomography (PET/ CT)

Tendered Specification	To be read as
1.1 It combines two scanners -- the PET (Positron Emission Tomography), which shows metabolism and the function of cells, and the CT (Computed Tomography), which shows detailed anatomy -- into one. For example, the PET scanner can provide critical information about the metabolic function of cancer cells, and can detect very small tumors, but not the exact location. The CT scanner, however, provides that anatomic information. So the combination PET/CT scanner gives doctors a powerful new system for detecting and diagnosing conditions like cancer earlier and more accurately, increasing the patient's chances of a good outcome	1.1 It combines two scanners -- the PET (Positron Emission Tomography), which shows metabolism and the function of cells, and the CT (Computed Tomography), which shows detailed anatomy -- into one. For example, the PET scanner can provide critical information about the metabolic function of cancer cells, and can detect very small tumors, but not the exact location. The CT scanner, however, provides that anatomic information. So the combination PET/CT scanner gives doctors a powerful new system for detecting and diagnosing conditions like cancer earlier and more accurately, increasing the patient's chances of a good outcome
2 Operational Requirements	
2.1 1. Integrated PET and multi-slice spiral CT scanner designed to provide accurateregistration and fusion of high-resolution PET and CT images. 2. Should be capable of functioning as a CT scanner or PET scanner alone as required. 3. The CT component should comprise a whole body Multi slice CT scanner with 128 slice acquisition per rotation. 4. The PET component should be capable of imaging all applicable PET radio-pharmaceutical agents.	2.1 1. Integrated PET and multi-slice spiral CT scanner designed to provide accurateregistration and fusion of high-resolution PET and CT images. 2. Should be capable of functioning as a CT scanner or PET scanner alone as required. 3. The CT component should comprise a whole body Multi slice CT scanner with 128 slice generation per rotation 4. The PET component should be capable of imaging all applicable PET radio- pharmaceutical agents.
3 Technical Specifications	
3.1 PET SPECIFICATIONS: Tunnel length: specify length (short to avoid claustrophobia) Type: specify: LSO/LYSO/LBS Size of crystal: thickness > 20mm No. of detector rings: please specify No. of crystals per ring : please specify Total No. of crystals : please specify Gantry aperture: at least 70 cm SYSTEM PERFORMANCE Should follow NEMA NU2-2007or later	3.1 PET SPECIFICATIONS: Tunnel length: specify length (short to avoid claustrophobia) **Type: specify: LSO/LYSO/LBS** **Size of crystal: thickness ≥ 20mm** No. of detector rings: please specify No. of crystals per ring : please specify Total No. of crystals : please specify Gantry aperture: at least 70 cm SYSTEM PERFORMANCE Should follow NEMA NU2-2007or later

recommendations Axial FOV (cm): at least 150mm Transaxial FOV (cm): > 65cm No. of Image Planes: please specify Plane Spacing (mm): please specify Transverse resolution (mm): <5 mm Axial resolution (mm):< 5 mm Uniformity: < 5%(optional) Scatter fraction < 40% Sensitivity (cps/KBq): at least 5 cps/kBq& above Count rate NECR Peak (kcps): please specify Coincidence window (nsec): less than 6 ns Reconstruction time : please specify	recommendations Axial FOV (cm): at least 150mm Transaxial FOV (cm): > 65cm No. of Image Planes: please specify Plane Spacing (mm): please specify **Transverse resolution (mm): <6 mm** **Axial resolution (mm):< 6 mm** Uniformity: < 5%(optional) Scatter fraction < 40% Sensitivity (cps/KBq): at least 5 cps/kBq& above Count rate NECR Peak (kcps): please specify Coincidence window (nsec): less than 6 ns Reconstruction time : please specify
Acquisition must include static, dynamic. whole body and respiratory gated acquisition a. Volume acquisition b. Combined PET/CT operation c. Automated multi-bed acquisitions d. Automatic PET initialization following CT	**Acquisition must include static, dynamic. whole body and respiratory gated acquisition (for both PET &CT)** a. Volume acquisition b. Combined PET/CT operation c. Automated multi-bed acquisitions d. Automatic PET initialization following CT
Combined PET/CT whole body protocols a. Store function for multiple user-defined combinations of CT and PET protocols b. Capability for arbitrary combination of Multiple CT and PET Protocols	Combined PET/CT whole body protocols a. Store function for multiple user-defined combinations of CT and PET protocols b. Capability for arbitrary combination of Multiple CT and PET Protocols
PET Exam planning a. PET bed planning based on Spiral CT acquisitions b. Selection and positioning of PET examination ranges on CT topogram should be possible	PET Exam planning a. PET bed planning based on Spiral CT acquisitions b. Selection and positioning of PET examination ranges on CT topogram should be possible
Data Corrections and Reconstruction- to start simultaneously with acquisition a. CT based attenuation correction b. Scatter correction c. Decay correction d. Dead time correction e. Detector efficiency normalization f. FORE/OSEM/LORS reconstruction	Data Corrections and Reconstruction- to start simultaneously with acquisition a. CT based attenuation correction b. Scatter correction c. Decay correction d. Dead time correction e. Detector efficiency normalization f. FORE/OSEM/LORS reconstruction
Image Display a. Whole body viewer with standing MIP views b. Number of orthogonal views should be possible c. PET-CT image fusion of co—registered data d. Color management with gamma correction, color maps e. SUV analysis	Image Display a. Whole body viewer with standing MIP views b. Number of orthogonal views should be possible c. PET-CT image fusion of co—registered data d. Color management with gamma correction, color maps e. SUV analysis
Maintenance and Quality control a. Automated calibration of PET and CT detectors and electronics. b. Automated daily quality assurance of PET acquisition system c. Acquisition of normalization and well counter calibration data	Maintenance and Quality control a. Automated calibration of PET and CT detectors and electronics. b. Automated daily quality assurance of PET acquisition system c. Acquisition of normalization and well counter calibration data

3.2 CT SPECIFICATIONS 1.GANTRY Aperture: 70cms or more Rotation Mechanism **Scan Field: 40 mm or more** Rotation Time: less than or equal to 0.4 sec Bi-way Patient Communication System : in multiple languages Integrated cooling system with heat dissipation outside the Gantry Room Must have light field localizer 2.GENERATOR Type: please specify Maximum Power: ≥ 70KW 3.TUBE (DUAL FOCUS) Type: please specify (stationary/rotating) Focal Spots size: please specify mA range: 40-600 mA Tube Voltage kV range: 80- 140 kV Anode heat storage capacity: at least 6MHU Computer Control anode temperature monitoring 4.DETECTOR SYSTEM 128 slice acquisition per rotation. Type of detector: please specify (scintillator/photodiode or scintillator/PM tube) Type of scintillator: please specify **Number of elements: at least 42000** **Number of Projections: at least 128** Number of Detector Channels: please specify 5.PATIENT TABLE **Flat table top** Minimum table top height: please specify Scanable length (Metal free): at least 180cm Maximum Patient Weight: 190 kg or more Indexing Accuracy : please specify Random feed: please specify Remote control table feed in steps of 1 mm: please specify Scout film, topogram or scanogram length : please specify Longitudinal table movement: please specify Longitudinal table speed: please specify 6.IMAGE ACQUISITION AND RECONSTRUCTION Option for acquisition in List mode must be there Volume acquisition: please specify Real time reconstruction : please specify (it should be faster) Slice thickness (mm): please specify Scan field (cm): please specify Reconstruction field (cm): please specify Reconstruction matrix: please specify Reconstruction: Iterative type Option for reconstruction using T.O.F must be there	3.2 CT SPECIFICATIONS 1.GANTRY Aperture: 70cms or more Rotation Mechanism **Scan Field: 40 cm or more** Rotation Time: less than or equal to 0.4 sec Bi-way Patient Communication System : in multiple languages Integrated cooling system with heat dissipation outside the Gantry Room Must have light field localizer 2.GENERATOR Type: please specify Maximum Power: ≥ 70KW 3.TUBE (DUAL FOCUS) Type: please specify (stationary/rotating) Focal Spots size: please specify **mA range: 40-600 mA or more** **Tube Voltage kV range: 80- 140 kV or more** Anode heat storage capacity: at least 6MHU Computer Control anode temperature monitoring 4.DETECTOR SYSTEM **128 slice generation per rotation.** Type of detector: please specify (scintillator/photodiode or scintillator/PM tube) Type of scintillator: please specify **Number of elements: at least 23000** **Number of Projections: at least 128-deleted-** Number of Detector Channels: please specify 5.PATIENT TABLE **Flat table top-deleted-** Minimum table top height: please specify Scanable length (Metal free): at least 180cm Maximum Patient Weight: 190 kg or more Indexing Accuracy : please specify Random feed: please specify Remote control table feed in steps of 1 mm: please specify Scout film, topogram or scanogram length : please specify Longitudinal table movement: please specify Longitudinal table speed: please specify 6.IMAGE ACQUISITION AND RECONSTRUCTION Option for acquisition in List mode must be there Volume acquisition: please specify Real time reconstruction : please specify (it should be faster) Slice thickness (mm): please specify Scan field (cm): please specify Reconstruction field (cm): please specify Reconstruction matrix: please specify Reconstruction: Iterative type Option for reconstruction using T.O.F must be there

Must have automatic patient dose reduction facility 7. IMAGE DISPLAY Monitor (at least 19" Flat Screen) Monitor resolution: 1024x1024 or better Image display matrix: multiple options including 512 x 512 and 1024X1024 Pixel size (mm) : please specify CINE display Cine image rate : please specify Filming (Interactive and automatic) Window width: please specify 8.PERFORMANCE OF SYSTEM (IMAGE QUALITY) Spatial resolution (High resolution) : please specify Low contrast resolution for full FOV: please specify Noise: please specify 9.COMPUTER AND ARCHIVING CAPCACITY **Capacity of system disc (GB) 2Terabyte, at least 10 TB image storage server Raw data (GB) 2 Terabyte ,Image data (No. images at 512 x 512 matrix): please specify Long Term storage (Preferably on CD-R)** I0.SPIRAL SCANNING FACILITY Longest continuous spiral scan time (at least 100 sec) Fastest rotational speed: please specify Minimum slice width: please specify Length of continuous spiral scan (cm): please specify Maximum spiral scan time (sec): please specify Image quality (should be constant for the complete length of the spiral scan) Pitch factor (volume Pitch): please specify Max. number of ranges in Auto range: please specify Number of scans per range: please specify Max. number of images per range: please specify Scan cycle time (sec): please specify 11.CLINICAL APPLICATION — FOLLOWING SOFTWARES REQUIRED In addition system should have facility for (These functions should be possible from Main console 1024x1024matrix/workstation 3D Reconstruction and Display) a. i. Shaded surface display ii. Maximum intensity projection iii. Minimum intensity projection iv. Volume rendering technique b. Provision to make DICOM/PDF/JPEG/AVI/MPEG digital output c. Cine Display d. Bone Mineral Density e. CT radiation dose reduction. CARE Bolus / Smart prep./ Any other equivalent facility f. Real time Multiplanar Reconstruction and display g. Volume measurements of tissues and organs	Must have automatic patient dose reduction facility 7. IMAGE DISPLAY Monitor (at least 19" Flat Screen) Monitor resolution: 1024x1024 or better Image display matrix: multiple options including 512 x 512 and 1024X1024 Pixel size (mm) : please specify CINE display Cine image rate : please specify Filming (Interactive and automatic) Window width: please specify 8.PERFORMANCE OF SYSTEM (IMAGE QUALITY) Spatial resolution (High resolution) : please specify Low contrast resolution for full FOV: please specify Noise: please specify 9.COMPUTER AND ARCHIVING CAPCACITY **Capacity of system disc (GB) 2Terabyte, Raw data (GB) 2 Terabyte. Image data (No. images at 512 x 512 matrix): please specify** **Long Term storage (Preferably on CD-R)** I0.SPIRAL SCANNING FACILITY Longest continuous spiral scan time (at least 100 sec) Fastest rotational speed: please specify Minimum slice width: please specify Length of continuous spiral scan (cm): please specify Maximum spiral scan time (sec): please specify Image quality (should be constant for the complete length of the spiral scan) Pitch factor (volume Pitch): please specify Max. number of ranges in Auto range: please specify Number of scans per range: please specify Max. number of images per range: please specify Scan cycle time (sec): please specify 11.CLINICAL APPLICATION — FOLLOWING SOFTWARES REQUIRED In addition system should have facility for (These functions should be possible from Main console 1024x1024matrix/workstation 3D Reconstruction and Display) a. i. Shaded surface display ii. Maximum intensity projection iii. Minimum intensity projection iv. Volume rendering technique b. Provision to make DICOM/PDF/JPEG/AVI/MPEG digital output c. Cine Display d. Bone Mineral Density e. CT radiation dose reduction. CARE Bolus / Smart prep./ Any other equivalent facility f. Real time Multiplanar Reconstruction and display g. Volume measurements of tissues and organs

