

PROCUREMENT OF HAND BAGGAGE CT MACHINES FOR PAA AIRPORTS

OPERATIONAL AND TECHNICAL SPECIFICATIONS/COMPLIANCE SHEET

This RFP invites proposals from reputable firms for the supply, installation & commissioning, training and other associated services for **Hand Baggage CT Scanners** for airports of **Pakistan Airport Authority (PAA)** as per following minimum operational & technical specifications, on FOR basis:

S. No.	Tender Requirements	Qty	Compliance	Remarks / Reference
1.	GENERAL INFORMATION			
1.1.	Name of the Firm			
1.2.	Firm Address			
1.3.	Contact No.			
1.4.	Name of Principal / OEM			
1.5.	Principal's Address			
1.6.	Make & Type of the offered Equipment			
1.7.	Model No. (Specify if applicable)			
1.8.	Country of Origin (OEM)			
1.9.	Country of Manufacture (Specify)			
1.10.	The bidder shall fill and submit this technical & operational specification compliance, document duly signed and stamped by bidder and OEM, with technical bid.			
1.11.	The bidder shall duly provide appropriate remarks and/or references to the relevant supporting documents under the 'Remarks & Reference' column against each specification, wherever applicable.			
1.12.	The bidder shall quote the cost for each item separately and attach relevant documents for all items and services, including the optional services mentioned in this RFP (if any).			
1.13.	The cost of optional items and services, wherever mentioned, shall be quoted by the bidder separately and shall not be part of financial evaluation. However, availing or inclusion of these items shall remain at the sole discretion of PAA.			
1.14.	In the case of local representative, the bidder shall submit a valid Authorization Certificate from the OEM. The OEM certificate shall include authorization for resale, distribution, installation/commissioning and after-sale services of offered equipment. Authorization certification of bidder from any other authorized agent (sub-authorization) shall not be accepted.			

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1.15.	Bidder must have technical facilitation/Service centers technical man power for repair /technical supports for ensuring services for warranty/ post warranty period in Pakistan (minimum 2 x Major cities of Pakistan).			
1.16.	Bidder shall submit the undertaking of technical support through manpower and remote assistance during and post warranty period.			
1.17.	The bidder shall submit OEM certificate, guaranteeing the following services and support from date of installation & commissioning of system: (a) Availability of spares for 10 years . (b) Continuity of after-sale support including firmware upgrades, releases, patches, and related services etc. for 10 years .			
1.18.	Machines of the offered model / equipment shall have been successfully deployed and operational at Airports in at least 10 countries. Verifiable documentary evidence shall be provided.			
1.19.	The bidder must attach all relevant technical brochures, literature, and datasheets of offered system and all accessories, in their bids, properly numbered, labeled and cross-referenced. (Document reference number to be filled under Reference Column).			
1.20.	Comprehensive details of offered system with itemized list in the technical offer and itemized cost (with breakup) in financial offer covering Hardware, Software, Installation / Commissioning, Trainings / FAT.			
1.21.	The bidder shall provide OEM-approved SOPs for operation, routine maintenance, preventive maintenance, troubleshooting and fault recovery of the equipment. The SOPs shall be supplied in English, in both hard and soft copy formats, and shall cover all procedures necessary for safe, efficient and continuous operation of the equipment throughout its service life.			
1.22.	For bid evaluation purposes, the quoted price of the main equipment shall carry a weightage of 80%, while the quoted price of spares and consumables shall carry a weightage of 20%. The prices of spares and consumables shall be quoted separately and shall not be included in the total bid value submitted for the main equipment. For evaluation purposes, the weighted evaluated price shall be determined as follows: Evaluated Price = (Main Equipment Price × 80%) + (Spares & Consumables Price × 20%) Note: The Contract Award Price shall comprise only the price of the main BOQ components. Prices of spares and consumables shall be used solely for evaluation purposes and shall not form part of the Contract Award Price.			

