

CERTIFICATE

In accordance with SPPRA's comments on receiving and redressing complaints received during tender processing, we have certified that no complaints have been received about the procurement process of the below-mentioned tender.

PPMS ID: T00518-23-0005

Tender Name: PROCUREMENT OF ANGIOGRAPHY SYSTEM FOR HYBRID ENDOVASCULAR SURGERY MODULAR OPERATING ROOM WITH INSTALLATION, INTEGRATION, TESTING, & COMMISSIONING AT 6th FLOOR SMBBIT

Tender Reference: PROC/SMBBIT/(ADP # 1242 /(2022-2023B)/2024-2025

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LETTER OF ACCEPTANCE

M/s. Siemens Healthcare (Pvt.) Ltd.,
Karachi, Pakistan

SUB: LETTER OF ACCEPTANCE FOR PROCUREMENT OF ANGIOGRAPHY SYSTEM FOR HYBRID ENDOVASCULAR SURGERY MODULAR OPERATING ROOM WITH INSTALLATION, INTEGRATION, TESTING, & COMMISSIONING AT 6th FLOOR SMBBIT, NIT NO: PROC/SMBBIT/2023-24/1131 (22nd February 2024), Ref no: PROC/SMBBIT/(ADP # 1242 /(2022-2023B)/2024-2025

- A.** Notice Inviting Tender issued in respect of "PROCUREMENT OF ANGIOGRAPHY SYSTEM FOR HYBRID ENDOVASCULAR SURGERY MODULAR OPERATING ROOM WITH INSTALLATION, INTEGRATION, TESTING, & COMMISSIONING AT 6th FLOOR SMBBIT" to be supplied during the Financial Year 2023-24.
- B.** The said bid (Single Stage – Two Envelope procedure basis) submitted on 16-03-2024 by your firm.
- C.** Meeting of Procurement Committee of Institute was held on 16-03-2024 & 02-05-2024 to open the Technical Proposal and Financial Proposal respectively.
- D.** Procurement Committee of SMBB Institute of Trauma, Karachi has evaluated the bid submitted by participant in detail and is pleased to inform you that you have been selected as the "Most Advantageous Bid" for Supply of below mentioned items. The Procuring Agency now wishes to offer you supply of these item(s) on terms & conditions as per bid documents of said NIT.

S.#	Name & Specifications of Items as per Tender Document	Item Nr.	Quoted Financial by SIEMENS	Qty.	Req. Qty.	Unit Price in PKR
1	SINGLE PLANE CEILING ANGIOGRAPHY SYSTEM	1	Artis Q ceiling vascular surgery	1	01 System Complete as per specification	369,134,000.00
	TECHNICAL REQUIREMENTS:	2	Automap	1		
A	POSITIONING ARM:	3	Table OR Version	1		
A.1	The system should be ceiling mounted with capability to move on all multi axis of the table and sliding arm for 180 degree or more rotational coverage.	4	Fluoro Loop	1		
A.2	Real time display of rotation angulations.	5	CLEARstent Live + CLEARstent	1		
A.3	Geometry: C-arm/ G-arm	6	Dynavision DSA/DR	1		
A.4	RAO/LAO +/- 120° or More	7	Card acq. Mode w/high speed	1		
A.5	Cranial / Caudal : min. +/-90° or more	8	UPS device/table/imaging system	1		
A.6	Fast rotation speed: 50° /Sec or more	9	Mem. Expansion 3 (50K -1K Matrix)	1		
A.7	Isocentric Height: Variable/Fixed	10	Mem. Expansion 4 (100K -1K Matrix)	1		
A.8	Lateral/Transverse c-arm flexible movement for fingertip-to-fingertip coverage.	11	2K Acquisition	1		
A.9	Auto positioning: Programmable auto positioning of selected.	12	Peristepping / Perivision	1		
A.10	Angulations, (50 or more) Programmable Positions.)	13	Vascular Analysis	1		
A.11	The control panel can be mounted at any side of the patent table.	14	syngo EVAR Guidance Engine as40	1		
A.12	All the rotational/ Angles should be digital displayed.	15	Lower body radiation protection	1		
A.13	Allow patient positioning without fluoroscopy while moving the table or C Arm i.e. zero dose patient positioning.	16	Moveable upper body rad. Protection	1		
A.14	Variable source-to-detector distance	17	LED Exam Light	1		
A.15	Motorized gantry rotation for free positioning of system and table, for optimum patient access.	18	Intercom - Comfort	1		
B	PATIENT SUPPORT / TABLE:	19	Tabletop extension	1		
B.1	Catheterization table with maximum radiolucent unobstructed overhang of 250cm or more	20	Handgrips with support (2)	1		
B.2	Floor mounted with up down/vertical longitudinal and transverse	21	Large Display	1		
B.3	Rotational movements/ table pivoting	22	Large Display Video Controller 9	1		
B.4	Table top length: 300 cm or more	23	LD High Contrast panel size 55"	1		
B.5	Longitudinal travel: 1000-1500 mm or better	24	Large display diagn. Protection	1		

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B.6	Transverse travel 100-300 mm or better	25	connection - 3rd party Carrier Sys.	1		
B.7	CPR in any table position	26	2 19" b/w displays (live+ref)	1		
B.8	All Table side movement controls	27	19" Display (ref)	1		
B.9	catheterization table should be IPX4 or better rated.	28	160 KVA UPS (Emerson or equivalent) 10min	1		
B.10	Table top should be of such construction in material and durability to accept patients weight of not less than 250 kg or more plus 50 kg or more for accessories and resuscitation.	29	Angiography Power Injector with 50 Syringes	1		
B.11	Table dimensions should be able to accommodate patients of all ages.	30	Thyroid Shield (Protech-USA or Eq.)	5		
B.12	Complete accessories should be provided including arm holder, hand grip, arm support and arm rest and positioning aids.	31	Trolley mounted hangers for Lead Aprons	1		
B.13	Left / right table pivoting: +/- 90 degree or better.	32	Lead Glass 4 x 1 Meter	1		
B.14	Table Tilt and Cradle (Tilt angle head up/down and Tilt angle lateral: +/- 15 degree or better.	33	Lead Goggles / PB Glasses	5		
B.15	Upright images of objects or body parts with synchronized movement of detector and collimation system	34	Lead Apron Double Side (Protech USA or Eq.)	5		
B.16	Stepping DSA facility for peripheral angiography	35	Pre-Shipment Inspection	1		
B.17	Complete accessories should be provided including arm rest	36	Laser Crosshairs	1		
B.18	Hand grip arm support and arm rest and positioning aids.	37	syngo Needle Guidance	1		
C	TABLE SIDE CONTROL FEATURES	38	Sensis Vibe Hemo	1		
C.1	Single table side integrated touch screen for all parameters including adjustment of system parameters, display settings of large screen, frame rates, hemodynamic system controls, 3D	39	ECG radiolucent cable	1		
C.2	Integrated tableside control of Hemodynamic system on single touch screen	40	Starter kit CO thermo	1		
D	X-RAY GENERATOR	41	IBP adapter Y-splitter	1		
D.1	Microprocessor based high frequency X-ray generator	42	Head-end operation w/trolley	1		
D.2	Output Power 100 KW. Radiographic rating minimum 1000 mA at 100 KV	43	Operating Table (Trumpf Medical)	1		
D.3	Max current 1000 mA or better		<p>Note: If Procuring agency will purchased system with OT Table as Trumpf medical than our quoted Item # 3 will not be supplied with package and we provided 1 Year warranty as free of cost on "Services Only" which is mention our page Post warranty contract of Angiography machine which is part of our financial offer.</p>			
D.4	The system should have capability of digital radiography and fluoroscopy					
D.5	Max tube current in continuous & pulse fluoroscopy up to 200mA or more					
D.6	Shortest Exposure time of 1msec with automatic exposure control					
E	X-RAY TUBE:					
E.1	Dual/Triple focus X-ray tube with anode heat storage capacity of at least 5.0 MHU or better.					
E.2	Latest liquid bearing technology for longer durability and quiet operations.					
E.3	Rotating anode with focal spot size of minimum 0.3 to 1.0mm or better.					
E.4	Anode cooling rate should be 1500kHU/min or more					
F	FLAT PANEL DETECTOR:					
F.1	The flat panel detector with integrate detachable grid especially designed to					
F.2	Large Flat Panel Detector: size approx. 30x40 cm or more					
F.3	Detector Type: Amorphous Silicon or equivalent					
F.4	Pixel size: 160 um or less on full Field of View.					
F.5	Spatial resolution: 3.2 lp/cm or more on full Field of View.					
F.6	DQE 75% or more					
F.7	Matrix size: 2k x 2k or better					
F.8	Digitization depth 16-bit or better					
F.9	Image acquisition to be done in 16 bit digitalization depth and processing and storage and acquisition					
G	IMAGING SYSTEM:					
G.1	Digital imaging system (Acquisition / Fluoroscopy), fully multitasking for independent image retrieval, acquisition, post processing, archiving, printing and display functions.					

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G.2	High resolution digital imaging system.					
G.3	Acquisition, processing and display in 1024 x 1024 x 16 bits.					
G.4	Hard Disk/Magnetic Disk Capacity for storage of 100,000 images or more 1024 x 1024 matrix					
G.5	DICOM 3.0 with standard exchange media					
G.6	Should have DICOM functions (Print, Storage. Query & Retrieve, Modality Worklist)					
G.7	Digital pulsed fluoroscopy / radiography with 4 to 30 frames per second in 1024 x 1024 @ 16 bits.					
G.8	Display of scene directory for easy selection of any image or scene from the examination room or					
G.9	variable copper / equivalent filtration for reduction in skin dose (0.1 / 0.2 / 0.3 / 0.5 / 0.6 / 0.9/1 mm Cu) or better (at least 3 filters)					
G.10	Automatic detection of vessel edge. Enhanced contrast and visibility of vessels edges without increasing noise					
G.11	noise and artefact reduction, also on moving structures and objects					
G.12	Synchronized FPD and collimator rotation for both portrait and landscape view.					
G.13	Road mapping of images with display of one live and one prerecorded. Both still and dynamic loops. Should be playable with LIVE image.					
G.14	Image enhancement and edge sharpening					
G.15	The system must have online image density (gray scale) correction i.e. Automatic online image density correction of dynamic scene and single images for clear view in the bright and dark areas of the image.					
G.16	Online Digital subtraction angiography (DSA) with frame rates from 0.5 to 6.0 f/s or more, selectable.					
G.17	Manual and Automatic pixel shift processing during Roadmap and DSA based on real time movement detection for most accurate subtracted image display.					
G.18	All controls of digital imaging system must be available in the examination as well as control room.					
G.19	Imaging from the left and right side of the table for complex procedures.					
G.20	Store fluoro facility to store fluoroscopy.					
G.21	LIVE Stent enhancement software to improve visibility of stents and balloons in real time, in relation to previously deployed stents.					
G.22	The system must be capable to synchronize with the datasets / images of separate IVUS system. Integration shall be guaranteed.					
H	RADIATION LOWERING & DOSE CONTROL FEATURES					
H.1	Dedicated X-Rays radiation dose monitoring and latest dose reduction software and features, Doserite + DTS/CARE+CLEAR/Dosewise/Autoright/Clarity should be quoted as standard.					
H.2	Automatic calculation and optimization of exposure data based on fluoroscopic data.					
H.3	Active patient skin radiation dose monitoring based on actual C-arm angulations, table positions.					
H.4	Radiation free collimation.					
H.5	Real-time displays on main examination room monitor as well as control room monitor including cumulative Dose Area Product and Fluoro time.					
H.6	DICOM structured report containing patient, procedure and dose data.					
I	SOFTWARE PACKAGES FOR COMPLEX ENDOVASCULAR INTERVENTIONS:					
I.1	3D road mapping capability for EVAR/FEVAR/BEMAR and other endovascular procedures.					