h. Quantitative lung evaluation i. Pre and post processing filter functions j. Complete cardiac package both for PET & CT with ECG Gating (CT angiography with rotation facility, CT perfusion, Advanced vessel analysis for vessel and lesion quantification) Comparison of PET and SPECT images on same window. k. Cardiac PET viability review application software. l. Fly-through image software for airways, bowel (colonography) and vessels m. Multi-modality image fusion (CT/MR, CT/PET) n. Pediatric protocols o. Neuro quantification software including assessment of dementia using SUV values. p. System management software for computerized calibration, quality control q. Should be possible to evaluate different scans of same patient done over a time to give overall assessment of malignancies progression in oncology. r. Quantification of metabolic parameters for oncology application, including SUV volume, SUV standardised of BMI, SUV peak, SUV-L, Glycotic index and latest software to calculate metabolic tumor volume (Threshold based, gradient based, iterative and region growing method etc. **s. 4-D TOF or better or advanced respiratory gating software and hardware for PET/CT acquisition and processing should be a standard feature.**	h. Quantitative lung evaluation i. Pre and post processing filter functions j. Complete cardiac package both for PET & CT with ECG Gating (CT angiography with rotation facility, CT perfusion, Advanced vessel analysis for vessel and lesion quantification) Comparison of PET and SPECT images on same window. k. Cardiac PET viability review application software. l. Fly-through image software for airways, bowel (colonography) and vessels m. Multi-modality image fusion (CT/MR,CT/PET) n. Pediatric protocols o. Neuro quantification software including assessment of dementia using SUV values. p. System management software for computerized calibration, quality control q. Should be possible to evaluate different scans of same patient done over a time to give overall assessment of malignancies progression in oncology. r. Quantification of metabolic parameters for oncology application, including SUV volume, SUV standardised of BMI, SUV peak, SUV-L, Glycoticindex and latest software to calculate metabolic tumor volume (Threshold based, gradient based, iterative and region growing method etc. **S.-Deleted**
3.4 DICOM CONNECTIVITY Connectivity to RIS/ PACS system, DICOM query, send, retrieve, modality work-list, store, print, DICOM-RT (connectivity to SYSTEMS LIKE Varis&Lantis networking systems: Cadplan/Eclipse [Varian], Brainscan [BrainLab], PLATO-Sunrise [Nucletron], Coherence [Siemens] etc.)	3.4 DICOM CONNECTIVITY Connectivity to RIS/ PACS system, DICOM query, send, retrieve, modality work-list, store, print, DICOM-RT (connectivity to SYSTEMS LIKE Varis&Lantis networking systems: Cadplan/Eclipse [Varian], Brainscan [BrainLab], PLATO-Sunrise [Nucletron], Coherence [Siemens] etc.)
3.5 WORK STATIONS- 5independent post processing workstations/5 server based workstations with 5 permanentlicenses Should have display matrix of 1024x1024, with colour monitor Software for Multiplanar and 3D image reconstruction in Gray scale and colour, CT angiography Having maximum and minimum intensity projection, volume rendering, multi-modality image fusion, and fly-through image software Facility for multimodality image fusion including PET, SPECT,CT,IVIRI Reporting monitor resolution: please specify All 5 no. client nodes or 5 workstation should be concurrently capable of all post processing function of PET&CT. They should be provided with keyboard, mouse and	3.5 WORK STATIONS- 5 independent post processing workstations/5 server based workstations with 5 permanent licenses Should have display matrix of 1024x1024, with colour monitor Software for Multiplanar and 3D image reconstruction in Gray scale and colour, CT angiography Having maximum and minimum intensity projection, volume rendering, multi-modality image fusion, and fly-through image software Facility for multimodality image fusion including PET, SPECT,CT,IVIRI Reporting monitor resolution: please specify All 5 no. client nodes or 5 workstation should be concurrently capable of all post processing function of PET&CT including advanced applications (Neuro, oncology & cardiac). They should be provided with keyboard, mouse and medical

medical grade flat panel monitor of minimum19”size 3.6 OTHER CAPABILITIES: 3D PET Imaging capability Different type of acquisition mode for PET/CT: Static, Dynamic and Whole Body scan-dynamic imaging also must be possible for assessing tracer kinetics Gated — ECG and Respiratory gated Static and Dynamic acquisition mode on PET/CT	grade flat panel monitor of minimum19”size 3.6 OTHER CAPABILITIES: 3D PET Imaging capability Different type of acquisition mode for PET/CT: Static, Dynamic and Whole Body scan-dynamic imaging also must be possible for assessing tracer kinetics Gated — ECG and Respiratory gated (both PET & CT) Static and Dynamic acquisition mode on PET/CT
4 System Configuration Accessories, spares and consumables	
4.1 System as specified 4.2 PERIPHERALS a. Latest dual head pressure injector: Digitally controlled CT injection system with pedestal head mount, remote monitor, VRC and syringe heater, along with 200 sets of 200 ml disposable CT syringes with tubing and connector. b. Dry laser camera on LAN with facility of taking printout on film sizes at least 14”x17”. One thousand films (14”x17” size) per year to be provided for five years. c. High resolution color laser printer on LAN for color hardcopy on paper with 5 sets of all cartridges- Two no. 4.3 ESSENTIAL SPARE PARTS (Provide detailed list of spare parts supplied must include at least one X-ray tube) a. Various positioning aids including Head Rests, Head straps, set of two body straps, arm support and leg support, steps for patient to climb on the bed b. Infant immobilizers/positioning aid c. Quality Assurance phantoms & Tools for CT & PET including CATPHAN phantom d. Jasczczk phantom for PET/CT performance evaluation must have hollow spheres (each individually removable and fillable) e. NEMA phantom and associated accessories to perform QA as per NU-2007/latest and associated software to analyze QC parameters f. Multiple number of users definable scanning protocols g. Extended patient scheduling facility h. Manuals & other charts 4.4 Imagestorage serverandprocessor: **i) Hardware to include high speed state of the art processor, 20 TBexpandable to 40TB. ≥8 GB RAM, with automatic archival systems & High speed**	4.1 System as specified 4.2 PERIPHERALS a. Latest dual head pressure injector: Digitally controlled CT injection system with pedestal head mount, remote monitor, VRC and syringe heater, along with 200 sets of 200 ml disposable CT syringes with tubing and connector. b. Dry laser camera on LAN with facility of taking printout on film sizes at least 14”x17”. One thousand films (14”x17” size) per year to be provided for five years. c. High resolution color laser printer on LAN for color hardcopy on paper with 5 sets of all cartridges- Two no. 4.3 ESSENTIAL SPARE PARTS (Provide detailed list of spare parts supplied must include at least one X-ray tube) a. Various positioning aids including Head Rests, Head straps, set of two body straps, arm support and leg support, steps for patient to climb on the bed b. Infant immobilizers/positioning aid c. Quality Assurance phantoms & Tools for CT & PET including CATPHAN phantom d. Jasczczk phantom for PET/CT performance evaluation must have hollow spheres (each individually removable and fillable) e. NEMA phantom and associated accessories to perform QA as per NU-2007/latest and associated software to analyze QC parameters f. Multiple number of users definable scanning protocols g. Extended patient scheduling facility h. Manuals & other charts 4.4 Imagestorage serverandprocessor **i) Hardware to include high speed state of the art processor, 20 TB. ≥8 GB RAM, with automatic archival systems & High speed volume rendering graphics card with at least 2 GB RAM.**