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1.23.	SLA (Optional) The bidder shall separately quote the cost of SLA for a period of two (02) years beyond the warranty period. Note: The decision for opting of items mentioned as Optional in bidding documents will be at the discretion of PAA. However, the prices of Optional items will not be considered for financial evaluation. The cost of 2 year SLA shall remain frozen for a period of 1 year after the expiry of warranty period of equipment.			
2.	SCOPE			
2.1.	The successful bidder shall be responsible for the supply, delivery, installation, testing, commissioning and operationalization of twelve (12) Hand Baggage CT Scanning Machines at locations designated by PAA, comprising four (04) units at JIAP Karachi, four (04) units at AllAP Lahore, four (04) units at IAP Islamabad. PAA reserves the right to change the deployment locations anywhere within Pakistan without any change in the contract price. The scope of work shall include, but not be limited to, the following: (a) Hand Baggage CT Scanning Machines Qty.12 (04-JIAP, 04-AllAP ,04-IAP) (b) FAT and Factory Trainings, (c) Installation and Commissioning, (d) On-site Operational & Technical Trainings. (e) Site Acceptance Test (SAT)	12 units		
3.	OPERATIONAL REQUIREMENTS / SPECIFICATIONS			
3.1.	Following compliance is mandatory: - EC/EU compliance for aviation security from OEM or / and - Equipment should be on TSA qualified visual image technology list (attach compliance from OEM)			
3.2.	Goods will not be accepted if any software or component is manufactured or designed by India or Israel. The bidder shall furnish an OEM certificate confirming compliance with this requirement.			
4.	TECHNICAL SPECIFICATIONS			
4.1.	Technology: CT (Computed Tomography)			
4.2.	Tunnel Size (W x H): Minimum 600 mm x 400 mm			
4.3.	Conveyor Speed: ≥ 0.15 m/sec			
4.4.	Throughput: Minimum 540 trays per hour (TPH)			

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4.5.	Conveyor Height: 950 mm or less			
4.6.	Deployment Method: Standalone with TRS. TRS length to be assessed during site survey by bidder in coordination with PAA and ASF.			
4.7.	Display Image Resolution: Min 1280 X 1024			
4.8.	Safety Parameters: - Leakage Radiation: $\leq 1.5 \mu\text{Sv/hr}$ (0.15 mR/hr) - Double X-Ray curtains on both ends			
4.9.	Image Archiving: Minimum 150,000 per machine and minimum 1,000,000 images per site			
4.10.	TIP Library (OEM): Minimum 1,000 threat images			
4.11.	<u>Secondary View Station (SVS)</u> The bidder shall provide one (01) Secondary View Station (SVS) per machine. Fully integrated with the offered Hand Baggage CT Screening Machine. The SVS shall enable authorized operators to remotely review, and analyze alarmed baggage using all image processing, threat assessment and image manipulation functions available at the primary operator workstation. The SVS shall include all necessary hardware, software, licenses and networking components for complete operation. The workstation shall, at a minimum, comprise: - Processor: Intel Core i7 (latest available generation) or equivalent - RAM: Minimum 16 GB DDR5 - Storage: Minimum 512 GB SSD - Graphics: Dedicated graphics card with minimum 8 GB VRAM - Display: minimum 27-inch capacitive multi touch LED monitors with minimum Full HD (1920 × 1080) resolution - Network Interface: Dual Gigabit Ethernet - Operating System: OEM-recommended licensed operating system - Keyboard, mouse and all associated peripherals The SVS shall be supplied complete in all respects and shall support future integration of additional CT screening lanes, if required by PAA.	12		
4.12.	<u>Screening Room:</u> Separate screening rooms shall be provided at three (3) designated locations at IIAP, JIAP and AIIAP for screeners operating C3 x-ray scanning machines. All deployed machines shall be integrated into a centralized screening platform capable of remote image review. The screening room/workstations shall be relocatable to any suitable location within the airport network, subject to operational requirements, without requiring major system modifications at the central search point.			
5.	CENTRALIZED MANAGEMENT SOFTWARE			
5.1.	Centralized, network-compatible management software capable of monitoring, analyzing, managing, configuring and reporting all deployed machines through an authorized network. The software must have the following capabilities: Centralized Dashboard: Displaying real-time status of all connected screening systems including operational status (e.g., Ready, Warning, Alarm, offline), throughput, operator activity, system health etc. Remote Administration: Capability to perform remote system configuration and diagnostics.			