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I.2	Rotational angiography software					
I.3	One click vessel segmentation capability from 3D image dataset of CTA, MRA and other 3D imaging modality.					
I.4	For complex EVAR procedure planning system should have the capability to place markers on the ideal landing zone for the perfect placement of stent-graft in aorta.					
I.5	For endovascular EVAR/FEVAR/BEVAR procedure real time navigation guidance tool for complex and tortuous vasculature.					
I.6	Fusion of Computed Tomography and Magnetic Resonance Images with 3D images for 3D guidance to navigate through the entire vessel without needing to make contrast runs at each step of the procedure.					
I.7	Digital subtracted Angiography.					
I.8	Advance 2D and 3D image acquisition.					
I.9	Advance endovascular software package should have planning tools, three dimensional views of vasculature which can easily tell the right projection angle. The angles should be able to be recalled during the procedure for optimal navigation and stent placement for EVAR/BEMAR/FEVAR procedures.					
I.10	3D live road mapping guidance and overlay should be aligned with the live X-ray image, irrespective of table and system					
I.11	System should automatically do motion compensation while using 3D roadmap during complex interventions.					
I.12	System should allow acquisition of bone subtracted 3D rotational angiography images.					
I.13	System should allow user/clinical team to control 3D acquisitions using a mouse/touch screen in the exam room without going out of sterile environment.					
I.14	3D rotational angiography feature should be able to provide post treatment assessment with non-subtracted images that allows to shows devices stents, coils, and clips and provide the optimal stand projection for endovascular treatment.					
I.15	System should have the capability of curved Multi-Planar Reformation (MPR) to allow user to define a curve in the volumetric dataset and then view an image along this curve for viewing multiple structures.					
I.16	Volume calculation and automated vessel analysis feature, to provide information on vessel segment diameter, area and length with only two/three mouse-clicks.					
I.17	CBCT acquisitions should automatically place vessel centerlines and have the possibility to adjust centerlines at table side.					
I.18	System should allow user to Control CBCT acquisition using a mouse or touch screen in the examination room.					
I.19	CBCT acquisition should allow multiple vessel analysis with curved MPR.					
I.20	Dose reduction with the help of Cu/Al filters while acquiring rotational CBCT images.					
I.21	Computer assisted aneurysm analysis to provide information on aneurysms, like volume, neck size etc.					
I.22	Dynamic pre and post PTCA / Valvotomy comparison with one image live and other reference.					
I.23	System should allow harmonization user interface of 3D workstation with platform.					
I.24	System should include other necessary tools and features to support advance endovascular procedures in the hybrid Cath lab environment.					
I.25	Automatic loop replay after acquisition or fluoroscopy.					
I.26	Dynamic real time pan / zoom.					
I.27	Dynamic real time digital image processing like edge enhancement or gamma correction, noise reduction (spatial filtering)					

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I.28	Simultaneous display of fluoroscopy and reference images, not only as static images but as dynamic loop.					
I.29	Online image density (gray scale) correction.					
I.30	Facility to review previous studies in the examination room from the patients old CD.					
I.31	Automatic positioning of the C-Arm corresponding to reference image.					
I.32	Store fluoro facility to store fluoroscopy.					
I.33	Live Steer Enhancement software with integrated table side control					
I.34	All the software and hardware should be latest version by the manufacturer.					
I.35	Automatic positioning of the c-arm corresponding to reference image and vice versa.					
I.36	Simultaneous display of fluoroscopy and reference images.					
I.37	X-ray optimization before fluoro with built-in intelligence by using c-arm and table position data to calculate before taking an acquisition					
I.38	System will be installed in Hybrid OR, therefor it should not have open cable duct or track which is difficult to clean and can compromise sterility/cleanliness.					
J	RECORDING / ARCHIVING & COMMUNICATION SYSTEM					
J.1	Recording/ archiving system should be DICOM-3 compatible.					
J.2	Digital images should be stored as backup on CDs / DVDs with incorporated original DICOM handling software / DICOM player from original manufacturer.					
J.3	DICOM (Send/store, commitment, retrieve/query)					
J.4	The system should have the capability for retrieval of Angio/CT/MR images back into the digital imaging system from the PACS, CDs and/or the network.					
J.5	PACS compatibility/ integration.					
J.6	Ethernet connection to connect with other terminals.					
J.7	Integrated intercom system					
K	MONITORS FOR THE SYSTEM:					
K.1	Large monitor at least 55 inch or more with 4K resolution Display for live, reference in addition to 3D with the possibility to connect external inputs with customizable layout. (These should be supplied by the angiography manufacturer along with the angiography shipment).					
K.2	Monitors should be ceiling mounted with original ceiling suspension system.					
K.3	Two 19" medical grade LCD/LED for live and reference images as backup in the examination room. These two monitor should be ceiling mounted					
L	WORKSTATION:					
L.1	Two LCD/LED medical grade monitors for live images and road mapping in the control room, minimum 19" inch or more in size.					
L.2	Manufacturer's original dedicated workstation for post processing.					
L.3	Speed, Hard Disk and Memory as per OEM					
L.4	CD/DVD Writer for image storage.					
L.5	Workstation should have 3D capability.					
L.6	All licenses with part numbers					
M	HEMODYNAMIC MONITORING SYSTEM (OPTIONAL MUST BE QUOTED)					
M.1	PHYSIOLOGICAL HEMODYNAMIC MONITORING SYSTEM (original from Manufacturer of Angio system and should be FDA 510k approved for patients of all ages, adults and pediatrics)					

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M.2	16 channel detector, to record at least four channels IBP, cardiac output with thermo dilution method, surface ECG in any configuration and simultaneous 12 leads ECG, NIBP and SPO2 measurement					
M.3	The system must have the complete software for all pediatric and adults right/left heart, Angio/Valvular hemodynamic examination including functionality for hemodynamic calculations such as gradients, valve areas, shunts. Including annotations, and 12 channels ECG					
M.4	Automatic acquisition or transfer of patient demographic data and system parameters (dose report) operate able via integrated table side control should be offered					
M.5	Digital display of all parameters like IBP, heart rate, cardiac output parameters. It should be possible to print the waveform simultaneously, while acquiring the data in the back ground. It should be possible to store the wave form on the hard disk of the physiology recording system.					
N	ACCESSORIES					
N.1	Lower body radiation protection flaps.					
N.2	1 x Fully programmable latest model contrast medium injector with 50 syringes. Should be from Europe USA JAPAN or equivalent					
N.3	Lead Glass Window size 4 x 1 meter or more. Pb equivalence 2mm or better.					
N.4	5x Pb aprons, double sided. Should be from Europe USA JAPAN or equivalent, light weight and FDA/CE approved					
N.5	5 x Thyroid shields and 5 pair x Pb Glasses. Should be from Europe USA JAPAN or equivalent, light weight and FDA/CE approved					
N.6	Trolley mounted hangers for lead aprons.					
N.7	Intercom for communication between control and exam room.					
N.8	Imported online UPS 160 KVA compatible for the whole system with back-up time of 10 minutes for fluoro and cine acquisition and full angio operation					
	Requirement:					
	Certification:					
	1. System (Angiography and Hemodynamic Monitoring system) should					
	Warranty and Maintenance Period:					
	1. Warranty Period required 3 years with maintenance and parts					
	2. PPM must be done according to the OEM criteria in warranty period.					
	3. Service support and parts availability upcoming next ten years after					
	4. Free of cost software installation and up gradation would be					
	5. Required surety of service support and parts from the manufacturer,					
	6. Up-time guarantee during warranty period must be 90-95%.					
	7. Response to breakdown during and after warranty period must be 1-					
	8. Down Time:					
	If equipment is malfunctioning or not working properly then down time					
	90% → No Down Time					
	Below 90% → 1.5 days increase daily					
	Below 75% → 3.5 days increase daily					
	Below 50% → 5 days increase daily					
	Trainings & Manual:					
	1. Operating and service manual with troubleshooting and circuit					
	2. In house operator and application training session for end user by					
	3. In house service training session for Biomedical by Principal					
	Note:					
	1. Supply, Installation, Testing, Commissioning and Maintenance					
	2. The supplier should install the angiography system in					
	3. The winning bidder for the modular operation theater should					
	COUNTRY OF ORIGIN: UK / USA / EUROPE / JAPAN OR					
2	OPERATING TABLE:					