volume rendering graphics card with at least 2 GB RAM. **ii) The server should have either proprietary or reputed software (e.gTera Recon), capable of advanced 3D processing and high end applications**. iii) Archiving: Image archiving of >4TB capacity capable of maintain Automatic Digital archiving of Data/ studies on CD, DVD along with compatible drives and 1000 CD-RW and 1000 DVD-RW to be provided. iv) Latest antivirus software should be loaded in the server for its protection and for the protection of all clients system. Antivirus should be updated regularly for CAMC period v) Backup server facility should be available for retrieving the data when the main server crashes due to any reason. 4.5 The Chiller system,if required, shall be provided along with the machine by the principals. No local system shall be accepted. This will also have a warranty of 5 years	**ii) The server should have either proprietary or reputed software (e.gTera Recon), capable of advanced 3D processing.** iii) Archiving: Image archiving of >4TB capacity capable of maintain Automatic Digital archiving of Data/ studies on CD, DVD along with compatible drives and 1000 CD-RW and 1000 DVD-RW to be provided. iv) Latest antivirus software should be loaded in the server for its protection and for the protection of all clients system. Antivirus should be updated regularly for CAMC period v) Backup server facility should be available for retrieving the data when the main server crashes due to any reason. 4.5 The Chiller system,if required, shall be provided along with the machine by the principals. No local system shall be accepted. This will also have a warranty of 5 years
5. Radiation Measuring, Safety Accessories	
i. Two dose calibrators for PET radio pharmaceuticals (Atomlab 500 dose calibrator or equivalent) including radioactive reference \ quality control sources and dose calibrator shielding rings (2.25" thick lead). ii. Two L- bench with lead glass for handling PET RPS. **iii. One PET dose drawing system \ module for drawing F-18 /FDG from a vial in to a syringe** iv. One hundred no. painted Lead bricks and 8 lead corners for F- 18 handling v. One waste bin with minimum 12 mm lead on all side with sliding door for PET RPS waste vi. Two waste bins with minimum 6 mm lead on all side with hatch door for PET RPS waste vii. Lead vial shields for 10ml and 30ml vials - Two numbers each viii. Tungsten syringe shield (for PET RPS) (≥9mm tungsten) -2cc & 5cc -2 no. each. ix. Shielded syringe holders for PET RPS - Two no. (Two each for 2ml, 5ml & 10ml) x. One digital µSv/hr range GM based survey –cum – contamination monitors. xi. **Comprehensive central area radiation monitoring system**. xii. Six digital pocket dosimeters: easy to readwith loud alarm and if required one dosimeter charger- Gamma & Beta. xiii. PET sharps container with lead shielding – 2 no. xiv. One decontamination kit for PET RPS with SS Niptong& SS forceps. xv. Digital temperature and humidity control system- two no xvi. Light weight radiation protection aprons- Two no xvii. High energy shielded decay drum (shielded with 0.5" lead for high energy isotopes) -three no. xviii. PET shipping system for VIAL PIG including vial pig	i.Two dose calibrators for PET radio pharmaceuticals(Atomlab 500 dose calibrator or equivalent) including radioactive reference \ quality control sources and dose calibrator shielding rings (2.25" thick lead). ii. Two L- bench with lead glass for handling PET RPS. **iii.One manual / spring arm PET dose drawing system\module for drawing F-18 /FDG from a vial into a syringe** iv. One hundred no. painted Lead bricks and 8 lead corners for F- 18 handling v. One waste bin with minimum 12 mm lead on all side with sliding door for PET RPS waste vi. Two waste bins with minimum 6 mm lead on all side with hatch door for PET RPS waste vii. Lead vial shields for 10ml and 30ml vials - Two numbers each viii. Tungsten syringe shield (for PET RPS) (≥9mm tungsten) -2cc & 5cc -2 no. each. ix. Shielded syringe holders for PET RPS - Two no. (Two each for 2ml, 5ml & 10ml) x. One digital µSv/hr range GM based survey –cum – contamination monitors. **xi.Comprehensive central area radiation monitoring system for 4 rooms.** xii. Six digital pocket dosimeters: easy to readwith loud alarm and if required one dosimeter charger- Gamma & Beta. xiii. PET sharps container with lead shielding – 2 no. xiv. One decontamination kit for PET RPS with SS Niptong& SS forceps. xv. Digital temperature and humidity control system- two no xvi. Light weight radiation protection aprons- Two no xvii. High energy shielded decay drum (shielded with 0.5" lead for high energy isotopes) -three no.

(Lead shielding: sides & bottom:1", Top:1.75") should meet DOT II type A packaging requirements- two no. xix**. Fumehood for PET Radiopharmacy with sliding lead glass shield with HEPA air filtration (Germ Free Radiopharmacy hood or equivalent- 1 no.** xx. One Survey meter monitoring beta and gamma. Range 0-2R/hr. xxi. Four x-ray LCD illuminators for minimum2 films view of 14'x17' size. xxii. One collapsible wheel chair with rubberized swivel wheels. xxiii. One patient trolley with rubber foam mattress. xxiv. Two Glucometers with 50 packs of blood glucose strips. xxv. One crash cart trolley. xxvi.Two single syringe pumps, with delivery rate form 0.1 ml/h to over 200 ml/h in 0.1 ml increments & capable of using 10ml, 20ml and 50ml syringes commonly available in local market. xxvii. One biphasic Defibrillator **xxviii. One vital sign monitor** xxix. One Digital GM based Survey - cum - Contamination monitor. xxx. One electrical weighing machine for at least 200 kg. xxxi. One side by side refrigerator of minimum 500 L capacity xxxii. Latest specifications all in one PC, ≥16GB RAM, ≥512GB SSD (preferably iOS) having licensed operating system and software, MS office & Antivirus software and along with Laserjet printer for patient reports and data maintenance. xxxiii. Latest specifications Laptop with monitor at least 15", ≥16GB RAM, ≥ 512GB SSD (preferably iOS) having licensed operating system and software, MS office & Antivirus software along with licensed software to display PET/CT studies.	xviii**.** PET shipping system for VIAL PIG including vial pig (Lead shielding: sides & bottom:1", Top:1.75") should meet DOT II type A packaging requirements- two no. **xix. Laminer flow for PET Radiopharmacy with sliding lead glass shield with HEPA air filtration. 12mm leadline for working area (Germ Free Radiopharmacy hood or equivalent- 1 no.** xx. One Survey meter monitoring beta and gamma. Range 0-2R/hr. xxi. Four x-ray LCD illuminators for minimum2 films view of 14'x17' size. xxii. One collapsible wheel chair with rubberized swivel wheels. xxiii. One patient trolley with rubber foam mattress. xxiv. Two Glucometers with 50 packs of blood glucose strips. xxv. One crash cart trolley. xxvi.Two single syringe pumps, with delivery rate form 0.1 ml/h to over 200 ml/h in 0.1 ml increments & capable of using 10ml, 20ml and 50ml syringes commonly available in local market. xxvii. One biphasic Defibrillator **xxviii. One vital sign monitor (Body temp, ECG, Pulse, B.P., Resp rate)** xxix. One Digital GM based Survey - cum - Contamination monitor. xxx.One electrical weighing machine for at least 200 kg. xxxi. One side by side refrigerator of minimum 500 L capacity xxxii. Latest specifications all in one PC, ≥16GB RAM, ≥512GB SSD (preferably iOS) having licensed operating system and software, MS office & Antivirus software and along with Laserjet printer for patient reports and data maintenance. xxxiii. Latest specifications Laptop with monitor at least 15", ≥16GB RAM, ≥ 512GB SSD (preferably iOS) having licensed operating system and software, MS office & Antivirus software along with licensed software to display PET/CT studies
6 Other Items	
6.1 FDG Supply: 200doses of FDG/year, each dose calibrated to 120mCi delivery at department doorstep (for 2 years). Rates to be quoted separately also **6.2 One 'Automatic synthesis module' (Self shielded type) along with required safety cabinet / hot cell for Galllium-68 radiopharmaceuticals- Rates should be quoted separately also**. 6.3 One 68 Germanium/ Gallium Generator of 25mCi capacity per year for two years, with delivery at doorstep. Rate to be quoted separately also. 6.4 PSMA-11(10mg) & DOTANOC (10mg) long with radiolabelling kits (GMP approved) & supplies to meet 200	6.1 FDG Supply: 200doses of FDG/year, each dose calibrated to 120mCi delivery at department doorstep (for 2 years). Rates to be quoted separately also **6.2 One 'Automatic synthesis module' (Self shielded type) along with required stand alone hot cell(60mm leadline) for Galllium-68 radiopharmaceuticals- Rates should be quoted separately also.** 6.3 One 68 Germanium/ Gallium Generator of 25mCi capacity per year for two years, with delivery at doorstep. Rate to be quoted separately also. 6.4 PSMA-11(10mg) & DOTANOC (10mg) long with radiolabelling kits (GMP approved) & supplies to meet

runs of each. Rates to be quoted separately also. 6.5 Dehumidifiers.	200 runs of each. Rates to be quoted separately also. 6.5 Dehumidifiers
7Environmental factors	
7.1 Shall meet IEC-60601-1-2:2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility. or should comply with 89/366/EEC; EMC-directive. 7.2 The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90% 7.3 The unit shall be capable of operating continuously in ambient temperature of 10 -40 deg C and relative humidity of 15-90% 7.4 Completeinstallationshouldinclude: 1. Site study in advance prior to submitting the bid. **2. Electrical Requirements to be specified and substation to be made. Site visit a must before submitting the bid.** 3. All AERB Clearances and Environmental clearances to be arranged with local authorities. Institute will provide all the documentations and coordination. 4. All other regulatory clearance will be coordinated by the supplier.	7.1 Shall meet IEC-60601-1-2:2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility. or should comply with 89/366/EEC; EMC-directive. 7.2 The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90% 7.3 The unit shall be capable of operating continuously in ambient temperature of 10 -40 deg C and relative humidity of 15-90% 7.4 Completeinstallationshouldinclude: 1. Site study in advance prior to submitting the bid. **2. Electrical Requirements to be specified and electrical panel to be made. Site visit a must before submitting the bid.** 3. All AERB Clearances and Environmental clearances to be arranged with local authorities. Institute will provide all the documentations and coordination. 4. All other regulatory clearance will be coordinated by the supplier.
8. INSTALLATION	**8. INSTALLATION**
i. The scope of work for site modification for PET CT shall include area as per **Annexure-1**	ii. The scope of work for site modification for PET CT shall include area as per **Annexure-1**
iii. 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 console room, changing room wash basin, work-station and printer locations. It should also include Lead lined door with lead glass peeping window, radiation warning indicators and signage, Aluminium false ceiling, GVT floor tiles and full height wall tiles. All site-modification should comply with specified standards of the hospital	iv. 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 console room, changing room wash basin, work-station and printer locations. It should also include Lead lined door with lead glass peeping window, radiation warning indicators and signage, Aluminium false ceiling, GVT floor tiles and full height wall tiles. All site-modification should comply with specified standards of the hospital
v. Necessary furniture and fixtures for comfortable working conditions, storage of system components and consumable stand for protective aprons and gonad shields, etc. should be provided.	vi. Necessary furniture and fixtures for comfortable working conditions, storage of system components and consumable stand for protective aprons and gonad shields, etc. should be provided.
iv. Power and Air-conditioning requirement must be mentioned. AC of adequate capacity should be provided. Power supply by the institute will be terminated at	iv. Power and Air-conditioning requirement must be mentioned. AC of adequate capacity should be provided. Power supply by the institute will be terminated at