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	iii. Archiving, Reporting & Search: Automated background archiving of images, alarms, events, operational records and device history in a centralized database. The software shall support configurable reporting and advanced search/filtering based on time, data, device. iv. Access Control: Role-based user access and audit trail for administrative activities. v. Integration: capability to interface with other airport screening equipment through industry standard communication interfaces or API, where required by PAA. vi. Scalability : The software shall have provision for future expansion to accommodate additional screening systems and workstations without any additional cost impact. vii. Cyber security: the software shall incorporate cybersecurity measures.																							
5.2.	REMOTE MONITORING & MAINTENANCE COMPUTER																							
(a)	The bidder shall provide dedicated workstations to be deployed at: i. Screening rooms at IIAP, JIAP and AIIAP (Qty- 3) for monitoring by operational staff and ii. JIAP, AIIAP, IIAP and EED (Qty-4) for installation and operation of the centralized management software. The workstation shall have the following minimum specifications: <table><tr><td>Operating System</td><td>Latest supported 64-bit Microsoft Windows Professional/Enterprise edition or OEM recommended OS</td></tr><tr><td>Processor</td><td>Intel Core i7 (13th Generation or later) / AMD Ryzen 7 (7000 Series or better)</td></tr><tr><td>Memory</td><td>Minimum 16 GB DDR5</td></tr><tr><td>Storage</td><td>Minimum 512 GB SSD</td></tr><tr><td>Display</td><td>Minimum 24-inch LED monitor, Full HD (1920 × 1080) resolution</td></tr><tr><td>Network Interface</td><td>Dual Gigabit Ethernet ports and Wi-Fi capability</td></tr><tr><td>USB Ports</td><td>Minimum four (04) USB 3.0 or higher ports</td></tr><tr><td>Graphics</td><td>Integrated or dedicated graphics supporting Full HD display</td></tr><tr><td>Power</td><td>UPS with minimum 30 minutes backup</td></tr><tr><td>Peripherals</td><td>Keyboard, mouse and all accessories required for operation of the management software</td></tr></table> The workstation shall be fully compatible with the supplied centralized management software and shall support monitoring, reporting, database management, software updates and administration of all Hand Baggage units deployed under the contract.	Operating System	Latest supported 64-bit Microsoft Windows Professional/Enterprise edition or OEM recommended OS	Processor	Intel Core i7 (13th Generation or later) / AMD Ryzen 7 (7000 Series or better)	Memory	Minimum 16 GB DDR5	Storage	Minimum 512 GB SSD	Display	Minimum 24-inch LED monitor, Full HD (1920 × 1080) resolution	Network Interface	Dual Gigabit Ethernet ports and Wi-Fi capability	USB Ports	Minimum four (04) USB 3.0 or higher ports	Graphics	Integrated or dedicated graphics supporting Full HD display	Power	UPS with minimum 30 minutes backup	Peripherals	Keyboard, mouse and all accessories required for operation of the management software	7		
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(b)	The bidder shall provide the Remote Maintenance Kit (Laptop) to be provided at IIAP, JIAP, AIAP and EED, pre-installed and stored with all the applications, software, drivers, licenses necessary for the remote management, maintenance of quoted Hand Baggage machines, with the following or higher specifications: <table><tr><td>Processor</td><td>Intel Core Ultra 7 or higher</td></tr><tr><td>Storage</td><td>1 TB NVME</td></tr><tr><td>Memory</td><td>16GB DDR5</td></tr><tr><td>Display</td><td>16-inch, FHD Resolution or higher</td></tr><tr><td>Keyboard</td><td>Backlit</td></tr><tr><td>Battery</td><td>60 WHr or higher</td></tr><tr><td>Wireless</td><td>Wi-Fi 6 and Bluetooth 5.0</td></tr><tr><td>Camera</td><td>Built-in, FHD or better</td></tr><tr><td>Ports</td><td>02 x USB-A, 01x USB-C, 1 x HDMI Out, 1 x RJ-45</td></tr><tr><td>Accessories</td><td>Carry-Case and Power Adapter etc.</td></tr></table>	Processor	Intel Core Ultra 7 or higher	Storage	1 TB NVME	Memory	16GB DDR5	Display	16-inch, FHD Resolution or higher	Keyboard	Backlit	Battery	60 WHr or higher	Wireless	Wi-Fi 6 and Bluetooth 5.0	Camera	Built-in, FHD or better	Ports	02 x USB-A, 01x USB-C, 1 x HDMI Out, 1 x RJ-45	Accessories	Carry-Case and Power Adapter etc.	4		
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(c)	The Bidder shall provide, as part of the offered solution and without any additional cost, all hardware, software, networking components, interfaces, licenses, installation materials and accessories required for the complete implementation, integration, operation and remote maintenance of the Hand Baggage X-ray Scanning System, in accordance with the requirements of this RFP. This shall include, but not be limited to, servers, network switches, distribution boxes, interface modules, communication equipment, cabling, connectors, mounting hardware and any other associated equipment necessary to achieve the required functionality. Any hardware, software, component, material or service essential for the complete and satisfactory performance of the system, whether or not specifically identified in this RFP, shall be deemed to be included within the Bidder’s scope of supply without any additional cost.																							
6.	Parallel Remote Viewing																							
6.1.	The system shall provide a read-only parallel remote viewing facility for authorized Customs personnel to monitor screening images in real time. The remote viewing station shall have no operational control over the screening equipment or its functions.																							
7.	UPS																							
7.1.	The bidder shall provide the following or higher specifications for the UPS: <table><tr><td></td><td><table><tr><td>Type</td><td>Pure Sinewave, True Online, Double conversion</td></tr><tr><td>VA Rating</td><td>Adequate so as total load shall not exceed 70% of actual capacity of UPS</td></tr></table></td></tr></table>		<table><tr><td>Type</td><td>Pure Sinewave, True Online, Double conversion</td></tr><tr><td>VA Rating</td><td>Adequate so as total load shall not exceed 70% of actual capacity of UPS</td></tr></table>	Type	Pure Sinewave, True Online, Double conversion	VA Rating	Adequate so as total load shall not exceed 70% of actual capacity of UPS	12																
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		<table><tr><td>Input</td><td>110 – 230 VAC</td></tr><tr><td>Output</td><td>220 - 240 VAC</td></tr><tr><td>AVR</td><td>Built-in</td></tr><tr><td>Protection</td><td>Under-voltage & Over-voltage, Frequency Fluctuation (40-60 Hz), Low battery, overload, over temperature, short circuit, over voltage, battery over charge & over discharge.</td></tr><tr><td>Power Factor</td><td>> 0.99 PF</td></tr><tr><td>Transfer Time</td><td>0 ms</td></tr><tr><td>Management</td><td>At Maintenance Workstation via SNMP</td></tr><tr><td>Battery</td><td>Built-in or External (at least 15 minutes of backup time at full load)</td></tr><tr><td>Accessories</td><td>Maintenance / Service Bypass Panels, and Power Cords etc.</td></tr></table>	Input	110 – 230 VAC	Output	220 - 240 VAC	AVR	Built-in	Protection	Under-voltage & Over-voltage, Frequency Fluctuation (40-60 Hz), Low battery, overload, over temperature, short circuit, over voltage, battery over charge & over discharge.	Power Factor	> 0.99 PF	Transfer Time	0 ms	Management	At Maintenance Workstation via SNMP	Battery	Built-in or External (at least 15 minutes of backup time at full load)	Accessories	Maintenance / Service Bypass Panels, and Power Cords etc.			
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8.	SERVICE AND CONFIGURATION ACCESS:																						
8.1.	The bidder shall provide PAA with all OEM-authorized service and configuration tools, including hardware security keys (where applicable), software utilities, licenses, access credentials and documentation required to configure, maintain, diagnose, calibrate, update and modify operational parameters of the equipment. The bidder shall ensure that PAA is not dependent on the OEM or bidder for routine service configuration and maintenance activities. All such tools shall be supplied as part of the contract without additional cost. All software and service tools shall be supplied with non-expiring licenses transferable to PAA and shall not require recurring subscription or annual renewal for their intended use.																						
9.	LICENSE																						
9.1.	The bidder shall provide: (a) Perpetual license for software																						
10.	SITE SURVEY (Mandatory)																						
10.1.	The bidders are required to conduct, at no-cost no-obligation basis to PAA, a comprehensive site survey and submit Site Survey Report along with technical bid.																						
10.2.	The design shall take into consideration all local constraints, building-related limitations, and on-site conditions. Lack of knowledge of the exact local conditions will not absolve the bidder, under any circumstances, from fulfilling his contractual obligations.																						
10.3.	The bidder shall request for the Site Survey through PAA by providing requisite documents within 7 days from the date of tender advertisement on following email addresses:																						