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A.1	Ceiling system with OR Table is smoothly integrated with an OR Table MAQUET MAGNUS/ Trumpf Medical or recommended by the OEM to create a truly multifunctional room suitable for hybrid surgery and interventions.					
A.2	OPERATING TABLE WITH TRANSFERABLE TABLE TOP					
A.3	1 x TRANSPORTER SHUTTLE					
	For transporting the operating table top or the table top plus a mobile operating table column; running gear with swivel wheels, pedal for braking; maximum load: 350 kg or more					
A.4	1 x MOBILE COLUMN					
	Mobile operating table column with electrically motorized adjustment of height, lateral tilting and Trendelenburg/ reverse-Trendelenburg; power supply integrated in column as well as integrated high-capacity battery; column and table top should be operated with the column keypad and the cable or wireless remote control; column cladding and base plate are made of stainless steel					
A.5	1 x OR TABLE TOP WITH PAD					
	Operating table top with hook coupling point and should have electrically motorized adjustment of leg section joints, back section, back section joints and longitudinal shift; with Velcro; stainless steel load-bearing structure;					
A.6	1 x LEG SECTION WITH PADS					
	Two parts leg section with viscous elastic FoamLine pads should be used for decubitus prophylaxis and spreadable joint, motorized adjustment of the leg section with remote control.					
A.7	1 x HEAD SECTION WITH PAD					
	Head positioning with viscous elastic FoamLine pads should be used for decubitus prophylaxis, electrically conductive, soft and detachable, with Velcro strap;					
A.8	TECHNICAL SPECIFICATIONS:					
A.9	Rotation: 350° without stop or better					
A.10	Column height: 500 - 1000 mm or better					
A.11	Height adjustment without pads: 500 mm or better					
A.12	Sliding table top: 400 mm or better					
A.13	Trendelenburg /Reverse-Trend: ± 45° or better					
A.14	Tilt: ± 45° or better					
A.15	Leg Section Up/down: + 90° / - 90° or better					
A.16	Back Section Up/down: + 90° / - 90° or better					
A.17	Load Capacity: 350 kg or more					
A.18	STANDARD ACCESSORIES					
A.19	1 x Wireless remote control and 1 x wired remote control					
A.20	1 x Arm rest with clamp (pair)					
A.21	1 x Anesthesia Screen					
A.22	1 x Adjustable leg rest pads (pair)					
A.23	1 x Large width body strap					
A.24	1 x Shoulder support					
A.25	1 x I.V Pole and all other accessories for vascular and endovascular surgery					
A.26	Complete OR Table including Table Top and all other parts and accessories compatible with the angiography system and x-ray radiation.					
	Power Requirement:					
	1. Line voltages: 100-240VAC					
	2. Line Frequency: 50/60 Hz					
	Requirement:					
	Certification:					
	1. System should have Certification FDA					
	510(k)/CE/JIS/MHLW/JQAO					
	Warranty and Maintenance Period:					

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	<p>1. Warranty Period required 3 years with maintenance and parts replacement. All the parts are included in the warranty i.e. Shuttle, column, table top, keypad, battery, remote control, all accessories and etc.</p> <p>2. PPM must be done according to the OEM criteria in warranty period.</p> <p>3. Service support and parts availability upcoming next ten years after installation of quoted model must be ensure via a separate letter by O.E.M.</p> <p>4. Free of cost software installation and up gradation would be responsibility of manufacturer and its authorized distributor for upcoming next ten years after installation of quoted model.</p> <p>5. Required surety of service support and parts from the manufacturer, in case of transfer agency / distributor via undertaking by O.E.M.</p> <p>6. Up-time guarantee during warranty period must be 90-95%.</p> <p>7. Response to breakdown during and after warranty period must be 1-3Hours.</p> <p>8. Down Time: If equipment is malfunctioning or not working properly then down time period would start i.e., if machine remain out of order for more than one day; then one and half day increase in contract of concerned equipment will be charged but if any part required from manufacturer, then downtime period not calculated for a month but after a month the down time should be calculated, are mentioned below; 90% → No Down Time Below 90% → 1.5 days increase daily Below 75% → 3.5 days increase daily Below 50% → 5 days increase daily</p> <p>Trainings & Manual: 1. Operating and service manual with troubleshooting and circuit diagram must be provided. 2. In house operator training session for end user. 3. In house service training session for Biomedical by Principal Certified resource</p> <p>Note: 1. Supply, Installation, Testing, Commissioning and Maintenance (Including all type of work for the completion of the installation) is the responsibility of awarded firm/supplier. 2. Operation Theater table should be fully compatible and synchronized with the Angiography System.</p> <p>COUNTRY OF ORIGIN: UK / USA / EUROPE / JAPAN OR EQUIVALENT</p>					
3	IVUS (OPTIONAL MUST BE QUOTED)	44	IVUS Model: Intrasight 5 Mobile System	1	01 System Complete as per specification with 100 Catheters	75,300,000.00
A.1	Fullly integration and synchronized with the Angiography machine	45	IVUS Catheter	100		
A.2	Intravascular Ultrasound (IVUS) therapy using digital or rotational catheters					
A.3	Plug and play catheter and no flushing required					
A.4	Determination of lesion or vessel length to assist in device and selection					
A.5	Intravascular Ultrasound (IVUS) therapy using digital or rotational catheters					
A.6	Automated border contours for fast simple image interpretation					
A.7	Automated Lumen and Vessel measurement					
A.8	Colorized tissue Map for plaque for visualizing histopathology					
A.9	Pre/ post Intervention side-comparison analysis					
A.10	Multiple image screen formats					

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A.11	Biophysical inputs. ECG Pressure etc.					
A.12	Automatic and manual measurement and image analysis					
A.13	Precise tomographic assessment of lumen area					
A.14	Accurate measurement of the degree of stenosis					
A.15	Ability to identify anatomical landmarks					
A.16	Ability to visualize dissections or tears in the vessel wall					
A.17	Includes instantaneous Wave-free ratio (iFR) with hyperemia independent ability to assess serial lesions.					
A.18	Fractional Flow Reserve measurement measure ratio represents the potential decrease in coronary flow distal to the coronary stenosis					
B	IVUS Workstation:					
B.1	CPU					
B.2	Memory: Minimum 32GB SD RAM or better					
B.3	Hard drive capacity: Minimum 1TB SSD SATA or better					
B.4	19" or more medical grade LCD/LED in control room					
B.5	Mouse					
B.6	Keyboard					
B.7	Digital archiving capacity: DVD, DICOM Network (includes Worklist management, DICOM Store)					
B.8	Touch screen Module					
B.9	100 x IVUS catheter					
	Power Requirement:					
	1. Line voltages: 100-240VAC					
	2. Line Frequency: 50/60 Hz					
	Requirement:					
	Certification:					
	1. System should have Certification FDA 510(k)/CE/JIS/MHLW/JQAO					
	Warranty and Maintenance Period:					
	1. Warranty Period required 3 years with maintenance and parts replacement. All the parts are included in the warranty i.e. CPU, LCD/LED, touch screen module and etc.					
	2. PPM must be done according to the OEM criteria in warranty period.					
	3. Service support and parts availability upcoming next ten years after installation of quoted model must be ensure via a separate letter by O.E.M.					
	4. Free of cost software installation and up gradation would be responsibility of manufacturer and its authorized distributor for upcoming next ten years after installation of quoted model.					
	5. Required surety of service support and parts from the manufacturer, in case of transfer agency / distributor via undertaking by O.E.M.					
	6. Up-time guarantee during warranty period must be 90-95%.					
	7. Response to breakdown during and after warranty period must be 1-3Hours.					
	8. Down Time:					
	If equipment is malfunctioning or not working properly then down time period would start i.e., if machine remain out of order for more than one day; then one and half day increase in contract of concerned equipment will be charged but if any part required from manufacturer, then downtime period not calculated for a month but after a month the down time should be calculated, are mentioned below;					
	90% → No Down Time					
	Below 90% → 1.5 days increase daily					
	Below 75% → 3.5 days increase daily					
	Below 50% → 5 days increase daily					
	Trainings & Manual:					

S.#	Name & Specifications of Items as per Tender Document	Item Nr.	Quoted Financial by SIEMENS	Qty.	Req. Qty.	Unit Price in PKR
	<p>1. Operating and service manual with troubleshooting and circuit diagram must be provided.</p> <p>2. In-house operator and application-training session for end user by Principle Certified resource.</p> <p>3. In house service training session for Biomedical by Principal Certified resource</p> <p>Note:</p> <p>1. Supply, Installation, Testing, Commissioning and Maintenance (Including all type of work for the completion of the installation) is the responsibility of awarded firm/supplier.</p> <p>2. IVUS system should be fully compatible and synchronized with the angiography system</p> <p>COUNTRY OF ORIGIN: UK / USA / EUROPE / JAPAN OR EQUIVALENT</p>					
Total Amount						444,434,000.00

Amount in word: Rupees Four Hundred Forty Four Million & Four Hundred Thirty Four Thousand Only.

1	This Letter of Acceptance does not form a contractual or legal relationship under the relevant law of Pakistan between SMBB Institute of Trauma and the addressee of this "Letter of Acceptance".
2	Therefore, You are requested to confirm within seven (07) days on your company letterhead from the date of receipt of this Letter of Acceptance, regarding your willingness to accept this offer for Supply to SMBB Institute of Trauma, Karachi.
3	If agreed, Form of Contract on Non-Judicial Stamp Paper will be submitted (As per Terms and conditions)
4	<p>PERFORMANCE DEPOSIT: Performance Security, items-wise individually, will be submitted by Supplier to Purchaser in two equally divided forms of Pay Order / Demand Draft, or Bank Guarantee in favour of Shaheed Mohtarma Benazir Bhutto Institute of Trauma, Karachi (SMBBIT), which will be released as per tender documents, salient feature clause # 18.</p> <p>• Performance Security of Rs. 22,221,700 Pay Order / Demand Draft or Bank Guarantee will be released after the satisfactory supply and installation of the mentioned equipment. (Bidder will furnish Installation Certificate duly signed by authorized representative at the time of release of Pay Order / Demand Draft or Bank Guarantee).</p> <p>• Performance Security of Rs. 22,221,700 Pay Order / Demand Draft or Bank Guarantee will be released after satisfactory completion of Warranty Period of 3 years / maintenance Period.</p>
5	Stamp duty @0.35% of ordered amount shall be paid through E-stamp duty (www.estamps.gos.pk) and the paid receipt and agreement should have to be submitted to the Procurement department (SMBB-IT), Karachi.
6	Documents showing any set of exemption from duty taxes should also attached with the bills.
7	GOODS SUPPLIED ON (DDP BASIS): The entire quantity of the ordered goods shall be delivered within 12 Weeks or earlier from the date of issuance of supply order / contract award. (The delivery period shall start from the date of Award of Contract / Contract Agreement.)
8	Liquidity Damages: If it fails to deliver, 0.5% of the total bill amount per day, up to 10 percent limit after the completion period, depends upon the damages done due to non-supply.

an
EXECUTIVE DIRECTOR / DDO
SMBB INSTITUTE OF TRAUMA, KARACHI

Copy to:-

- The Director (A&F) SPPRA with reference to SPPRA PPMS ID T00518-23-0004 & Evaluation Report # BE00518-23-0004-5
- Accounts & Finance Department, SMBB Institute of Trauma.

ra
EXECUTIVE DIRECTOR / DDO
SMBB INSTITUTE OF TRAUMA, KARACHI

Ramish



SHAHEED MOHTARMA BENAZIR BHUTTO
INSTITUTE OF TRAUMA, KARACHI

No. PROC/SMBBIT/2023-24/1362
Dated: 10-June-2024

AWARD OF TENDER (A.O.T)