existing point. All electrical provisions including earthing etc. will be vendor's responsibility	existing point. All electrical provisions including earthing etc. will be vendor's responsibility
vii. The site should be rendered pest/rodent free.	viii. The site should be rendered pest/rodent free.
SITE MODIFICATION	**SITE MODIFICATION**
1. Supplier shall ensure that the equipment model quoted is commissioned within the designated area of institute, without major structural changes to the building	1. Supplier shall ensure that the equipment model quoted is commissioned within the designated area of institute, without major structural changes to the building
2. The Site drawing of the Institute can be obtained from the HSCC office	2. The Site drawing of the Institute can be obtained from the HSCC office
3. The vendor should inspect the site before quoting and ensure that the unit can be installed in the available space without any functional compromise.	3. The vendor should inspect the site 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 of technical bid.	4. Complete equipment layout site plan and details of work (BOQ) should be part of technical bid.
5. Provisions should be made for placing the various accessories in console room, work-station and printer locations.	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 tilesand full height wall tiles.	**It should also include Lead lined door with lead glass peeping window, radiation warning indicators and signages, Aluminium false ceiling. GVT floor tiles (600mmx600mm) and full height wall tiles (600x600mm).**
7. All site modification works should comply with specified standards of the hospital	7. All site modification works should comply with specified standards of the hospital
The SCOPE OF WORK for SITE MODIFICATION OF PET CT SYSTEM	The SCOPE OF WORK for SITE MODIFICATION OF PET CT SYSTEM
The area considered for Site Modification for item PET CT SYSTEM is indicated in the site plan attached as **Annexure 1.**	The area considered for Site Modification for item PET CT SYSTEM is indicated in the site plan attached as **Annexure 1.**
Civil work	**Civil work**
Civil construction work including construction/modification/demolition of brick wall if any, plastering, flooring as per the approved plan and equipment layout plan	Civil construction work including construction/modification/demolition of brick wall if any, plastering, flooring as per the approved plan and equipment layout plan
Additional strengthening of floor / Concrete bed of SPECT CT and equipment area, if required	Additional strengthening of floor / Concrete bed of SPECT CT and equipment area, if required
Platform for unloading and shifting the SPECT CT should be provided if necessary	Platform for unloading and shifting the SPECT CT should be provided if necessary
Cable tray, trench & channel - necessary trenches, cable tray and channels at required location would be provided	Cable tray, trench & channel - necessary trenches, cable tray and channels at required location would be provided
All the construction work to be done as per the final plan approved by institute/HSCC Ltd Ceiling-to-wall ceramic tiling in SPECT CT examination room	All the construction work to be done as per the final plan approved by institute/HSCC Ltd Ceiling-to-wall ceramic tiling in SPECT CT examination room.
Flooring	**Flooring**
600 x 600 mm glazed Vitrified (GVT) tiles with 100mm tile skirting in PET CT Examination room	600 x 600 mm glazed Vitrified (GVT) tiles with 100mm tile skirting in PET CT Examination room
5mm-Vinyl flooring in PET CT equipment/ Radio-chemistry	5mm-Vinyl flooring in PET CT equipment/ Radio-chemistry
Painting	**Painting**
Two coats Plastic Emulsion Paint over 2 coats of wall putty including primer in Console, SPECT CT equipment / UPS room.	Two coats Plastic Emulsion Paint over 2 coats of wall putty including primer in Console, SPECT CT equipment / UPS room.
All the doors (with lead sheet wherever required as per AERB approved map) should be provided with necessary fittings. Other doors with hydraulic type door closures	All the doors (with lead sheet wherever required as per AERB approved map) should be provided with necessary fittings. Other doors with hydraulic type door closures

(DORMA / equivalent Make) and with Mortised locks of Godrej / equivalent reputed make.	(DORMA / equivalent Make) and with Mortised locks of Godrej / equivalent reputed make.
False Ceiling	**False Ceiling**
Aluminium, acoustic 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	Aluminium, acoustic 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
Electrical work	**Electrical work**
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.	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.
The electrical work shall include the following:	The electrical work shall include the following:
A distribution panel of standard make and appropriate capacity shall be provided for main equipment with complete cabling, terminal, earthing etc. and any other items to complete the work.	A distribution panel of standard make and appropriate capacity shall be provided for main equipment with complete cabling, terminal, earthing etc. and any other items to complete the work.
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.	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.
Switches light and power points should be of modular type and of standard make.	Switches light and power points should be of modular type and of standard make.
General lights-LED light fittings with minimum 500 Lux illumination	General lights-LED light fittings with minimum 500 Lux illumination
CCTV system for patient waiting areas with control in console room. Music and Public Address system for calling / informing the patients in the patients in the waiting areas.	CCTV system for patient waiting areas with control in console room. Music and Public Address system for calling / informing the patients in the patients in the waiting areas.
Air Conditioning: minimum 15 TR capacities. Ductable package air conditioners and split air conditioners may be used according to room as well as equipment requirement and suitability. Humidity control should be effective to eliminate moisture condensation on equipment surface.	**Air Conditioning: minimum 15 TR capacities.** Ductable package air conditioners and split air conditioners may be used according to room as well as equipment requirement and suitability. Humidity control should be effective to eliminate moisture condensation on equipment surface.
The outdoor units of AC should have grill coverings to prevent theft and damage.	
Environment specifications	**Environment specifications**
Relative Humidity range To be maintained between 60% and 80 % in all areas except equipment room, which shall be as per requirement of the equipment	Relative Humidity range To be maintained between 60% and 80 % in all areas except equipment room, which shall be as per requirement of the equipment
Temperature ranges 22+2 °C in all areas except equipment room which shall be as per requirement of the equipment	Temperature ranges 22+2 °C in all areas except equipment room which shall be as per requirement of the equipment
Air conditioning load the heat load calculations and maintaining the desired temp. and humidity shall be responsibility of the bidder.	Air conditioning load the heat load calculations and maintaining the desired temp. and humidity shall be responsibility of the bidder.
Fire detection system-shall comprise of fire panel, smoke /heat detectors	Fire detection system-shall comprise of fire panel, smoke /heat detectors
Ultrasonic Pest repellents to be provided and installed.	Ultrasonic Pest repellents to be provided and installed.
Defect liability of turnkey works	**a. The turnkey work including installation /**

a. **The turnkey work including installation / commissioning of all the turnkey items should be completed within 3months of handover of site and power.** b. Certification to the effect that the work has been executed as per the specifications incorporated in the above document will be by the HSCC Ltd. / and Safdarjung Hospital.	**commissioning of all the turnkey items should be completed within 5months of handover of site and power**. b. Certification to the effect that the work has been executed as per the specifications incorporated in the above document will be by the HSCC Ltd. / and Safdarjung Hospital.
Furniture	**Furniture**
Revolving chairs height adjustable, medium-back with hand-rest-8 NOS	Revolving chairs height adjustable, medium-back with hand-rest-8 NOS
Cupboard with laminate door shutters for storage of spare parts and accessories and records as per requirement – 3 No's	Cupboard with laminate door shutters for storage of spare parts and accessories and records as per requirement – 3 No's
Drug trolley- 1 No's	Drug trolley- 1 No's
Patent trolley with rubber foam mattress-1 No's	Patent trolley with rubber foam mattress-1 No's
Name boards for all rooms	Name boards for all rooms
Tables for Workstation-5 No's	Tables for Workstation-5 No's
Dustbins 10 No's	Dustbins 10 No's
All furniture items should be of standard make	All furniture items should be of standard make
9.Power Supply	**9.Power Supply**
9.1 Power input to be 220-240VAC(Single Phase),/400-440 V (3 Phase)/ 50Hz as appropriate fitted with Indian plug at least160 kvA UPS with batteries, other accessories and manuals, to be installed and commissioned with a 5 year warranty 9.2 Rescuable over current breaker shall be fitted for protection	9.1 Power input to be 220-240VAC(Single Phase),/400-440 V (3 Phase)/ 50Hz as appropriate fitted with Indian plug at least160 kvA UPS with batteries, other accessories and manuals, to be installed and commissioned with a 5 year warranty 9.2 Rescuable over current breaker shall be fitted for protection
10Standards, Safety and Training	**10Standards, Safety and Training**
10.1.a. The radiation equipment offered against this tender shall duly conform to the prescribed international national standards and norms of radiation safety, AERB type approval certificate /NOC should be attached 10.1.b. Equipment is to be installed as per AERB requirements. Qualified personnel from the company should install and Commission the camera 10.1.c. Cordoning off of the acquisition terminal with lead and appropriate sized lead glass is to be done. 10.1.d. Comprehensive warranty of the equipment including crystals & CT tube and all accessories as well as batteries of the UPS and Air conditioning units , radioactive reference sources should be for five years after the satisfactory commissioning (functional delivery) and handing over of the system. Warranty will include all the accessories as well as electronic/electrical consumables cable/ leads, Air-conditioning units etc., and third party items. 10.1.e. Rates for Five years comprehensive maintenance contract (CMC) after the expiry of warranty with uptime as per the tender terms. CMC will include the crystal, CT tube, batteries of the UPS, Air-conditioning units. All the accessories supplied with the main equipment as well as electronic/electrical consumables/cable/leads etc. will also be part of CMC 10.1.f. Atleast 95% uptime should be maintained during warranty as well as CMC period.	10.1.a. The radiation equipment offered against this tender shall duly conform to the prescribed international national standards and norms of radiation safety, AERB type approval certificate /NOC should be attached 10.1.b. Equipment is to be installed as per AERB requirements. Qualified personnel from the company should install and Commission the camera 10.1.c. Cordoning off of the acquisition terminal with lead and appropriate sized lead glass is to be done. 10.1.d. Comprehensive warranty of the equipment including crystals & CT tube and all accessories as well as batteries of the UPS and Air conditioning units , radioactive reference sources should be for five years after the satisfactory commissioning (functional delivery) and handing over of the system. Warranty will include all the accessories as well as electronic/electrical consumables cable/ leads, Air-conditioning units etc., and third party items. 10.1.e. Rates for Five years comprehensive maintenance contract (CMC) after the expiry of warranty with uptime as per the tender terms. CMC will include the crystal, CT tube, batteries of the UPS, Air-conditioning units. All the accessories supplied with the main equipment as well as electronic/electrical consumables/cable/leads etc. will also be part of CMC 10.1.f. Atleast 95% uptime should be maintained during warranty as well as CMC period.

10.1.g. The acceptance tests for the verification of different performance parameters of the system will be carried out by department with the help of the company service engineers 10.1.h. Hands on onsite training for physician, physicist and technologist to be provided by trained engineer and application specialist for at least three working weeks 10.2 Five new sets of sources for PET QC and calibration shall be provided on demand. Responsibility of disposal of the old sources shall lie with the vendor company 10.3 Shall comply with AERB and BARC guidelines including NEMA testing, CT QA and other machine related quality control parameters that the regulatory authority may additionally come up with in the next 5 years. 10.4 At the time of installation PET/CT QA test as per AERB requirement has to be performed by the provider.	10.1.g. The acceptance tests for the verification of different performance parameters of the system will be carried out by department with the help of the company service engineers 10.1.h. Hands on onsite training for physician, physicist and technologist to be provided by trained engineer and application specialist for at least three working weeks 10.2 Five new sets of sources for PET QC and calibration shall be provided on demand. Responsibility of disposal of the old sources shall lie with the vendor company 10.3 Shall comply with AERB and BARC guidelines including NEMA testing, CT QA and other machine related quality control parameters that the regulatory authority may additionally come up with in the next 5 years. 10.4 At the time of installation PET/CT QA test as per AERB requirement has to be performed by the provider.
11 Documentation	**11 Documentation**
11.1User/Technical/Maintenance manuals to be supplied in English. 11.2 Certificate of calibration and inspection with validity of at least two years andrecalibration free of cost till 5 years. **FDA and CE approval certificate** AERB type approval certificate for CT 11.3 Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet. Any point, if not substantiated with authenticated catalogue/manual, will not be considered. 11.4 List of Equipment available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.	11.1User/Technical/Maintenance manuals to be supplied in English. 11.2 Certificate of calibration and inspection with validity of at least two years and recalibration free of cost till 5 years. **FDA and CE approval certificate-Deleted** AERB type approval certificate for CT 11.3 Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet. Any point, if not substantiated with authenticated catalogue/manual, will not be considered. 11.4 List of Equipment available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.

All other Specifications shall remain unchanged.