S. No.	Tender Requirements	Qty	Compliance	Remarks / Reference
	Asma.akhlaq@paa.gov.pk Copy to: Adldcns.te@paa.gov.pk The following requisite documents need to be submitted with survey request: 1. CNIC Copy 2. Request Letter 3. Passport size Pictures 4. Special branch verification certificate 5. Employee Card / employment letter 6. Local Police Verification certificate			
11.	MANDATORY DOCUMENTS TO BE INCLUDED WITH TECHNICAL BID			
11.1.	The participating bidder shall submit the following documents with technical bid, but not limited to, in an organized manner, ensuring the labelling of documents for quick reference: (a) Technical BoQ – itemized list containing hardware, software, accessories and more with detailed specifications. (b) Technical Literature (Datasheets, Brochures, etc.) (c) Site Survey report			
12.	EQUIPMENT DELIVERY & IMPLEMENTATION TIMELINE			
12.1.	The successful bidder shall complete the installation and commissioning within 90 days from the date of contract agreement, including: (a) Delivery of stores (BoQ items) and installation material (non-BoQ items) at designated sites. (b) Factory Acceptance Test (FAT) and Factory Training, and (c) Installation, commissioning, local training, site acceptance (SAT).			
13.	FACTORY ACCEPTANCE TEST (FAT)			
13.1.	The bidder shall quote separately the cost for conducting / arranging FAT for offered system in financial offer. However, the total cost shall be included in total bid value. (Per person cost is to be quoted.)			
13.2.	The Factory Acceptance Tests shall be conducted / arranged for 12.2.1 Four (04) member technical team for Five (05) working days (excluding journey period) and			