M/s. Siemens Healthcare (Pvt.) Ltd.,
Karachi, Pakistan

PROCUREMENT OF ANGIOGRAPHY SYSTEM FOR HYBRID ENDOVASCULAR SURGERY MODULAR OPERATING ROOM WITH INSTALLATION, INTEGRATION,

TESTING, & COMMISSIONING AT 6th FLOOR SMBBIT
Sub: NIT NO: PROC/SMBBIT/2023-24/1131 (22nd February 2024),
Ref no: PROC/SMBBIT/ADP # 1242/(2022-2023B)/2024-2025

Reference to our subject tender Dated: 14-03-2024 and letter of Acceptance Ref # PROC/SMBBIT/2023-24/135A, Dated: 03-06-24. The rates quoted by you for the supply of the following items have been approved and accepted by the Competent Authority of SMBB Institute of Trauma. You are therefore requested to please arrange the supply of the same at an early date after receipt of the supply order, to meet the urgent requirement, and send your bill in quadrilateral to the store office to arrange the payment from the Finance & Accounts Department of SMBB-IT.										
S.#	Item No.	Name of Item	Required Qty	Product Description / Specification	Brand Name / Make	Model	Warranty	Service Warranty	Offered Price	Total Price
1	1	SINGLE PLANE CEILING ANGIOGRAPHY SYSTEM	01 System Complete as per specification	As Per Same Mentioned in Contract Agreement	Siemens Healthineer's	Artis Q	3 Years	1 Year	254,300,000	254,300,000
2	-	LASER CROSSHAIRS	-	As Per Same Mentioned in Contract Agreement	Siemens Healthineer's	-	3 Years	-	610,000	610,000
3	-	SYNGO NEEDLEGUIDENCE	-	As Per Same Mentioned in Contract Agreement	Siemens Healthineer's	-	3 Years	-	1,460,000	1,460,000
4	1 M	SENSIS VIBE HEMO HEMODYNAMIC MONITORING SYSTEM (OPTIONAL MUST BE QUOTED)	-	As Per Same Mentioned in Contract Agreement	Siemens Healthineer's	-	3 Years	-	9,520,000	9,520,000
5	1 M	ECG RADIO LUCENT CABLE HEMODYNAMIC MONITORING SYSTEM (OPTIONAL MUST BE QUOTED)	-	As Per Same Mentioned in Contract Agreement	Siemens Healthineer's	-	3 Years	-	100,000	100,000
6	1 M	IBP ADAPTER Y-SPLITTER HEMODYNAMIC MONITORING SYSTEM (OPTIONAL MUST BE QUOTED)	-	As Per Same Mentioned in Contract Agreement	Siemens Healthineer's	-	3 Years	-	80,000	80,000
7	-	STARTER KIT CO THERMO	-	As Per Same Mentioned in Contract Agreement	Siemens Healthineer's	-	3 Years	-	550,000	550,000
8	2	OPERATING TABLE HEAD-END OPERATION W/TROLLEY	01 System Complete as per specification	As Per Same Mentioned in Contract Agreement	Baxter Medical, Germany	Trusystem7500	3 Years	-	102,514,000	102,514,000
9	-	IVUS Model: Intravision 5 Mobile System	1	As Per Same Mentioned in Contract Agreement	Siemens Healthineer's	-	3 Years	-	50,700,000	50,700,000
10	-	IVUS Catheter	100	As Per Same Mentioned in Contract Agreement	Siemens Healthineer's	-	-	-	246,000	24,600,000
Total										444,434,000

Amount in word: Rupees Four Hundred Forty-Four Million Four Hundred Thirty-Four Thousand Only.

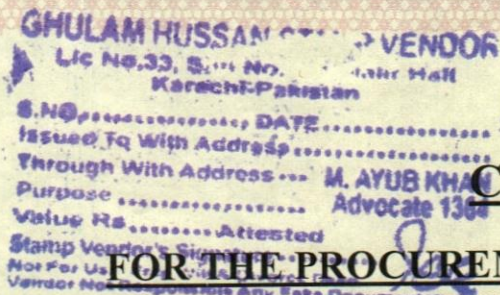
2	Date of Delivery: As per Supply Order
3	Place of Delivery: SMBB Institute of Trauma, Karachi.
4	Dispatch Instruction: Free Delivery to the Consignee i.e. SMBB Institute of Trauma, Karachi.
5	Name and Address of the Consignee: Chief Operating Officer - SMBB Institute of Trauma, Karachi.
6	PARTICULAR GOVERNING SUPPLY:
6.1	As per policy given in the bid documents.
7	INSPECTION:
7.1	Inspection Authority: Nominated Inspection Committee of SMBB-IT, Karachi i/Concerned Department of Supplied Items.
8	PAYMENT: Through office of: The Finance Department SMBB-IT on production of the Delivery Challan, Inspection Note and Invoice, which will make payment from the consignee's Account.
9	PART SUPPLY / PART PAYMENT: Allowed.
9.1	Note:- It should be mentioned on the Delivery Note 1 st Supply, 2 nd Supply and Final Supply & on Invoice (Bill that this is 1 st Bill, 2 nd Bill and in the last supply Final Bill) else in delay of payment the firm will be held responsible.
10	SPECIAL INSTRUCTION:
10.1	All the supplies must be completed within the stipulated delivery period. In case of failure, purchaser reserves the right to forfeit the security deposit and purchase the stock from any other sources on risk and expenses of supplier without any notice. The Liquidated damages will be applicable as per Bid document
10.2	The stores if found damaged shall be replaced by supplier free of cost.
10.3	Sub-Standard stores if supplied will not be returned and supplier will be required to supply the stores of the contracted specification and of standard quality in addition to the same without any additional expenses to the Government.
11	The Supplier / Manufacturer should ensure the supply of quality stores.
12	Documents showing any set of exemption from duty taxes should also be attached with the bills.
13	Liquidity Damages: 0.5% of the bid price per month after the period of Completion up to 10% maximum.
14	Stamp duty: @0.35% of ordered amount of Rs. 1,291,969/- shall be paid through E-stamp duty (www.estamps.gos.pk) and the paid receipt and agreement should have to be submitted to the Procurement department (SMBB-IT, KARACHI).

Copy to:

- The Director (A&F)SPPRA with reference to SPPRA PPMS ID T00518-23-0004 & Evaluation Report # BE00518-23-0004-5
- Store Incharge, SMBB Institute of Trauma, Karachi
- Accounts & Finance Department, SMBB Institute of Trauma, Karachi
- Deputy Manager - BioMedical Department, SMBB Institute of Trauma, Karachi

EXECUTIVE DIRECTOR / D.D.O
SMBB INSTITUTE OF TRAUMA, KARACHI

EXECUTIVE DIRECTOR / D.D.O
SMBB INSTITUTE OF TRAUMA, KARACHI



30 APR 2024

NIT NO: PROC/SMBBIT/2023-24/1131 (22nd February 2024),
Ref no: PROC/SMBBIT/(ADP # 1242 /(2022-2023B)/2024-2025



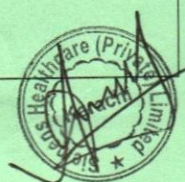
	TECHNICAL REQUIREMENTS:	2	Automap	1	per specification	00
A	POSITIONING ARM:	3	Table OR Version	1		
A.1	The system should be ceiling mounted with capability to move on all multi axis of the table and sliding arm for 180 degree or more rotational coverage.	4	Fluoro Loop	1		
A.2	Real time display of rotation angulations.	5	CLEARstent Live + CLEARstent	1		
A.3	Geometry: C-arm/ G-arm	6	Dynavision DSA/DR	1		
A.4	RAO/LAO +/- 120° or More	7	Card acq. Mode w/high speed	1		
A.5	Cranial / Caudal : min. +/-90° or more	8	UPS device/table/imaging system	1		
A.6	Fast rotation speed: 50° /Sec or more	9	Mem. Expansion 3 (50K -1K Matrix)	1		
A.7	Isocentric Height: Variable/Fixed	10	Mem. Expansion 4 (100K -1K Matrix)	1		
A.8	Lateral/Transverse c-arm flexible movement for fingertip-to-fingertip coverage.	11	2K Acquisition	1		
A.9	Auto positioning: Programmable auto positioning of selected.	12	Peristepping / Perivision	1		
A.10	Angulations, (50 or more) Programmable Positions.)	13	Vascular Analysis	1		
A.11	The control panel can be mounted at any side of the patient table.	14	syngo EVAR Guidance Engine as40	1		
A.12	All the rotational/ Angles should be digital displayed.	15	Lower body radiation protection	1		
A.13	Allow patient positioning without fluoroscopy while moving the table or C Arm i.e. zero dose patient positioning.	16	Moveable upper body rad. Protection	1		
A.14	Variable source-to-detector distance	17	LED Exam Light	1		
A.15	Motorized gantry rotation for free positioning of system and table, for optimum patient access.	18	Intercom - Comfort	1		
B	PATIENT SUPPORT / TABLE:	19	Tabletop extension	1		
B.1	Catheterization table with maximum radiolucent unobstructed overhang of 250cm or more	20	Handgrips with support (2)	1		
B.2	Floor mounted with up down/vertical longitudinal and transverse	21	Large Display	1		
B.3	Rotational movements/ table	22	Large Display	1		



D.2	Output Power 100 KW. Radiographic rating minimum 1000 mA at 100 KV	43	Operating Table (Trumpf Medical)	1		
D.3	Max current 1000 mA or better	Note: If Procuring agency will purchased system with OT Table as Trumpf medical than our quoted Item # 3 will not be supplied with package and we provided 1 Year warranty as free of cost on " Services Only " which is mention our page Post warranty contract of Angiography machine which is part of our financial offer.				
D.4	The system should have capability of digital radiography and fluoroscopy					
D.5	Max tube current in continuous & pulse fluoroscopy up to 200mA or more					
D.6	Shortest Exposure time of 1msec with automatic exposure control					
E	X-RAY TUBE:					
E.1	Dual/Triple focus X-ray tube with anode heat storage capacity of at least 5.0 MHU or better.					
E.2	Latest liquid bearing technology for longer durability and quiet operations.					
E.3	Rotating anode with focal spot size of minimum 0.3 to 1.0mm or better.					
E.4	Anode cooling rate should be 1500kHU/min or more					
F	FLAT PANEL DETECTOR:					
F.1	The flat panel detector with integrate detachable grid especially designed to					
F.2	Large Flat Panel Detector: size approx. 30x40 cm or more					
F.3	Detector Type: Amorphous Silicon or equivalent					
F.4	Pixel size: 160 um or less on full Field of View.					
F.5	Spatial resolution: 3.2 lp/cm or more on full Field of View.					
F.6	DQE 75% or more					
F.7	Matrix size: 2k x 2k or better					
F.8	Digitization depth 16-bit or better					
F.9	Image acquisition to be done in 16 bit digitalization depth and processing and storage and acquisition					
G	IMAGING SYSTEM:					
G.1	Digital imaging system (Acquisition / Fluoroscopy), fully multitasking for independent image retrieval, acquisition, post processing, archiving, printing and display functions.					
G.2	High resolution digital imaging system.					
G.3	Acquisition, processing and display in 1024 x 1024 x 16 bits.					