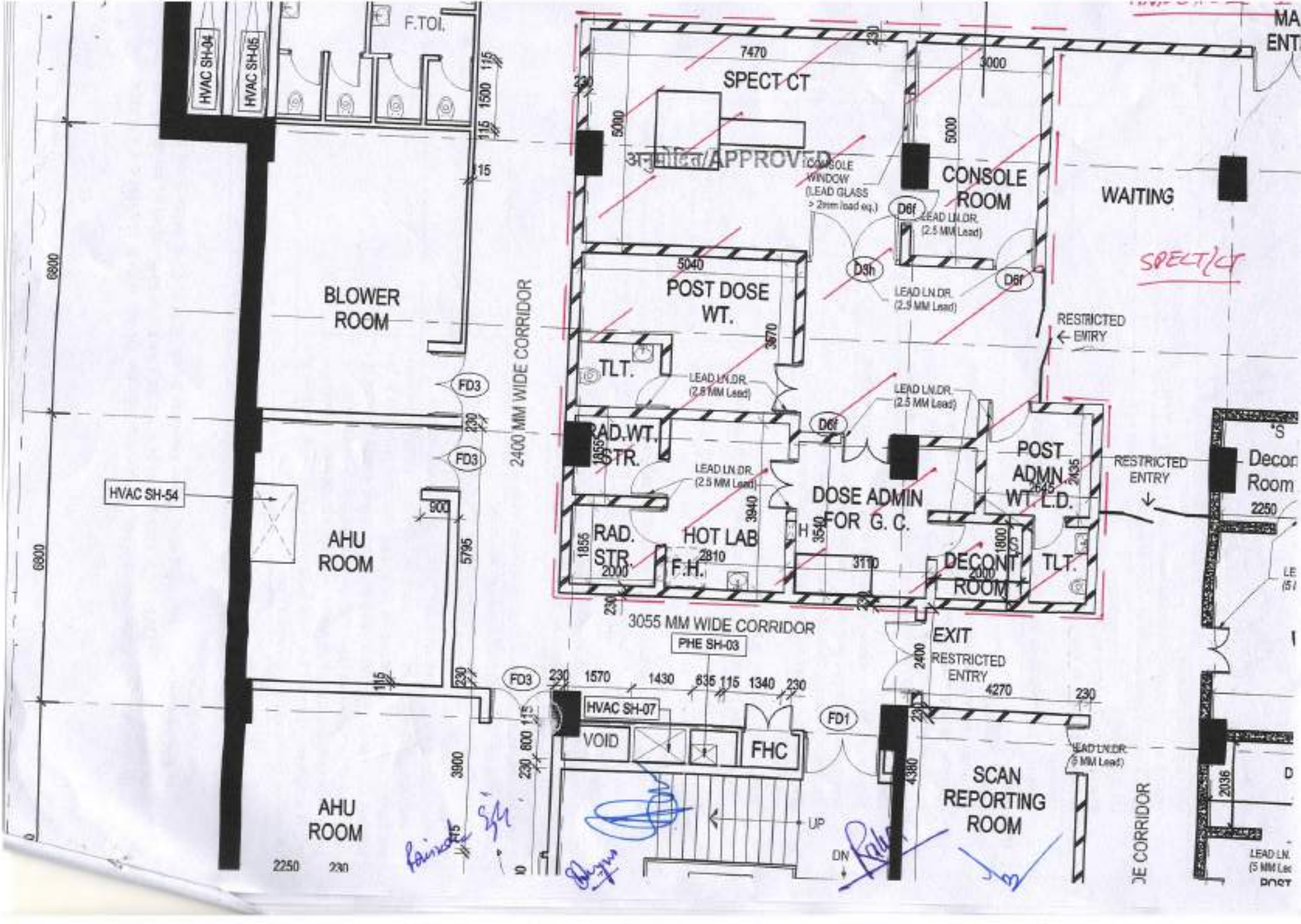
The bid submission date for **all above items** is extended form **05.10.2020 to 13.10.2020.**

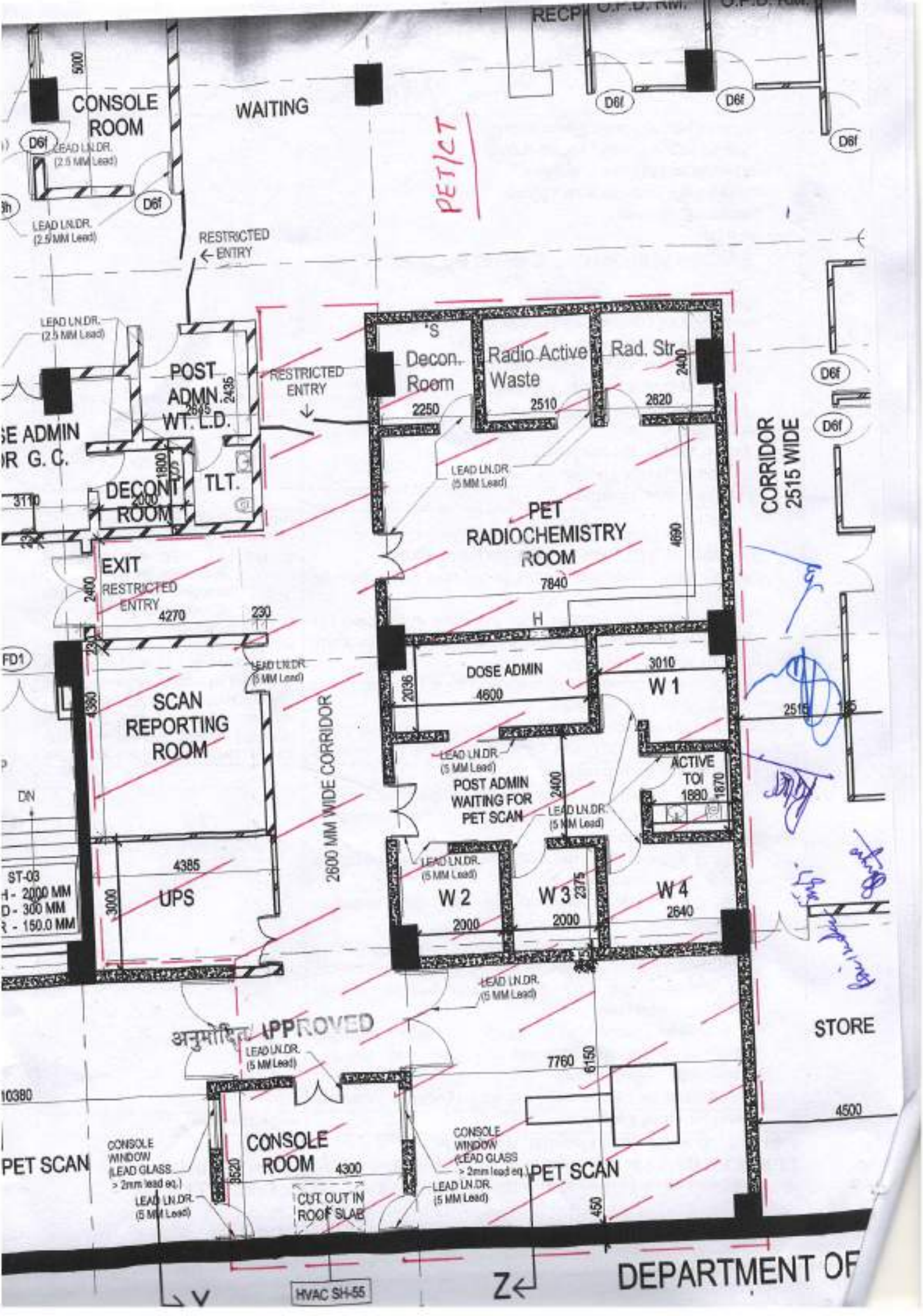
Further, Amendments of all Equipment under CTVS Department (Item no. 01, 02, 03), which are pending, their bid submission date is also extended form **05.10.2020 to 13.10.2020**

All other terms and conditions of the tender enquiry documents including Amendments issued so far shall remain unchanged.

Prospective bidders are advised to regularly visit HSCC website/CPPP Website for the Corrigendum/amendments etc. if any, as these will be notified on these portals only. No separate advertisement will published in the newspaper in this regard.

For Medical Superintendent
VMMC & Safdarjung Hospital New Delhi


HVAC SH-04
HVAC SH-05
F.TOI.
SPECT CT
अनुमोदित/APPROVED
CONSOLE WINDOW (LEAD GLASS > 2mm lead eq.)
CONSOLE ROOM
WAITING
D6f
D3h
LEAD LN.DR. (2.5 MM Lead)
POST DOSE WT.
BLOWER ROOM
2400 MM WIDE CORRIDOR
TLT.
RESTRICTED ENTRY
FD3
RAD.WT. STR.
HVAC SH-54
AHU ROOM
DOSE ADMIN FOR G. C.
POST ADMN. WT. L.D.
RAD. STR.
HOT LAB
F.H.
DECONT ROOM
TLT.
3055 MM WIDE CORRIDOR
PHE SH-03
EXIT
HVAC SH-07
VOID
FHC
FD1
SCAN REPORTING ROOM
UP
DN
Decon Room


CONSOLE ROOM
WAITING
PET/CT
RESTRICTED ENTRY
LEAD LN.DR. (2.5 MM Lead)
POST ADMN. WT. L.D.
DECONT ROOM
TLT.
EXIT
SCAN REPORTING ROOM
UPS
2600 MM WIDE CORRIDOR
Decon. Room
Radio Active Waste
Rad. Str
PET RADIOCHEMISTRY ROOM
CORRIDOR 2515 WIDE
DOSE ADMIN
W 1
POST ADMIN WAITING FOR PET SCAN
ACTIVE TOI
W 2
W 3
W 4
STORE
CONSOLE ROOM
CONSOLE WINDOW (LEAD GLASS > 2mm lead eq.)
CUT OUT IN ROOF SLAB
PET SCAN
HVAC SH-55
DEPARTMENT OF
अनुमोदित APPROVED

No.P-45021/112/2020-PP(BE-II)(E-43780)
Government of India
Ministry of Commerce and Industry
Department for Promotion of Industry and Internal Trade
(Public Procurement Section)

Udyog Bhawan, New Delhi
Dated August 24, 2020

OFFICE MEMORANDUM

Subject: Format for registration of bidders from countries which shares land border with India – regarding

The undersigned is directed to refer Department of Expenditure Order (Public Procurement No. 1) dated 23.07.2020 mandating that bidders having beneficial ownership in countries which share land border with India will be eligible to bid in public procurement, only if they are registered with the competent authority. Accordingly, the bidders, who have beneficial ownership in countries which share land border with India and intend to participate in public procurement in India, may submit application for "Registration" in the format enclosed as Appendix "A". Bidders are also required to submit application for "Security Clearance" in the format enclosed as Appendix "B". Complete application containing both "Registration" and "Security Clearance" formats, duly filled in, may be submitted in the Office of Joint Secretary (MKN), DPIIT, Room No. 236A, Udyog Bhawan, New Delhi.

2. The validity period of the registration shall be 12 months from the date of issue of registration letter. However, in case of appointment of new Director(s)/ new shareholders with more than 10% shares/ change in controlling ownership interest or control through other means, the registration shall stand cancelled. In such cases, bidders will be required to apply for a fresh registration. The list of bidders who have been registered with competent authority shall be displayed on the website of DPIIT.

3. The registration granted by this Department shall be only for the purpose of bid participation under Rule 144(xi) of General Financial Rules, 2017.