S. No.	Tender Requirements	Qty	Compliance	Remarks / Reference
	12.2.2 Three (3) member operational team for Five (05) working days (excluding journey period) at OEM's premises in accordance with the approved Factory Acceptance Test Plan.			
13.3.	The bidder shall bear the cost of Visa (Processing & Fees), return air tickets, transportation, and accommodation with meals, medical insurance, vaccination fees and Daily Subsistence Allowance (DSA) as per government defined rates. Following the satisfactory completion of the tests, PAA shall issue a duly signed Factory Acceptance Certificate.			
13.4.	Factory Acceptance shall be required for all components of the system including all hardware and software. The Factory Acceptance shall verify all the equipment's functional and operational capabilities and physical characteristics as specified in the scope of compliance.			
13.5.	The bidder shall undertake to submit FAT plan/procedures for PAA's approval at least thirty (30) days prior to the scheduled commencement of the factory acceptance tests. Factory Acceptance Test Plan and Procedures together with the proposed acceptance certificate format. PAA shall notify the bidder of its decision within fifteen (15) days. Any changes in the procedures initiated by the bidder will be without cost to PAA and subject to PAA's approval.			
13.6.	The OEM shall assemble, configure and test the entire system and sub-systems at its own premises during FAT and prior to shipment. This Factory Acceptance Test shall be performed in accordance with a prepared Factory Acceptance Test Plan incorporating specific test procedure, which will clearly demonstrate compliance of the equipment with the tender requirements in all general, operational and technical aspects.			
13.7.	The test procedures shall contain step-by-step instructions (textual and media based as necessary) with a concise but comprehensive explanation of each test, including the test scenario and objective.			
13.8.	All observations agreed on and discrepancies noted during the Factory Acceptance Test are to be corrected by the bidder prior to shipment of the equipment.			
13.9.	All results of the Factory Acceptance Test shall be duly recorded and shall be signed by the OEM, bidder's representative and PAA.			
13.10.	The equipment shall be considered factory accepted by PAA upon satisfactory completion of each Acceptance Test as certified by the relevant test records signed by the bidder's appointed representative and counter-signed by PAA's appointed representative(s).			
14.	FACTORY TRAINING			