G.4	Hard Disk/Magnetic Disk Capacity for storage of 100,000 images or more 1024 x 1024 matrix					
G.5	DICOM 3.0 with standard exchange media					
G.6	Should have DICOM functions (Print, Storage. Query & Retrieve, Modality Worklist)					
G.7	Digital pulsed fluoroscopy / radiography with 4 to 30 frames per second in 1024 x 1024 @ 16 bits.					
G.8	Display of scene directory for easy selection of any image or scene from the examination room or					
G.9	Variable copper / equivalent filtration for reduction in skin dose (0.1 / 0.2 / 0.3 / 0.5 / 0.6 / 0.9/1 mm Cu) or better (at least 3 filters)					
G.10	Automatic detection of vessel edge. Enhanced contrast and visibility of vessels edges without increasing noise					
G.11	Noise and artefact reduction, also on moving structures and objects					
G.12	Synchronized FPD and collimator rotation for both portrait and landscape view.					
G.13	Road mapping of images with display of one live and one prerecorded. Both still and dynamic loops. Should be playable with LIVE image.					
G.14	Image enhancement and edge sharpening					
G.15	The system must have online image density (gray scale) correction i.e. Automatic online image density correction of dynamic scene and single images for clear view in the bright and dark areas of the image.					
G.16	Online Digital subtraction angiography (DSA) with frame rates from 0.5 to 6.0 f/s or more, selectable.					
G.17	Manual and Automatic pixel shift processing during Roadmap and DSA based on real time movement detection for most accurate subtracted image display.					
G.18	All controls of digital imaging system must be available in the examination as well as control					



	room.					
G.1 9	Imaging from the left and right side of the table for complex procedures.					
G.2 0	Store fluoro facility to store fluoroscopy.					
G.2 1	LIVE Stent enhancement software to improve visibility of stents and balloons in real time, in relation to previously deployed stents.					
G.2 2	The system must be capable to synchronize with the datasets / images of separate IVUS system. Integration shall be guaranteed.					
H	RADIATION LOWERING & DOSE CONTROL FEATURES					
H.1	Dedicated X-Rays radiation dose monitoring and latest dose reduction software and features, Doserite + DTS/CARE+CLEAR/Dosewise/Autoright/Clarity should be quoted as standard.					
H.2	Automatic calculation and optimization of exposure data based on fluoroscopic data.					
H.3	Active patient skin radiation dose monitoring based on actual C-arm angulations, table positions.					
H.4	Radiation free collimation.					
H.5	Real-time displays on main examination room monitor as well as control room monitor including cumulative Dose Area Product and Fluoro time.					
H.6	DICOM structured report containing patient, procedure and dose data.					
I	SOFTWARE PACKAGES FOR COMPLEX ENDOVASCULAR INTERVENTIONS:					
I.1	3D road mapping capability for EVAR/FEVAR/BEMAR and other endovascular procedures.					
I.2	Rotational angiography software					
I.3	One click vessel segmentation capability from 3D image dataset of CTA, MRA and other 3D imaging modality.					



I.4	For complex EVAR procedure planning system should have the capability to place markers on the ideal landing zone for the perfect placement of stent-graft in aorta.					
I.5	For endovascular EVAR/FEVAR/BEVAR procedure real time navigation guidance tool for complex and tortuous vasculature.					
I.6	Fusion of Computed Tomography and Magnetic Resonance Images with 3D images for 3D guidance to navigate through the entire vessel without needing to make contrast runs at each step of the procedure.					
I.7	Digital subtracted Angiography.					
I.8	Advance 2D and 3D image acquisition.					
I.9	Advance endovascular software package should have planning tools, three dimensional views of vasculature which can easily tell the right projection angle. The angles should be able to be recalled during the procedure for optimal navigation and stent placement for EVAR/BEMAR/FEVAR procedures.					
I.10	3D live road mapping guidance and overlay should be aligned with the live X-ray image, irrespective of table and system movements.					
I.11	System should automatically do motion compensation while using 3D roadmap during complex interventions.					
I.12	System should allow acquisition of bone subtracted 3D rotational angiography images.					
I.13	System should allow user/clinical team to control 3D acquisitions using a mouse/touch screen in the exam room without going out of sterile environment.					
I.14	3D rotational angiography feature should be able to provide post treatment assessment with non-subtracted images that allows to shows devices stents, coils,					



	and clips and provide the optimal stand projection for endovascular treatment.					
I.15	System should have the capability of curved Multi-Planar Reformation (MPR) to allow user to define a curve in the volumetric dataset and then view an image along this curve for viewing multiple structures.					
I.16	Volume calculation and automated vessel analysis feature, to provide information on vessel segment diameter, area and length with only two/three mouse-clicks.					
I.17	CBCT acquisitions should automatically place vessel centerlines and have the possibility to adjust centerlines at table side.					
I.18	System should allow user to Control CBCT acquisition using a mouse or touch screen in the examination room.					
I.19	CBCT acquisition should allow multiple vessel analysis with curved MPR.					
I.20	Dose reduction with the help of Cu/Al filters while acquiring rotational CBCT images.					
I.21	Computer assisted aneurysm analysis to provide information on aneurysms, like volume, neck size etc.					
I.22	Dynamic pre and post PTCA / Valvotomy comparison with one image live and other reference.					
I.23	System should allow harmonization user interface of 3D workstation with platform.					
I.24	System should include other necessary tools and features to support advance endovascular procedures in the hybrid Cath lab environment.					
I.25	Automatic loop replay after acquisition or fluoroscopy.					
I.26	Dynamic real time pan / zoom.					
I.27	Dynamic real time digital image processing like edge enhancement or gamma correction, noise reduction (spatial filtration.)					



I.28	Simultaneous display of fluoroscopy and reference images, not only as static images but as dynamic loop.					
I.29	Online image density (gray scale) correction.					
I.30	Facility to review previous studies in the examination room from the patients old CD.					
I.31	Automatic positioning of the C-Arm corresponding to reference image.					
I.32	Store fluoro facility to store fluoroscopy.					
I.33	Live Stent Enhancement software with integrated table side control.					
I.34	All the software and hardware should be latest version by the manufacturer.					
I.35	Automatic positioning of the c-arm corresponding to reference image and vice versa.					
I.36	Simultaneous display of fluoroscopy and reference images.					
I.37	X-ray optimization before fluoro with built-in intelligence by using c-arm and table position data to calculate before taking an acquisition.					
I.38	System will be installed in Hybrid OR, therefor it should not have open cable duct or track which is difficult to clean and can compromise sterility/cleanliness.					
J	RECORDING / ARCHIVING & COMMUNICATION SYSTEM					
J.1	Recording/ archiving system should be DICOM-3 compatible.					
J.2	Digital images should be stored as backup on CDs / DVDs with incorporated original DICOM handling software / DICOM player from original manufacturer.					
J.3	DICOM (Send/store, commitment, retrieve/query)					
J.4	The system should have the capability for retrieval of Angio/CT/MR images back into the digital imaging system from the PACS, CDs and/or the network.					
J.5	PACS compatibility/					



	integration.					
J.6	Ethernet connection to connect with other terminals.					
J.7	Integrated intercom system					
K	MONITORS FOR THE SYSTEM:					
K.1	Large monitor at least 55 inch or more with 4K resolution Display for live, reference in addition to 3D with the possibility to connect external inputs with customizable layout. (These should be supplied by the angiography manufacturer along with the angiography shipment).					
K.2	Monitors should be ceiling mounted with original ceiling suspension system.					
K.3	Two 19" medical grade LCD/LED for live and reference images as backup in the examination room. These two monitor should be ceiling mounted					
L	WORKSTATION:					
L.1	Two LCD/LED medical grade monitors for live images and road mapping in the control room, minimum 19" inch or more in size.					
L.2	Manufacturer's original dedicated workstation for post processing.					
L.3	Speed, Hard Disk and Memory as per OEM					
L.4	CD/DVD Writer for image storage.					
L.5	Workstation should have 3D capability.					
L.6	All licenses with part numbers					
M	HEMODYNAMIC MONITORING SYSTEM (OPTIONAL MUST BE QUOTED)					
M.1	PHYSIOLOGICAL HEMODYNAMIC MONITORING SYSTEM (original from Manufacturer of Angio system and should be FDA 510k approved for patients of all ages, adults and pediatrics)					
M.2	16 channel detector, to record at least four channels IBP, cardiac output with thermo dilution method, surface ECG in any configuration and simultaneous 12 leads ECG, NIBP and SPO2 measurement					



M.3	The system must have the complete software for all pediatric and adults right/left heart, Angio/Valvular hemodynamic examination including functionality for hemodynamic calculations such as gradients, valve areas, shunts. Including annotations, and 12 channels ECG					
M.4	Automatic acquisition or transfer of patient demographic data and system parameters (dose report) operate able via integrated table side control should be offered					
M.5	Digital display of all parameters like IBP, heart rate, cardiac output parameters. It should be possible to print the waveform simultaneously, while acquiring the data in the back ground. It should be possible to store the wave form on the hard disk of the physiology recording system.					
N	ACCESSORIES					
N.1	Lower body radiation protection flaps.					
N.2	1 x Fully programmable latest model contrast medium injector with 50 syringes. Should be from Europe USA JAPAN or equivalent					
N.3	Lead Glass Window size 4 x 1 meter or more. Pb equivalence 2mm or better.					
N.4	5x Pb aprons, double sided. Should be from Europe USA JAPAN or equivalent, light weight and FDA/CE approved					
N.5	5 x Thyroid shields and 5 pair x Pb Glasses. Should be from Europe USA JAPAN or equivalent, light weight and FDA/CE approved					
N.6	Trolley mounted hangers for lead aprons.					
N.7	Intercom for communication between control and exam room.					
N.8	Imported online UPS 160 KVA compatible for the whole system with back-up time of 10 minutes for fluoro and cine acquisition and full angio operation					
Requirement:						
Certification:						