4. This issues with the approval of competent authority.

Encl: As above

(D.V.S.P. Varma)
Under Secretary to Govt. of India
Email: dvsp.varma@nic.in

To

1. All Ministries/ Departments of Government of India
2. All Industry Associations

Appendix-A

Format for bidder registration under Rule 144(xi) of GFR

Name of Bidder - as defined in the Department of Expenditure Order (Public Procurement No. 1) issued vide No. F No 6/18/2019-PPD dated 23rd July, 2020	
Type of business entity (Natural Person/ Private Limited Company/ Public Limited Company/ Sole Proprietorship/ One Person Company/ Partnership firm/ Limited Liability Partnership/ Joint Venture/ Trust/ NGO/or any other type of entity) In case of incorporated entity - to attach certificate of incorporation.	
Beneficial owners - as defined in the Department of Expenditure Order (Public Procurement No. 1) issued vide No. F.No.6/18/2019-PPD dated 23rd July, 2020 Details of all beneficial owners having ownership more than that prescribed in Para 9 of Department of Expenditure Order (Public Procurement No. 1) issued vide No. F.No.6/18/2019-PPD dated 23rd July, 2020 may be furnished in the format as given in Annexure -1 duly certified by practicing Chartered Account in India.	
Complete **address of the Registered Office** with contact person name, telephone number and email Id.	
Whether registration is being sought as a. Manufacturer/ service provider/ contractor for supply of goods/ services / works or b. As an **agent/reseller/distributor/member of consortium/ Branch Office/ Office Controlled by bidder/any subsidy of any artificial juridical person/** any other type of category)	

Bidder to give details in which category – registration is being sought.	
In case registration is being sought as **anagent/reseller/distributor/Office controlled by bidder/ any other subsidy of any artificial juridical person /any other category other than manufacturers , service provider and contractor** of above - the **details of manufacturer/ service provider/ contractor** may be furnished in Annexure-II.	
The **details of items** (goods/ services / works) for which registration is sought as per Annexure –III	
Financial details in INR/ US Dollar for last five financial years as per Annexure –IV duly certified by practicing Chartered Account in India.	

Note: The terminology "Works" in the entire document means "Works including turnkey works/ projects". Similarly, the terminology "Services" means "Consultancy as well as non-consultancy services".

Annexure-I

Details of beneficial ownership of M/s .....(Name of the bidder)

		Beneficial owner details		
Name of the beneficial owner	% beneficial ownership	Natural person or legal/ artificial juridical person/ entity	Country of Citizenship / Country of incorporation of legal/ artificial juridical person/ entity.	In case of legal/ artificial juridical person/ entity, beneficial ownership details of such entities may be furnished and so on.

Annexure-II

Details of manufacturer/ service provider/ contractor

Name of manufacturer/ service provider/ contractor	
Type of business entity (Natural Person/ Private Limited Company/ Public Limited Company/ Sole Proprietorship/ One Person Company/ Partnership firm/ Limited Liability Partnership/ Joint Venture/ Trust/ NGO/or any other type of entity) In case of incorporated entity - to attach certificate of incorporation.	
Beneficial owners – as defined in the Department of Expenditure Order (Public Procurement No. 1) issued vide No. F.No.6/18/2019-PPD dated 23rd July, 2020 Details of all beneficial owners having ownership more than that prescribed in Para 9 of Department of Expenditure Order (Public Procurement No. 1) issued vide No. F.No.6/18/2019-PPD dated 23rd July, 2020 may be furnished in the format as given in Annexure -I duly certified by practicing Chartered Account in India.	
Complete **address of the Registered Office of manufacturer/ service provider/ contractor** with contact person name, telephone number and email Id.	
In case of manufacturer, complete address of the**manufacturing premises** with name, telephone number and email Id of contact person.	
In case of service provider/ contractor, **complete address of the premises from where services** are provided may be given with name, telephone number and email Id of contact person.	
The **details of items** (goods/ services / works) for which registration is sought as per Annexure –III	
Financial details in INR/USD for last five financial years as per Annexure –IV duly certified by practicing Chartered Account in India.	

Annexure-III

Details of item (goods/ services / works) for which registration is sought

Description of items (goods/ services / works) for which registration is being sought.	
Broad technical specification parameters/ details of items	
Annual Capacity of bidder for each of the goods/ services / works for which registration is being sought.	
Major public procuring entities in India for these items	
Details of contracts received in last 05 years for these items from public procuring entities in India in the format given in Annexure-V	
Details of contracts received in last 05 years for these item from private sector in India in the format given in Annexure-VI	
Details of outsourced components/goods and subcontracted works and services proposed to be used in execution of contract may be provided in the format given in Annexure –VII.	

Note:-

1. Bidder can seek registration for multiple items in an application by providing requisite details for each of the item for which registration is being sought.
2. Registration will be valid for a period of one year from the date of issue.
3. If there is change in the beneficial ownership of the bidder/ manufacturer/ contractor/service provider – this registration shall automatically stand annulled. Fresh registration need to be filed in such cases.

Annexure-IV

Financial details in INR/ US Dollar for last five financial years duly certified by practicing Chartered Account in **India.**

Financial year (FY)	Net Sales turnover during the FY	Net Profit during the FY	Net worth at the end of the FY

Annexure-V

Details of contracts received in last 05 years from public procuring entities in India

Sr. No.	Description ofgoods/ services / works with broad technical parameters	Procuring entity details – Name and complete address of the Organization.	Purchase Order Qty and value	Status of the Order – Executed successfully/ under execution/ cancelled

Note: The details are required to be furnished only for those goods/ services / works for which registration is being sought.

Annexure-VI

Details of contracts received in last 05 years from private sector in India

Sr. No.	Description ofgoods/ services / works with broad technical parameters	Procuring entity details – Name and complete address of the Organization.	Purchase Order Qty and value	Status of the Order – Executed successfully/ under execution/ cancelled

Note: The details are required to be furnished only for those goods/ services / works for which registration is being sought.

Annexure-VII

Details of outsourced components/goods and subcontracted works and services proposed to be used in execution of contract

Sr. No.	Details of outsourced components/goods and subcontracted works and services	Major technical parameters	Manufactured by /Subcontracted to	Country of Origin

*The details are required to be furnished for top 20 high value outsourced components/goods and subcontracted works and services.

Appendix - B

Proforma for application for security clearance for registration of bidders from countries which share land border with India

I. **Details in respect of bidding company / person:**

Sl. No.	Name of the company / person	Type of company (Pvt Ltd. / Pub. Ltd. / sole proprietorship / one person company / partnership / LLP / JV / Trust / NGO etc.)	Country of registration in case of company / nationality (if holding multiple nationality, all must be mentioned) In case of person	Registration number with date in case of company / passport nos. and issue date in case of person	Registered office address and correspondence address in case of company / Contact Address in case of person	Previous name of the company, if any	Details of earlier registration, if any (ref. no. & date)

II. **Details of beneficial ownership of entity:**

Sl. No.	Name of the company/individuals which/who are the beneficial owner of bidding company	Country of registration, registration number with date in case beneficial owner is a company / nationality, passport nos. and issue date (if holding multiple nationality, all must be mentioned) In case beneficial owner is an individual	Registered office address in case of company and correspondence address / contact address in case of individual	Details of intermediary company(s) / persons between bidder company or person and beneficial owner company / individual	Enclose a chart depicting the link between bidding company / person and the beneficial company / owners along with details such as address, parentage, passport details (in case of individuals) or company registration details (in case of companies)

III. **Details in respect of Directors of bidding company.**

Sl. No.	Full Name of Board of Directors	Present position held with date (since when)	Date of birth	Parentage (name of father / mother)	Present & Permanent Address	Nationality (if holding multiple nationality, all must be mentioned)	Passport Nos. and issue date, if any	Contact Address & telephone number

IV. **Details of shareholders of bidding company (all companies/entities/individuals with more than 10% shares or having controlling ownership interest or exercising control through other means in case of less than 10% shares):**

Sl No	Full Name of individual / company	Parentage (name of father / mother) in case of individuals, and registration number in case of companies	Permanent address / present address in case of individuals, and registered and correspondence address in case of companies	Present position held, in any, in the applicant company	Nationality, in case of individual (if holding multiple nationality, all must be mentioned) / country of registration, in case of company	Passport Nos. and date of issue, if any (date of birth, in case passport is not available) for individuals	% of shares held in the company

V. **Details of tender(s) and specific goods / services / works proposed to be supplied:**

VI. **Reasons for seeking registration with Registration Committee of DPIIT:** A brief note be attached

VII. **Details of nature of activities undertaken by bidding company / person:** A brief note be attached

VIII. **Details of nature of activities undertaken by beneficial owner of bidding company / person:** A brief note be attached

IX. Details of criminal cases, if any, against the bidding company, its director(s) or person as per annexure

Annexure

Self-declaration for bidding company and its director(s) / owners or person

a. Name & address and registration number of the company :

b Name and address of owners (in case of proprietorship firm) / directors of the company / person

1. _____

2. _____

3. _____

4. _____

c Are the company owners (in case of proprietorship firm) / directors / person listed above, are the subject of any?

1	Preventive detention proceedings under Public Safety Act / National Security Act etc.	:	Yes / No
2.	Criminal investigation in which chargesheet has been filed	:	Yes / No

d. If, Yes, please provide following details

1. Case / FIR number :
2. Detention / warrant number, if any.
3. Police station / district / agency :
4. Sections of law under which case(s) has / have been filed :
5. Name and place of the court :

e. The above mentioned details are in respect of both India and any other foreign country.

(Signature)

Note: The above self-declaration is required to be filled and signed by the authorized signatory of the company.

F.No.6/18/2019-PPD
Ministry of Finance
Department of Expenditure
Public Procurement Division

161, North Block,
New Delhi
24th July, 2020

Order (Public Procurement No. 3)

Subject: Clarification to Order (Public Procurement No.1) dated 23rd July 2020

Attention is invited to paragraph 3(b) of the Order (Public Procurement No.1), under the heading 'Transitional provisions' which reads as follows:

> b) *If the tendering process has crossed the first exclusionary qualificatory stage* If the qualified bidders include bidders from such countries, the entire process shall be scrapped and initiated *de novo*. The *de novo* process shall adhere to the conditions prescribed in this Order

It is hereby clarified that: for the purpose of paragraph 3 (b), "qualified bidders" means only those bidders who would otherwise have been qualified for award of the tender after considering all factors including price, if Order (Public Procurement No. 1) dated 23rd July 2020 had not been issued.

2. If bidders from such countries would not have qualified for award for reasons unconnected with the said Order (for example, because they do not meet tender criteria or their price bid is higher or because of the provisions of purchase preference under any other order or rule or any other reason) then there is no need to scrap the tender / start the process de novo.

3. The following examples are given to assist in implementation of the Order.

Example 1: Four bids are received in a tender. One of them is from a country which shares a land border with India. The bidder from such country is found to be qualified technically by meeting all prescribed criteria and is also the lowest bidder. In this case, the bidder is qualified for award of the tender, except for the provisions of the Order (Public Procurement No. 1) dated 23rd July. In this case, the tender should be scrapped and fresh tender initiated.

Example 2: The facts are as in Example 1, but the bidder from such country, though technically qualified is not the lowest because there are other technically qualified bidders whose price is lower. Hence the bidder from such country would not be

qualified for award of the tender irrespective of the Order (Public Procurement No 1) dated 23rd July 2020. In such a case, there is no need to scrap the tender.