S. No.	Tender Requirements	Qty	Compliance	Remarks / Reference
14.1.	The bidder shall quote separately the cost for conducting / arranging Factory Training for each offered system in financial offer. However, the total cost shall be included in total bid value (per person cost shall be quoted).			
14.2.	The successful bidder shall provide Technical factory training at OEM premises covering operation, installation, configuration, troubleshooting, diagnostics, preventive maintenance and corrective maintenance of the equipment. The training shall be conducted at intermediate and advanced levels and shall qualify the trainees to independently perform routine maintenance, fault diagnosis, replacement of modules/components, corrective maintenance and restoration of the equipment to full operational status without OEM assistance. The training shall be conducted for: Ten (10) personnel for Seven (07) working days.			
14.3.	The successful bidder shall provide Operational Factory Training to operational team at OEM premises covering operation, installation, for advanced & intermediate level to : Ten (10) personnel for five (05) working days.			
14.4.	Factory Training shall cover both theoretical and practical parts with respect to both hardware and software. Theoretical Part should cover Basics, detailed theory of operation of system. The Practical Part of the training shall include installation, configuration / Tuning and operation procedures, fault finding, backup procedure, removal /replacement of faulty units and periodic maintenance procedures.			
14.5.	The detailed training plan indicating the curriculum/syllabus and technical practical training shall be submitted by the bidder with their proposal.			
14.6.	The training plan shall be subject to PAA approval. The training plan shall cover all equipment offered in the tender.			
14.7.	The bidder shall bear the cost of Visa Processing (Processing & Fees), return air tickets, transportation, and accommodation with meals, medical insurance, vaccination fees and Daily Subsistence Allowance (DSA) as per government defined rates.			
14.8.	The training material (hard and soft copy both), including but not limited to booklets, manuals, USBs, writing material etc., shall be provided to each participant. This training material will be part of the training package and shall not be returned.			
14.9.	The training courses at the factory shall be given by the manufacturer's experienced/certified technical staff. (Courses given by the supplier, sales or marketing staff will not be accepted).			
14.10.	After completion of the training, each participant shall be awarded for successful completion of the training certificate, issued by OEM.			

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15.	LOCAL TRAINING			
15.1.	The bidder shall provide on-site Local Technical Training to ten (10) Personnel for five (05) working days at each site. The training should cover installation, assembly, Operation, troubleshooting, maintenance of hardware and software.			
15.2.	The bidder shall provide on-site Local Operational Training to twenty (20) Personnel for five (05) working days at each site. The training should cover complete Operation of machines			
15.3.	The Local training of operational and maintenance personnel shall be provided by the experienced/certified trainer from OEM.			
15.4.	The Local Training shall be conducted during the installation and / testing phases.			
15.5.	A copy of specifically designed local training material shall be submitted to PAA for approval at least Thirty (30) days prior to the commencement of the respective courses. Appropriate and approved training handbooks, documentation and materials shall be handed over to each participant. The training should cover classroom training and practical training. The training materials distributed during the course shall not be returned to the successful bidder.			
16.	ACCESSORIES			
16.1.	Calibration bodies / STP (latest version) must be provided with each machine for calibration testing and periodic performance verification (if applicable)			
16.2.	Table and Chair: Suitable 02 x Table and 3 x Chair per machine. The chairs should have arm rest, frame, wheels, adjustable height mechanism and swivel capability. (Can be supplied locally).			
17.	SPARES/ CONSUMABLES			
17.1.	The bidder shall provide the price for spares and consumables (operational and equipment consumables) in USD however payment shall be processed in PKR. The rates of exchange to be used by the bidder for currency conversion shall be the TT&OD Selling Rates published or authorized by the State Bank of Pakistan prevailing on the date 28 days prior to the deadline for submission of bids. For the purpose of payments, the exchange rates used in bid preparation shall apply for the duration of the contract. The price for spares & consumables shall be locked for a period of 2 years after warranty period.			
17.2.	The bidder shall submit, as part of its proposal, a complete and comprehensive list of all spares, consumables and operational consumables required for operation, preventive maintenance, corrective maintenance and			