1. System (Angiography and Hemodynamic Monitoring system) should have Certification FDA 510(k) & CE/JIS/MHLW/JQAO					
Warranty and Maintenance Period:					
1. Warranty Period required 3 years with maintenance and parts replacement. All the parts are included in the warranty i.e. LCD/LED, Workstation including complete item and accessories, UPS with Batteries, Injector, Hemodynamics system, X-ray tube, Flat panel detector, all parts & consumable and etc.					
2. PPM must be done according to the OEM criteria in warranty period.					
3. Service support and parts availability upcoming next ten years after installation of quoted model must be ensure via a separate letter by O.E.M.					
4. Free of cost software installation and up gradation would be responsibility of manufacturer and its authorized distributor for upcoming next ten years after installation of quoted model.					
5. Required surety of service support and parts from the manufacturer, in case of transfer agency / distributor via undertaking by O.E.M.					
6. Up-time guarantee during warranty period must be 90-95%.					
7. Response to breakdown during and after warranty period must be 1-3Hours.					
8. Down Time:					
If equipment is malfunctioning or not working properly then down time period would start i.e., if machine remain out of order for more than one day; then one and half day increase in contract of concerned equipment will be charged but if any part required from manufacturer, then downtime period not calculated for a month but after a month the down time should be calculated, are mentioned below;					
90% → No Down Time					
Below 90% → 1.5 days increase daily					
Below 75% → 3.5 days increase daily					
Below 50% → 5 days increase daily					
Trainings & Manual:					
1. Operating and service manual with troubleshooting and circuit					



	diagram must be provided.					
	2. In house operator and application training session for end user by Principle Certified resource.					
	3. In house service training session for Biomedical by Principal Certified resource					
	Note:					
	1. Supply, Installation, Testing, Commissioning and Maintenance (Including all type of work for the completion of the installation) is the responsibility of awarded firm/supplier.					
	2. The supplier should install the angiography system in coordination with the Hybrid Operation Theater supplier for smooth and proper functionality.					
	3. The winning bidder for the modular operation theater should sign an MOU with the winning bidder of Angiography system. The purpose of the MOU is to ensure the smooth and proper functioning of the Angiography system and Modular operation theater, and to guarantee proper coordination.					
	COUNTRY OF ORIGIN: UK / USA / EUROPE / JAPAN OR EQUIVALENT					
2	OPERATING TABLE:					
A.1	Ceiling system with OR Table is smoothly integrated with an OR Table MAQUET MAGNUS/ Trumpf Medical or recommended by the OEM to create a truly multifunctional room suitable for hybrid surgery and interventions.					
A.2	OPERATING TABLE WITH TRANSFERABLE TABLE TOP					
A.3	1 x TRANSPORTER SHUTTLE					
	For transporting the operating table top or the table top plus a mobile operating table column; running gear with swivel wheels, pedal for braking; maximum load: 350 kg or more					
A.4	1 x MOBILE COLUMN					
	Mobile operating table column with electrically motorized adjustment of height, lateral tilting and Trendelenburg/ reverse-Trendelenburg; power supply integrated in column as well as integrated high-					



	capacity battery; column and table top should be operated with the column keypad and the cable or wireless remote control; column cladding and base plate are made of stainless steel.					
A.5	1 x OR TABLE TOP WITH PAD					
	Operating table top with hook coupling point and should have electrically motorized adjustment of leg section joints, back section, back section joints and longitudinal shift; with Velcro; stainless steel load-bearing structure;					
A.6	1 x LEG SECTION WITH PADS					
	Two parts leg section with viscous elastic FoamLine pads should be used for decubitus prophylaxis and spreadable joint, motorized adjustment of the leg section with remote control.					
A.7	1 x HEAD SECTION WITH PAD					
	Head positioning with viscous elastic FoamLine pads should be used for decubitus prophylaxis, electrically conductive, soft and detachable, with Velcro strap;					
A.8	TECHNICAL SPECIFICATIONS:					
A.9	Rotation: 350° without stop or better					
A.10	Column height: 500 - 1000 mm or better					
A.11	Height adjustment without pads: 500 mm or better					
A.12	Sliding table top: 400 mm or better					
A.13	Trendelenburg /Reverse-Trend: ± 45° or better					
A.14	Tilt: ± 45° or better					
A.15	Leg Section Up/down: + 90° / - 90° or better					
A.16	Back Section Up/down: + 90° / - 90° or better					
A.17	Load Capacity: 350 kg or more					
A.18	STANDARD ACCESSORIES					
A.19	1 x Wireless remote control and 1 x wired remote control					
A.20	1 x Arm rest with clamp (pair)					



A.2 1	1 x Anesthesia Screen					
A.2 2	1 x Adjustable leg rest pads (pair)					
A.2 3	1 x Large width body strap					
A.2 4	1 x Shoulder support					
A.2 5	1 x I.V Pole and all other accessories for vascular and endovascular surgery					
A.2 6	Complete OR Table including Table Top and all other parts and accessories compatible with the angiography system and x-ray radiation.					
	Power Requirement:					
	1. Line voltages: 100-240VAC					
	2. Line Frequency: 50/60 Hz					
	Requirement:					
	Certification:					
	1. System should have Certification FDA 510(k)/CE/JIS/MHLW/JQA O					
	Warranty and Maintenance Period:					
	1. Warranty Period required 3 years with maintenance and parts replacement. All the parts are included in the warranty i.e. Shuttle, column, table top, keypad, battery, remote control, all accessories and etc.					
	2. PPM must be done according to the OEM criteria in warranty period.					
	3. Service support and parts availability upcoming next ten years after installation of quoted model must be ensure via a separate letter by O.E.M.					
	4. Free of cost software installation and up gradation would be responsibility of manufacturer and its authorized distributor for upcoming next ten years after installation of quoted model.					
	5. Required surety of service support and parts from the manufacturer, in case of transfer agency / distributor via undertaking by O.E.M.					
	6. Up-time guarantee during warranty period must be 90-95%.					



	7. Response to breakdown during and after warranty period must be 1-3Hours.					
	8. Down Time:					
	If equipment is malfunctioning or not working properly then down time period would start i.e., if machine remain out of order for more than one day; then one and half day increase in contract of concerned equipment will be charged but if any part required from manufacturer, then downtime period not calculated for a month but after a month the down time should be calculated, are mentioned below;					
	90% → No Down Time					
	Below 90% → 1.5 days increase daily					
	Below 75% → 3.5 days increase daily					
	Below 50% → 5 days increase daily					
	Trainings & Manual:					
	1. Operating and service manual with troubleshooting and circuit diagram must be provided.					
	2. In house operator training session for end user.					
	3. In house service training session for Biomedical by Principal Certified resource					
	Note:					
	1. Supply, Installation, Testing, Commissioning and Maintenance (Including all type of work for the completion of the installation) is the responsibility of awarded firm/supplier.					
	2. Operation Theater table should be fully compatible and synchronized with the Angiography System.					
	COUNTRY OF ORIGIN: UK / USA / EUROPE / JAPAN OR EQUIVALENT					
3	IVUS (OPTIONAL MUST BE QUOTED)	44	IVUS Model: Intrasight 5 Mobile System	1	01 System Complete as per specification w ith 100	75,300,000.00
A.1	Fully integration and synchronized with the	45	IVUS Catheter	100		



	Angiography machine.				Catheters	
A.2	Intravascular Ultrasound (IVUS) therapy using digital or rotational catheters					
A.3	Plug and play catheter and no flushing required					
A.4	Determination of lesion or vessel length to assist in device and selection					
A.5	Intravascular Ultrasound (IVUS) therapy using digital or rotational catheters					
A.6	Automated border contours for fast simple image interpretation					
A.7	Automated Lumen and Vessel measurement					
A.8	Colorized tissue Map for plaque for visualizing histopathology					
A.9	Pre/ post Intervention side-comparison analysis					
A.10	Multiple image screen formats					
A.11	Biophysical inputs. ECG Pressure etc.					
A.12	Automatic and manual measurement and image analysis					
A.13	Precise tomographic assessment of lumen area					
A.14	Accurate measurement of the degree of stenosis					
A.15	Ability to identify anatomical landmarks					
A.16	Ability to visualize dissections or tears in the vessel wall					
A.17	Includes instantaneous Wave-free ratio (iFR) with hyperemia independent ability to assess serial lesions.					
A.18	Fractional Flow Reserve measurement measure ratio represents the potential decrease in coronary flow distal to the coronary stenosis					
B	IVUS Workstation:					
B.1	CPU					
B.2	Memory: Minimum 32GB SD RAM or better					
B.3	Hard drive capacity: Minimum 1TB SSD SATA or better					
B.4	19" or more medical grade LCD/LED in control room					
B.5	Mouse					
B.6	Keyboard					
B.7	Digital archiving capacity: DVD, DICOM Network (includes Worklist					



	management, DICOM Store)					
B.8	Touch screen Module					
B.9	100 x IVUS catheter					
	Power Requirement:					
	1. Line voltages: 100-240VAC					
	2. Line Frequency: 50/60 Hz					
	Requirement:					
	Certification:					
	1. System should have Certification FDA 510(k)/CE/JIS/MHLW/JQA O					
	Warranty and Maintenance Period:					
	1. Warranty Period required 3 years with maintenance and parts replacement. All the parts are included in the warranty i.e. CPU, LCD/LED, touch screen module and etc.					
	2. PPM must be done according to the OEM criteria in warranty period.					
	3. Service support and parts availability upcoming next ten years after installation of quoted model must be ensure via a separate letter by O.E.M.					
	4. Free of cost software installation and up gradation would be responsibility of manufacturer and its authorized distributor for upcoming next ten years after installation of quoted model.					
	5. Required surety of service support and parts from the manufacturer, in case of transfer agency / distributor via undertaking by O.E.M.					
	6. Up-time guarantee during warranty period must be 90-95%.					
	7. Response to breakdown during and after warranty period must be 1-3Hours.					
	8. Down Time:					
	If equipment is malfunctioning or not working properly then down time period would start i.e., if machine remain out of order for more than one day; then one and half day increase in contract of concerned equipment will be charged but if any part required from manufacturer, then downtime					



period not calculated for a month but after a month the down time should be calculated, are mentioned below;					
90% → No Down Time					
Below 90% → 1.5 days increase daily					
Below 75% → 3.5 days increase daily					
Below 50% → 5 days increase daily					
Trainings & Manual:					
1. Operating and service manual with troubleshooting and circuit diagram must be provided.					
2. In house operator and application training session for end user by Principle Certified resource.					
3. In house service training session for Biomedical by Principal Certified resource					
Note:					
1. Supply, Installation, Testing, Commissioning and Maintenance (Including all type of work for the completion of the installation) is the responsibility of awarded firm/supplier.					
2. IVUS system should be fully compatible and synchronized with the angiography system					
COUNTRY OF ORIGIN: UK / USA / EUROPE / JAPAN OR EQUIVALENT					
Total Amount					444,434,00
Amount in word: Rupees Four Hundred Forty Four Million & Four Hundred Thirty Four Thousand Only.					