Example 3: The facts are as in Example 1, but the bidder from a country which shares a land border with India, though technically qualified, is not eligible for award due to the application of price preference as per other orders/ rules. In such a case, there is no need to scrap the tender.

Example 4: Three bids are received in a tender. One of them is a bidder from a country sharing a land border with India. The bidder from such a country does not meet the technical requirements and hence is not qualified. There is no need to scrap the tender.

(Sanjay Prasad)
Joint Secretary (PPD)
Email ID js.pfc2.doe@gov.in
Telephone: 011-23093882

To,

(1) Secretaries of All Ministries/ Departments of Government of India for information and necessary action. They are also requested to inform the clarification to all procuring entities.

(2) Secretary, Department of Public Enterprises with a request to immediately circulate this clarification among Public Enterprises.

(3) Chief Secretaries/ Administrators of Union Territories/ National Capital Territory of Delhi

F.No.6/18/2019-PPD
Ministry of Finance
Department of Expenditure
Public Procurement Division

161, North Block
New Delhi
23rd July, 2020

Order (Public Procurement No. 2)

Subject: Exclusion from restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017 –regarding.

In Order (Public Procurement No. 1) dated 23rd July 2020, orders have been issued requiring registration of bidders from a country sharing a land border with India in order to be eligible to bid in public procurement.

2. Notwithstanding anything contained therein, it is hereby clarified that the said Order will not apply to bidders from those countries (even if sharing a land border with India) to which the Government of India has extended lines of credit or in which the Government of India is engaged in development projects.

3. Updated lists of countries to which lines of credit have been extended or in which development projects are undertaken are given in the website of the Ministry of External Affairs.

(Sanjay Prasad)
Joint Secretary (PPD)
Email ID: js-pfc2-doe@gov.in
Telephone: 011-23093882

To,

(1) Secretaries of All Ministries/ Departments of Government of India for information and necessary action. They are also requested to inform these provisions to all procuring entities.

(2) Secretary, Department of Public Enterprises with a request to immediately reiterate these orders in respect of Public Enterprises.

(3) Chief Secretaries/ Administrators of Union Territories/ National Capital Territory of Delhi

F.No.6/18/2019-PPD
Ministry of Finance
Department of Expenditure
Public Procurement Division

161, North Block,
New Delhi
23rd July, 2020

Office Memorandum

Subject: Insertion of Rule 144 (xi) in the General Financial Rules (GFRs), 2017

Rule"144 of the General Financral Rules 2017 entitled 'Fundamental principles of public buying', has been amended by inserting sub-rule (xi) as under:

Notwithstanding anything contained in these Rules, Department of Expenditure may, by order in writing, impose restrictions, including prior registration and/or screening, on procurement from bidders from a country or countries, or a class of countries, on grounds of defence of India, or matters directly or indirectly related thereto including national security; no procurement shall be made in violation of such restrictions

(Sanjay Prasad)
Joint Secretary (PPD)
Email ID: js.pfc2.doe@gov.in
Telephone: 011-23093882

To,

(1) Secretaries of All Ministries/ Departments of Government of India
(2) Chief Secretaries/ Administrators of Union Territories/ National Capital Territory of Delhi

F.No.6/18/2019-PPD
Ministry of Finance
Department of Expenditure
Public Procurement Division

161, North Block,
New Delhi
23rd July, 2020

Order (Public Procurement No. 1)

Subject: Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017

Attention is invited to this office OM no. 6/18/2019-PPD dated 23rd July 2020 inserting Rule 144 (xi) in GFRs 2017. In this regard, the following is hereby ordered under Rule 144 (xi) on the grounds stated therein:

Requirement of registration

1. Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority, specified in **Annex I.**

2 This Order shall not apply to (i) cases where orders have been placed or contract has been concluded or letter/notice of award/ acceptance (LoA) has been issued on or before the date of this order; and (ii) cases falling under **Annex II.**

Transitional cases

3. Tenders where no contract has been concluded or no LoA has been issued so far shall be handled in the following manner: -

   a) *In tenders which are yet to be opened, or where evaluation of technical bid or the first exclusionary qualificatory stage (i.e. the first stage at which the qualifications of tenderers are evaluated and unqualified bidders are excluded) has not been completed.* No contracts shall be placed on bidders from such countries. Tenders received from bidders from such countries shall be dealt with as if they are non-compliant with the tender conditions and the tender shall be processed accordingly.

   b) *If the tendering process has crossed the first exclusionary qualificatory stage*: if the qualified bidders include bidders from such countries, the

entire process shall be scrapped and initiated *de novo*. The *de novo* process shall adhere to the conditions prescribed in this Order.

c) As far as practicable, and in cases of doubt about whether a bidder falls under paragraph 1, a certificate shall be obtained from the bidder whose bid is proposed to be considered or accepted, in terms of paras 8, 9 and 10 read with para 1 of this Order.

Incorporation in tender conditions

4. In tenders to be issued after the date of this order, the provisions of paragraph 1 and of other relevant provisions of this Order shall be incorporated in the tender conditions.

Applicability

5. Apart from Ministries / Departments, attached and subordinate bodies, notwithstanding anything contained in Rule 1 of the GFRs 2017, this Order shall also be applicable
   a. to all Autonomous Bodies;
   b. to public sector banks and public sector financial institutions; and
   c. subject to any orders of the Department of Public Enterprises, to all Central Public Sector Enterprises; and
   d to procurement in Public Private Partnership projects receiving financial support from the Government or public sector enterprises/ undertakings.
   e. Union Territories, National Capital Territory of Delhi and all agencies/ undertakings thereof

Definitions

6. "Bidder" for the purpose of this Order (including the term 'tenderer', 'consultant' 'vendor' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency, branch or office controlled by such person, participating in a procurement process.

7. "Tender" for the purpose of this Order will include other forms of procurement, except where the context requires otherwise.

8 "Bidder from a country which shares a land border with India" for the purpose of this Order means

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a) An entity incorporated, established or registered in such a country; or
b) A subsidiary of an entity incorporated, established or registered in such a country; or
c) An entity substantially controlled through entities incorporated, established or registered in such a country, or
d) An entity whose *beneficial owner* is situated in such a country; or
e) An Indian (or other) agent of such an entity; or
f) A natural person who is a citizen of such a country; or
g) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

9 "Beneficial owner" for the purpose of paragraph 8 above will be as under:

(i) In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person(s), has a controlling ownership interest or who exercises control through other means.
Explanation—

a. "Controlling ownership interest" means ownership of, or entitlement to, more than twenty-five per cent of shares or capital or profits of the company;

b. "Control" shall include the right to appoint the majority of the directors or to control the management or policy decisions, including by virtue of their shareholding or management rights or shareholders agreements or voting agreements.

(ii) In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;

(iii) In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals.

(iv) Where no natural person is identified under (i) or (ii) or (iii) above, the beneficial owner is the relevant natural person who holds the position of senior managing official.

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(v) In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

10. "Agent" for the purpose of this Order is a person employed to do any act for another, or to represent another in dealings with third persons.

Sub-contracting in works contracts

11 In works contracts, including turnkey contracts, contractors shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority. The definition of "contractor from a country which shares a land border with India" shall be as in paragraph 8 above. This shall not apply to sub-contracts already awarded on or before the date of this Order.

Certificate regarding compliance

12. A certificate shall be taken from bidders in the tender documents regarding their compliance with this Order. If such certificate given by a bidder whose bid is accepted is found to be false, this would be a ground for immediate termination and further legal action in accordance with law.

Validity of registration

13. In respect of tenders, registration should be valid at the time of submission of bids and at the time of acceptance of bids. In respect of supply otherwise than by tender, registration should be valid at the time of placement of order. If the bidder was validly registered at the time of acceptance / placement of order, registration shall not be a relevant consideration during contract execution.

Government E-Marketplace

14 The Government E-Marketplace shall, as soon as possible, require all vendors/ bidders registered with GeM to give a certificate regarding compliance with this Order, and after the date fixed by it, shall remove non-compliant entities from GeM unless/ until they are registered in accordance with this Order.

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Model Clauses/ Certificates

15. Model Clauses and Model Certificates which may be inserted in tenders / obtained from Bidders are enclosed as **Annex III**. While adhering to the substance of the Order, procuring entities are free to appropriately modify the wording of these clauses based on their past experience, local needs etc. without making any reference to this Department.

(Sanjay Prasad)
Joint Secretary (PPD)
Email ID: js pfc2 doe@gov.in
Telephone 011-23093882

To

(1) Secretaries of All Ministries/ Departments of Government of India for information and necessary action. They are also requested to inform these provisions to all procuring entities.

(2) Secretary, Department of Public Enterprises with a request to immediately reiterate these orders in respect of Public Enterprises.

(3) Secretary DPIIT with a request to initiate action as provided under Annex I

(4) Chief Secretaries/ Administrators of Union Territories/ National Capital Territory of Delhi

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Annex I: Competent Authority and Procedure for Registration

A. The Competent Authority for the purpose of registration under this Order shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT)*.

B. The Registration Committee shall have the following members*:

i. An officer, not below the rank of Joint Secretary, designated for this purpose by DPIIT, who shall be the Chairman;
ii. Officers (ordinarily not below the rank of Joint Secretary) representing the Ministry of Home Affairs, Ministry of External Affairs, and of those Departments whose sectors are covered by applications under consideration;
iii. Any other officer whose presence is deemed necessary by the Chairman of the Committee.

C. DPIIT shall lay down the method of application, format etc. for such bidders as stated in para 1 of this Order.

D. On receipt of an application seeking registration from a bidder from a country covered by para 1 of this Order, the Competent Authority shall first seek political and security clearances from the Ministry of External Affairs and Ministry of Home Affairs, as per guidelines issued from time to time. Registration shall not be given unless political and security clearance have both been received.

E. The Ministry of External Affairs and Ministry of Home Affairs may issue guidelines for internal use regarding the procedure for scrutiny of such applications by them.

F. The decision of the Competent Authority, to register such bidder may be for all kinds of tenders or for a specified type(s) of goods or services, and may be for a specified or unspecified duration of time, as deemed fit. The decision of the Competent Authority shall be final.

G. Registration shall not be granted unless the representatives of the Ministries of Home Affairs and External Affairs on the Committee concur*.

H. Registration granted by the Competent Authority of the Government of India shall be valid not only for procurement by Central Government and its agencies/ public enterprises etc. but **also for procurement by State Governments and their agencies/ public enterprises etc. No fresh registration at the State level shall be required.**

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I. The Competent Authority is empowered to cancel the registration already granted if it determines that there is sufficient cause. Such cancellation by itself, however, will not affect the execution of contracts already awarded. Pending cancellation, it may also suspend the registration of a bidder, and the bidder shall not be eligible to bid in any further tenders during the period of suspension.

J. For national security reasons, the Competent Authority shall not be required to give reasons for rejection / cancellation of registration of a bidder.

K. In transitional cases falling under para 3 of this Order, where it is felt that it will not be practicable to exclude bidders from a country which shares a land border with India, a reference seeking permission to consider such bidders shall be made by the procuring entity to the Competent Authority, giving full information and detailed reasons. The Competent Authority shall decide whether such bidders may be considered, and if so shall follow the procedure laid down in the above paras.

L. Periodic reports on the acceptance/ refusal of registration during the preceding period may be required to be sent to the Cabinet Secretariat. Details will be issued separately in due course by DPIIT.

[*Note:

i. In respect of application of this Order to procurement by/ under State Governments, all functions assigned to DPIIT shall be carried out by the State Government concerned through a specific department or authority designated by it. The composition of the Registration Committee shall be as decided by the State Government and paragraph G above shall not apply. However, the requirement of **political and security clearance as per para D shall remain and no registration shall be granted without such clearance.**

ii. Registration granted by State Governments shall be valid only for procurement by the State Government and its agencies/ public enterprises etc. and shall not be valid for procurement in other states or by the Government of India and their agencies/ public enterprises etc.]

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Annex II: Special Cases

A. Till 31st December 2020, procurement of medical supplies directly related to containment of the Covid-19 pandemic shall be exempt from the provisions of this Order.

B. *Bona fide* procurements made through GeM without knowing the country of the bidder till the date fixed by GeM for this purpose, shall not be invalidated by this Order.

C. *Bona fide* small procurements, made without knowing the country of the bidder, shall not be invalidated by this Order.

D. In projects which receive international funding with the approval of the Department of Economic Affairs (DEA), Ministry of Finance, the procurement guidelines applicable to the project shall normally be followed, notwithstanding anything contained in this Order and without reference to the Competent Authority. Exceptions to this shall be decided in consultation with DEA.

E. This Order shall not apply to procurement by Indian missions and by offices of government agencies/ undertakings located outside India.

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Annex III

Model Clause /Certificate to be inserted in tenders etc.

(While adhering to the substance of the Order, procuring entities and GeM are free to appropriately modify the wording of the clause/ certificate based on their past experience, local needs etc.)

Model Clauses for Tenders

I. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.

II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

III. "Bidder from a country which shares a land border with India" for the purpose of this Order means: -

a. An entity incorporated, established or registered in such a country; or
b. A subsidiary of an entity incorporated, established or registered in such a country; or
c An entity substantially controlled through entities incorporated established or registered in such a country; or
d An entity whose *beneficial owner* is situated in such a country; or
e. An Indian (or other) agent of such an entity; or
f. A natural person who is a citizen of such a country; or
g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

IV. The *beneficial owner* for the purpose of (iii) above will be as under:

1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.
Explanation—

a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company.

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b. 'Control' shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements.

2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;

3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;

4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;

5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

VI. *[To be inserted in tenders for Works contracts, including Turnkey contracts]* The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

Model Certificate for Tenders (for transitional cases as stated in para 3 of this Order)

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I hereby certify that this bidder is not from such a country and is eligible to be considered."

Model Certificate for Tenders

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, if from such a country, has been registered with the

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Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

Model Certificate for Tenders for Works involving possibility of sub-contracting

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

Model Certificate for GeM:

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this vendor/ bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this vendor/ bidder fulfills all requirements in this regard and is eligible to be considered for procurement on GeM. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

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No.DPE/7(4)/2017-Fin.
Government of India
Ministry of Heavy Industries & Public Enterprises
Department of Public Enterprises
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Public Enterprises Bhawan
Block No.14, CGO Complex
Lodhi Road, New
Delhi-110003

Dated 8th November, 2016

OFFICE MEMORANDUM

Subject: - Relaxation of Norms for Startups Medium Enterprises in Public Procurement Regarding Prior Experience-Prior Turnover criteria-reg.

The undersigned is directed to enclose herewith a copy of the O.M No F.20/2/2014-PPD(pt.) dated 20th September, 2016 along with a copy of OM bearing the same number dated 25th July, 2016 (with enclosure) on the above subject issued by Ministry of Finance, Department of Expenditure (Procurement Policy Division). All Ministries/Departments concerned are advised to direct their CPSEs to follow the directions mentioned therein for implementation.

2. This issues with the approval of Secretary, DPE.

Kalyani Mishra

(Kalyani Mishra)
Director
Tel.24362061

Encl: As above

1. All Secretaries of Administrative Ministries/Departments
2. All CMD of CPSEs
3. Ministry of Finance, Department of Expenditure w.r.t. Letter No. F.20/2/2014-PPD (Pt.) dated 20th September,2016
4. Sr. Director NIC with a request to up load in-office website of DPE

No.F.20/2/2014-PPD(Pt.)
Ministry of Finance
Department of Expenditure
Procurement Policy Division

516, Lok Nayak Bhawan, New Delhi
Dated the 20th September, 2016

OFFICE MEMORANDUM

Subject: Relaxation of Norms for Startups Medium Enterprises in Public Procurement regarding Prior Experience - Prior Turnover criteria.

The undersigned is directed to refer to this Department O.M. of even number dated 25th July, 2016, wherein it was clarified that all Central Ministries/ Departments *may* relax condition of prior turnover and prior experience in public procurement to all Start-ups [whether Micro & Small Enterprises (MSEs) or otherwise] subject to meeting of quality and technical specifications in accordance with the relevant provisions of GFR, 2005.

2. A doubt has arisen if it makes optional for Central Ministries/ Departments to relax condition of prior experience and prior turnover in public procurement to Startups. In this regard, it is again clarified that normally for all public procurement, the Central Ministries/ Departments have to ensure that criteria of prior turnover and prior experience for all Startups is relaxed subject to their meeting of quality and technical specifications.

3. However, there may be circumstances (like procurement of items related to public safety, health, critical security operations and equipments, etc.) where procuring entities may prefer the vendors to have prior experience rather than giving orders to new entities. For such procurements, wherever adequate justification exists, the procuring entities may not relax the criteria of prior experience/ turnover for the Startups.

4. This issues with the approval of Finance Secretary.

(Vinayak T. Likhar)
Under Secretary (PPD)
Tel/Fax – 24621305
E-mail – vinayak.likhar@nic.in

To

The Secretaries of all Central Government Ministries/ Departments.

Copy to: -

(i) Financial Advisors of all Central Government Ministries/ Departments.

(ii) The Secretary, Department of Public Enterprises, Room No.305, Block No.14, CGO Complex, New Delhi-110 003 with a request to issue appropriate instructions to Central Public Sector Undertakings (CPSUs) to implement #5 of "Action Plan for Startup India".

No.F.20/2/2014-PPD(Pt.)
Ministry of Finance
Department of Expenditure
Procurement Policy Division

516, Lok Nayak Bhawan, New Delhi
Dated the 25th July, 2016

OFFICE MEMORANDUM

Subject:- Relaxation of Norms for Startups Medium Enterprises in Public Procurement regarding Prior Experience - Prior Turnover criteria.

The Government of India has announced 'Startup India' initiative for creating a conducive ecosystem for the growth of Startups in India. The Startups are defined in **Annexure-A** of the "Action Plan for Startups India". The same is available on the website of Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce & Industry.

2. Ministry of Micro, Small & Medium Enterprises (MSMEs) vide Policy Circular No. 1(2)(1)/2016-MA dated 10th March, 2016 has clarified that all Central Ministries / Departments / Central Public Sector Undertakings (CPSUs) may relax condition of prior turnover and prior experience with respect of Micro & Small Enterprises (MSEs) in all public procurements subject to meeting of quality and technical specifications.

3. As per Rule 160(i)(a) of GFR, 2005, there is already a provision that the bidding document should contain criteria for eligibility and qualification to be met by the bidders such as minimum level of experience, past performance, technical capability, manufacturing facilities and financial position etc. In view of above, it is further clarified that all Central Ministries / Departments may relax condition of prior turnover and prior experience in public procurement to all Startups (whether MSEs or otherwise) subject to meeting of quality and technical specifications in accordance with the relevant provisions of GFR, 2005.

(Vinayak T. Likhar)
Under Secretary to the Govt. of India
Tel/Fax – 24621305
E-mail – vinayak.likhar@nic.in

To

The Secretaries of all Central Government Ministries/ Departments.

Copy to: -

Financial Advisors of all Central Government Ministries/ Departments.

विकास आयुक्त का कार्यालय
(सूक्ष्म, लघु और मध्यम उद्यम)
सूक्ष्म लघु और मध्यम उद्यम मंत्रालय
(भारत सरकार)
निर्माण भवन, सातवीं मंजिल, मौलाना आजाद रोड,
नई दिल्ली-110 108

सत्यमेव जयते

MSME
MICRO, SMALL & MEDIUM ENTERPRISES
सूक्ष्म लघु और मध्यम उद्यम

OFFICE OF THE DEVELOPMENT COMMISSIONER
(MICRO, SMALL & MEDIUM ENTERPRISES)
MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES
GOVERNMENT OF INDIA
Nirman Bhawan, 7th Floor, Maulana Azad Road,
New Delhi - 110 108

Ph.EPABX - 23063600, 23063802, 23063803 FAX - (91-11) 23062315, 23061726, 23061068, e-mail - dcmsmshq@nb.nic.in

F. No. 1(2)(1)/2014-MA Part

Dated the 10th March, 2016

OFFICE MEMORENDUM

Please find enclosed a Policy Circular of even no dated 10th March, 2016 relating to Relaxation of Norms for Startups and Micro & Small Enterprises in Public Procurement on Prior Experience – Prior Turnover criteria.

Publication Division is requested to take up the matter with Public Information Bureau to place this Policy Circular on the public domain.

Yours faithfully,

Encl : As above.

(U. C. Shukla)
Director(MA)
Tele: 23063363

1. Shri Harish Anand, Director (Pub), O/o DC(MSME)
2. Shri S V Sharma, Director (SENET) with a request to up load in – office website.
3. Information Officer, PIB, Room No 704A Shastri Bhawan, New Delhi.

Government of India
Ministry of Micro, Small & Medium Enterprises
O/o the Development Commissioner (MSME)
Nirman Bhavan, A-Wing, 7th Floor
Maulana Azad Road,
New Delhi-110108
Tel. 011-23061091
Fax No.011-23060536

Policy Circular No. 1(2)(1)/2016-MA Dt. 10th March 2016

To

All Central Ministries/Departments/CPSUs/All Concerned

Subject: **Relaxation of Norms for Startups and Micro & Small Enterprises In Public Procurement on Prior Experience – Prior Turnover criteria.**

(1) The Government of India has notified Public Procurement Policy for Micro and Small Enterprises (MSEs) Order 2012 with effect from 1st April, 2012 and 20% procurement from Micro & Small Enterprises of the total procurement by Central Ministries/Departments/CPSUs has become mandatory with effect from 1st April, 2015.

(2) The Government of India has announced 'Startup India' initiative for creating a conducive environment for Startups in India.

(3) The Startups are normally Micro and Small Enterprises which may not have a track record. These will have technical capability to deliver the goods and services as per prescribed technical & quality specifications, and may not be able to meet the qualification criterion relating to prior experience-prior turnover.

(4) In exercise of Para 16 of Public Procurement Policy for Micro and Small Enterprises Order 2012, it is clarified that all Central Ministries/Departments/ Central Public Sector Undertakings may relax condition of prior turnover and prior experience with respect to Micro and Small Enterprises in all public procurements subject to meeting of quality and technical specifications.

(5) This issues with the approval of Union Minister of Micro, Small and Medium Enterprises.

10/3/16

(Surendra Nath Tripathi)
Additional Secretary & Development Commissioner-MSME
Ministry of Micro, Small & Medium Enterprises.