Whereas the purchaser is desirous that certain goods should be provided by Contractor and whereas the Contractor has agreed to provide and quote the rate which has been accepted by purchaser for supply of above mentioned goods against the sum of **Rs. 444,434,00/-** hereinafter called "The Contract Price".

SALIENT FEATURES / TERMS & CONDITIONS

1. Bid Currencies	:	Prices shall be quoted in PKR on Deliver duty paid (D.D.P) basis.
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2.	Supply of Equipment	:	<p>The entire quantity of the ordered goods shall be delivered within 12 Weeks or earlier from the date of issuance of supply order / contract award. (16 weeks above period supply not acceptable and the offer will be rejected).</p> <p>The delivery period shall start from the date of Award of Contract / Contract Agreement.</p>
3.	Installation Period	:	It will start after receiving of equipment at site.
4.	Warranty & Maintenance Period	:	<p>Warranty & Maintenance period should be start from the date of Installation report which satisfactorily signed by end user / Biomedical engineer.</p> <p>(This period will remain functional till (mentioned in items individually)).</p>
5. (a)	Contract Agreement	:	The Contractor / Contractor shall enter & execute a formal Agreement as per the "Form" annexed with such modification as may be necessary.
(b)	Stamp Paper / duty requirement for Agreement.	:	Rs. @0.35% of the Contract Value or as prescribed by Government Laws.
6.	Terms of Payment to Contractors.		<p>Goods supplied on D.D.P:</p> <p>i. Payment shall be made in Pak Rupees.</p> <p>ii. The payment will be made to the Contractor within 30 days of the receipt of original delivery challan(s) and invoice(s) in duplicate duly completed in all respect and signed and stamped by the Chairman of the Inspection Committee. The Inspection Committee will prepare and submit a report of physical inspection with a certificate to the effect that the goods conform to the specifications laid down in the bidding documents.</p>
7.	Insurance	:	<p>The goods supplied under the Contract shall be delivered to the Procuring Agency after the payment of all taxes and customs duty, CESS, Octroi charges etc.</p> <p>Risk will be transferred to the Procuring Agency only After the delivery of these goods has been made to the Procuring Agency. Hence, payment of insurance premium, if any, shall be the responsibility of the Contractor.</p>
8.	Release of Bid Security of 5%	:	To un-successful Contractors, after work is awarded. Bid Security will be released to successful Contractor after purchase order is released but after Security Deposit is deposited as per salient feature Sr.#10.
9.	Security Deposit / Performance Security	:	<p>The successful Contractor will have to deposit the requisite Performance security Bond in shape of Bank Guarantee (as per amount mentioned in bidding data sheet)</p> <p>This will be released as per salient feature Sr.#10.</p>
10.	Release of Performance / Security Deposit	:	<ul style="list-style-type: none"> Partial Bank Guarantee will be released after the satisfactory supply and installation of the equipment. (Contractor will furnish Installation Certificate dully signed by authorized representative at the time of release of Bank Guarantee). Partial Bank Guarantee will be released after satisfactory completion of warranty / maintenance Period (mentioned in Items individually).



11.	Variation in Contract Price	:	Amount mention in Contract Agreement will prevail till execution and no variation in price shall be allowed on any ground including Currency Fluctuation/ Variation / Devaluation or whatsoever.
12.	Taxes	:	All taxes will be deducted as per prevalent laws of Country.
13.	Approved makes.	:	As mentioned in items individually.
14.	Special Note Regarding Equipment's	:	Technical offers / Commercial offers failing to demonstrate below details would be rejected: a. Quoted system must be of advanced & latest version. b. Tender must cover complete equipment. c. Tender must cover complete range of disposables/ kits d. Tender must provide all technical details up to the satisfaction of the end user. e. Items should be quality approved from the concerned international body of the respective industry.
15.	Inspection of Imported equipment	:	After the Award of Tender / Contract, Contractor shall take two persons to the manufacturing site and bear all expenses of visit in case the cost of Award of Tender / Contract is above 20Million.
(a)	manufacturing site by the client.		
(b)	Training		Contractor will provide on-site successful training to all the personnel working on / operating the said Equipment / Machine as long as the need prevail.
16.	Maintenance.	:	Maintenance cost for all items for Period (mentioned in items individually) from the date of successful Installation shall be undertaken by the Contractor (Maintenance includes all Parts & Labor, etc. with Sufficient staff, during maintenance period).
17.	Default in Preventive Maintenance, Breakdown and Emergency Calls.	:	<ul style="list-style-type: none"> • In case of default by the Contractor with respect to maintenance, break down and emergency calls, the same will be carried out within 24 hours by the Procuring Agency and the cost so incurred will be paid from the Retention Money. • Moreover, an additional 10% of the amount spent would be charged from the concerned contractor being defaulter.
18.	Tax Exemption.	:	Incase Purchase on C&F basis, the required Certificate will be issued by this office that the import has been made for this Institute, so as to avail the facility of exemption of duties / taxes, as per Government Rules / Policy according to the Sindh Public Procurement Rules, 2010 (Amended till date).
19.	Transportation	:	The Contractor shall arrange such transportation of the goods as is required to prevent them from damage or deterioration during transit to their final destination as indicated in the Schedule of Requirements. The goods shall be supplied on "D.D.P." Basis at the SMBB Institute of Trauma, Karachi. Miscellaneous charges on logistics, transportation, Insurance, clearing from sea port / airport will also be paid / bear by the contractor(s).
20.	Supply, Installation, Testing & Commissioning	:	Means all types works related to civil, furniture, plumbing, electrical, HVAC, UPS or etc. any type of



		<p>work which is needed related to proper functioning of supplied equipment will completely responsibility of Contractor / contractor.</p> <p>Contractor / Contractor shall visit & inspect the site at their own expense and obtain all necessary information prior to submitting the tender. Any detail or information required should be obtained from Planning & Procurement Department before bidding. Once the tender is submitted, it will be assumed that no further clarification was required.</p>
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Now this agreement witnesseth as follows:

- In this agreement words and expression shall have the same meanings as are respectively assigned to them in the Terms & Conditions of Tender Enquiry referred to.
 - The Following documents after incorporating addenda, if any except these parts relating to Instruction to Contractors, shall be deemed to form and be read and constructed as part of this Agreement, viz:
 - Purchase order(s)/ Letter of Acceptance where applicable.
 - The completed Form of Bid along with Schedules to Bid.
 - Condition of Contract & Contract Data
 - The priced Scheduled of prices
 - The specifications
 - In consideration of the payments to be made by the Purchaser to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Purchaser to supply the goods and remedy defects therein in conformity and in all respects within the provisions of the Contract.
 - The Purchaser hereby covenants to pay the Contractor, in consideration of the execution and completion of the supply as per provisions of the Contract, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
 - LIQUIDITY DAMAGES:** In case deliveries are not completed within the time frame specified in the schedule of requirements / contract, a Show Cause Notice will be served on the Contractor which will be following by cancellation of the Contract to the extent of non - delivered portion of installments. No supplies will be accepted and the amount of Performance Guarantee / Security to the extent of non-delivered portion of supplies of relevant installments will be forfeited. If the firm fails to supply the whole installments, the entire amount of Performance Guarantee/Security will be forfeited to the Government Account and the firm will be blacklisted at least for two years for future participation in bids: The liquidated damage shall be 0.5 % per month or part thereof. The maximum amount of liquidated damages shall be 10% of the amount of contract. Once the cumulative amount of liquidated damages reaches ten percent (10%) of the amount of the contract, the Procuring Agency shall rescind the contract, without prejudice to other courses of action and remedies open to it.
 - PLACE OF DELIVERY:** SMBB Institute of Trauma, Karachi.
 - DISPATCH INSTRUCTION:** Free delivery to the Consignee i.e. SMBB Institute of Trauma, Karachi.
 - PARTICULAR GOVERNING SUPPLY:** As per policy given in the bid documents.
 - INSPECTION:** Nominated Inspection Committee of SMBBIT, Concerned Department of Supplied Items.
 - PAYMENT:** The Accounts & Finance Department SMBB-IT, Karachi on production of the Delivery Challan, Inspection Note and Invoice, which will make payment from the consignee's Account.
- NOTE:** Payment to Siemens Healthcare (Pvt.) Ltd. For the full value 100% within 30 days of delivery. Separate payment of 102,064,000/- PKR to RADIANT MEDICAL Pvt. Ltd for Trump Table.



11. **SECURITY DEPOSIT:** Performance Security, items-wise individually, will be submitted by Supplier to Purchaser in two equally divided forms of Pay Order / Demand Draft, or Bank Guarantee in favour of Shaheed Mohtarma Benazir Bhutto Institute of Trauma, Karachi (SMBBIT). which will be released as per, salient feature clause # 10.

- Performance Security of Rs. 22,221,700 Pay Order / Demand Draft or Bank Guarantee will be released after the satisfactory supply and installation of the mentioned equipment. (Bidder will furnish Installation Certificate duly signed by authorized representative at the time of release of Pay Order / Demand Draft or Bank Guarantee).

- Performance Security of Rs. 22,221,700 Pay Order / Demand Draft or Bank Guarantee will be released after satisfactory completion of Warranty Period of 3 years / maintenance Period.

12. **PART SUPPLY / PART PAYMENT:** Allowed.

12.1 Note: - It should be mentioned on the Delivery Note 1st Supply, 2nd Supply and Final Supply & on Invoice / Bill that this is 1st Bill, 2nd Bill and in the last supply Final Bill) else in delay of payment the firm will be held responsible.

13. **SPECIAL INSTRUCTION:** The Inspection Authority reserves the right to get any or all stores supplied against this Contract; tested by any respective Testing Laboratory/authority at the purchaser's discretion, before or after the acceptance of stores.

14.1 All the supplies must be completed within the stipulated delivery period in case of failure; purchaser reserves the right to forfeit the security deposit and purchase the stores from any other sources on risk and expenses of Contractor without any notice.

14.2 The stores if found damaged shall be replaced by Contractor free of cost.

14.3 Sub-Standard items if supplied will not be returned and Contractor will be required to supply the stores of the contracted specification and of standard quality in addition to the same without any additional expenses to the Government.

14. The Contractor / Manufacturer should ensure the supply of quality stores.

15. **USE OF CONTRACT DOCUMENTS AND INFORMATION:**

a) The Contractor shall not without the Procuring Agency's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern; sample, or information furnished by or on behalf of the Procuring Agency in connection there with, to any person other than a person employed by the Contractor in the performance of the Contract. Disclosure to such employed person shall be made in confidence and shall extend only, as far as may be necessary, to such performance and not further or otherwise.

b) Any document, other than the Contract itself, shall remain the property of the Procuring Agency and shall be returned (all copies) on completion of the Contractor's performance under the Contract.

c) The Contractor shall permit the Procuring Agency to inspect the Contractor's accounts and records relating to the performance of the Supplies.

16. **PATENT RIGHTS:** The Contractor shall indemnify the Procuring Agency against all third- party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof in the country.

17. **ENSURING STORAGE ARRANGEMENTS:** To ensure storage arrangements for the intended supplies, the Contractor shall inform the Procuring Agency at least two weeks prior to the arrival of the consignments at its



store/warehouse. However, in case no space is available at its store/warehouse at the time of supply, the Procuring Agency shall, seven days prior to such a situation, inform the Contractor, in writing, of the possible time-frame of availability of space by which the supplies could be made. In case the Contractor abides by the given time frame, he will not be penalized for delay.

18. INSPECTIONS, TESTS AND TRAINING:

- d) The Procuring Agency or its representative shall have the right to inspect and/or test the goods to confirm their conformity to the Contract specifications at the cost payable by the Contractor.
- e) The Procuring Agency's right to inspect, test and, where necessary, reject the goods either at Contractor's premises or upon arrival at Procuring Agency's destinations shall in no way be limited or waived by reasons of the goods having previously been inspected, tested, and approved by the Procuring Agency or its representative prior to the goods shipment from the manufacturing point.
- f) Contractor shall provide the training to the designated staff of the SMBB Institute of Trauma, Karachi for the smooth operation of the equipment / instruments. Training plan should be attached with the offer.

19. DELIVERY AND DOCUMENTS: The Contractor shall in accordance with the terms specified in the Schedule of Requirements make delivery of the goods.

20. INSURANCE: The goods supplied under the Contract shall be delivered to the Procuring Agency after the payment of all taxes and customs duty, cess, octroi charges etc. Risk will be transferred to the Procuring Agency only after the delivery of these goods has been made to the Procuring Agency. Hence, payment of insurance premium, if any, shall be the responsibility of the Contractor.

21. TRANSPORTATION:

- 21.1 The Contractor shall arrange such transportation of the goods as is required to prevent them from damage or deterioration during transit to their final destination as indicated in the Schedule of Requirements.
- 21.2 The goods shall be supplied on "D.D.P" Basis at SMBB Institute of Trauma, Karachi Store Department as per Schedule of Requirements on the risk and cost of the Contractor. Transportation including loading / unloading of goods shall be the responsibility of Contractor.

22. INCIDENTAL SERVICES: The Contractor will be required to provide to the Procuring Agency incidental services the cost of which should be included in the total bid price.

23. WARRANTY / GUARANTEE:

- 23.1 The term period of warranty / guarantee (mentioned in items specification individually) from the date on which the Stores have been put into operation and demonstrated to the Institute staff. In any case this period shall not exceed six months beyond the warranty expiration period from the date of taking-over of goods.

- 23.2 During the period of warranty / guarantee, the Contractor shall remedy, at his / her expense, all



defects in design, materials, and workmanship that may develop or are revealed under normal use of the goods upon receiving written notice from the Institute; the notice shall indicate in what respect the goods are faulty.

23.3 The provisions of this Clause include all the expenses that the Contractor may have to incur for delivery and installation of such replacement parts, material and equipment as are needed for satisfactory operation of the goods at the SMBB Institute of Trauma, Karachi premises.

23.4 The contractor shall provide warranty / guarantee for supply of Machinery / Equipment etc. for at least 05 years (where applicable).

23.5 The Contractor shall separately quote the price of service contract inclusive of parts as well as excluding the parts for 3 years (post warranty / guarantee period) in term of %age for total contract value.

PRICES OF POST WARRANTY CONTRACT					
Tender Item #	Equipment	Model	Price (including Parts & X-Ray Tube)	Price (Including Parts without X-Ray Tube)	Services only
1	Angiography Machine	Artis Q	18%	12%	3%

23.6 In case of consumable items, kits, chemicals, films etc. the contractor shall remain responsible for specificity, efficacy & sensitivity with maximum period of expiry as much allowed by manufacturer.

23.7 The Procuring Agency shall promptly notify the Contractor in writing of any claims arising out of this warranty.

24. **ASSIGNMENT:** The Contractor shall not assign, in whole or in part, its obligations to perform to another party under this Contract, except with the Procuring Agency's prior written consent.

25. **DELAYS IN THE CONTRACTOR'S PERFORMANCE:** Delivery of the goods shall be made by the Contractor in accordance with the time schedule prescribed by the Procuring Agency in the Schedule of Requirements

25.1 If at any time in the course of performance of the Contract, the Contractor encounters anything impeding timely delivery of the goods, he shall promptly notify the Procuring Agency in writing of the causes of delay and its likely duration. As soon as practicable, after receipt of the Contractor's notice, the Procuring Agency shall evaluate the situation and may, depending on merits of the situation, extend the Contractor's time for performance, with or without liquidated damages, in which case the extension shall be ratified by the Parties by a supplementary Contract to be treated as an addendum to the original contract.

25.2 Any undue delay by the Contractor in the performance of its delivery obligations shall render it liable to the imposition of liquidated damages.

26. **TERMINATION FOR DEFAULT:** The Procuring Agency may, without prejudice to any other remedy for breach of Contract, by a written notice of default sent to the Contractor, terminate this Contract in whole or in part if:



- 26.1 the Contractor fails to deliver any or all installments of the goods within the period(s) specified in the Contract, or within any extension thereof granted by the Procuring Agency;
- 26.2 the Contractor fails to perform any other obligation(s) under the Contract to the satisfaction of the Procuring Agency; and
- 26.3 The Contractor, in the judgment of the Procuring Agency, has engaged itself in corrupt or fraudulent practices before or after executing the Contract.

27. **FORCE MAJEURE:** The Contractor shall not be liable for forfeiture of its Performance Guaranty/ Bid Security, or termination / blacklisting for default if and to the extent that this delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure. For the purposes of this Clause Force Majeure means an act of God or an event beyond the control of the Contractor and not involving the Contractor's fault or negligence directly or indirectly purporting to mal-planning, mismanagement and /or lack of foresight to handle the situation. Such events may include but are not restricted to acts of the Procuring Agency in its sovereign capacity, wars or revolutions, fires, floods, earthquakes, strikes, epidemics, quarantine restrictions and freight embargoes. If a Force Majeure situation arises, the Contractor shall promptly notify the Procuring Agency in writing with sufficient and valid evidence of such condition and the cause thereof. The Committee, constituted for redressing grievances, will examine the pros and cons of the case and all reasonable alternative means for completion of purchase order under the Contract and will submit its recommendations to the competent authority. However, unless otherwise directed by the Procuring Agency in writing, the Contractor shall continue to perform its obligations under the Contract as far as is reasonably practical and shall seek reasonable' alternative means for performance not prevented by the Force Majeure event.

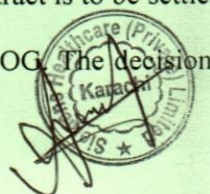
28. **TERMINATION FOR INSOLVENCY:** The Procuring Agency may at any time terminate the Contract by giving written notice of one-month time to the Contractor if the Contractor becomes bankrupt or otherwise insolvent. In that event, termination will be without compensation to the Contractor, provided that such termination will not prejudice or affect any right or remedy which has accrued or will accrue thereafter to the Parties.

29. ARBITRATION AND RESOLUTION OF DISPUTES:

29.1 The Procuring Agency and the Contractor shall make every effort to resolve amicably by direct informal negotiations any disagreement or dispute arising between them under or in connection with the Contract.

29.2 If, after thirty (30) days from the commencement of such informal negotiations, the Procuring Agency and the Contractor have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred to the Arbitrator for resolution through arbitration.

29.3 In case of any dispute concerning the interpretation and/or application of this Contract is to be settled through arbitration, the arbitrator to be appointed with the approval of the Institute's BOG. The decisions



taken and/or award given by the sole arbitrator shall be final and binding on the Parties.

30. PACKING:

30.1 The Contractor shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

30.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements.

31. **GOVERNING LANGUAGE:** The Contract shall be written in English language. All correspondence and other documents pertaining to the Contract, which are exchanged by the Parties, shall be written in English.

32. **APPLICABLE LAW:** This Contract shall be governed by the laws of Pakistan and the courts of Karachi - Pakistan shall have exclusive jurisdiction.

33. Contractor offering radiology equipment failing under compliance with Pakistan Nuclear Regulatory Authority (PNRA) should be registered with the authority to install and commission. All expense / fees for PNRA for clearance of X-ray based equipment shall be borne by the supplier (where applicable).

34. **UPS / Power protection for the equipment shall be incorporated in the systems and also included in bid amount (where applicable).**

35. **All the civil works and allied services will be carried-out by the Contractor with the consultation of the Procuring Agency (if required) cost of all types of works included in bid amount.**

36. **All site-specific work to be required in the system viz. Lead Glass / special antistatic flooring, environment control / radiation protection must be included Contractor quote (where applicable).**



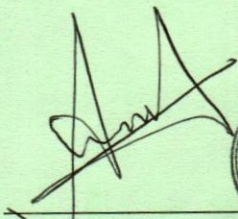

37. **Stamp duty @0.35%** of ordered amount shall be paid through **E-stamp duty (www.estamps.gos.pk)** and the paid receipt and agreement should have to be submitted to the Procurement department (SMBB-IT), Karachi.

38. **SHELF LIFE REQUIRED:** No supply will be accepted having expiry date less than 70% of shelf life for the National manufacturer and 70% for imported items (**Wherever applicable**).

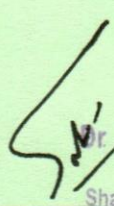
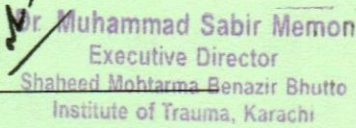
39. Documents showing any set of exemption from duty taxes should also be attached with the bills.

IN WITNESS WHEREOF the parties hereto have caused this Contract Agreement in accordance with their respective hands and seals, the day, month and the year first above written.

Signature of the Contractor

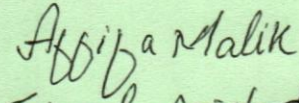


(Seal) 

Signature of the Purchaser

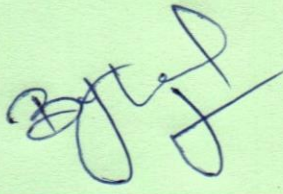

(Seal) 

Signed, Sealed and Delivered in the presence of:

Witness:


Technical Assistant (Sales)
(Name, Title and Address) 

Witness:


(Name, Title and Address)
MANAGER
SUPPLY CHAIN MANAGEMENT
SMBB Institute of Trauma, Karachi