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	repair of the equipment throughout the proposed support period. The list shall clearly indicate the description, OEM part number, unit price and recommended replacement frequency/consumption rate, wherever applicable. The submitted list shall be deemed complete and sufficient for operation and maintenance of the equipment throughout the support period. Any spare, consumable or operational consumable subsequently required for operation, maintenance, repair, restoration or continued functionality of the equipment, but not included in the submitted list, shall be supplied by the bidder at a unit price not exceeding the price of the lowest-priced spare or consumable quoted in the submitted list. No additional charges, claims or cost escalation on account of omitted, unidentified or subsequently identified spares or consumables shall be admissible. The prices quoted for all spares, critical spares, consumables and operational consumables shall remain firm and fixed for a period of two (02) years following expiry of the warranty period. PAA may procure such items on an as-required basis at the quoted rates throughout the said period.			
17.3.	The total quoted price of the spares identified by the bidder shall form part of the financial evaluation and shall carry a weightage of 20% for bid evaluation purposes.			
18.	MANUALS			
18.1.	The successful bidder shall be responsible to provide the following manuals in English on USB & Hard copies: (a) Operator/User Manuals (b) Technical Manuals (including Administration, Management, Configuration, installation & maintenance procedure). (c) Tailored Technical Guides containing step-by-step procedures for complete reinstallation of machine (d) OEM recommended SOP for operation and maintenance of machines			
19.	SITE ACCEPTANCE TEST (SAT)			
19.1.	The SAT Testing and Procedures shall consist of verification of all Equipment including Equipment performance, operational and technical characteristics under the Contract in a live operational environment by a joint team consisting of ASF and PAA. The SAT must also verify that the Equipment under the Contract has been delivered and that all Documentation, Drawings, etc. have been completed, delivered and working as per PAA's requirement.			
19.2.	If the system or sub-system fails to pass one or more of the tests(s), which shows that the system is non-compliant with the requirements or the specifications, then the bidder shall correct the cause of the failure(s) within the 30-day period from the date of intimation. The PAA shall reserve the right to have all the tests, or any single test performed again			

S. No.	Tender Requirements	Qty	Compliance	Remarks / Reference						
19.3.	The Site Acceptance Certificate will be signed upon complying with the following conditions: (a) Successful SAT Checks/Tests. (b) All Training Programs have been satisfactorily completed. (c) All Technical documentations and manuals have been delivered to the Site.									
20.	WARRANTY AND SERVICE LEVEL AGREEMENT (SLA)									
20.1.	The bidder shall submit a detailed SLA document outlining responsibilities, escalation procedures and other details, that shall be mutually agreed at the time of contract.									
20.2.	The successful bidder shall provide the following services, effective from the date of issuance of Site Acceptance (successful SAT) by the PAA: (a) 02-years of unconditional warranty of complete system (Hardware / Software& accessories) including updates and patches and operational & equipment consumables, (b) 02-years of SLA including maintenance support (updates and patches), Debugging and fault rectification (without parts). On call support charges and list for critical spares / operational and technical to be provided by bidder with cost which will be procured on as per requirement basis.									
20.3.	During the warranty period, the bidder shall provide, at no additional cost to PAA, all spares, critical spares, consumables and operational consumables required to ensure uninterrupted operation and maintenance of the equipment in accordance with OEM recommendations and contractual performance requirements. No separate payment shall be admissible for any such item during the warranty period. Any part found defective during the warranty period shall be replaced with a new OEM part at no additional cost to PAA. Repair, refurbishment or reuse of defective parts shall not be permitted.									
20.4.	The bidder shall oblige with following timelines for any nature of fault, defect, unserviceability in equipment: <table border="1"><tr><td>Response Time</td><td>2 working hour</td></tr><tr><td>Resolution Time</td><td>24-hour for basic configuration issues</td></tr><tr><td></td><td>45 days if replacement of parts involved</td></tr></table> If the equipment remains unserviceable beyond the stipulated resolution time of 45 days, the warranty period shall be extended by an equivalent number of days.	Response Time	2 working hour	Resolution Time	24-hour for basic configuration issues		45 days if replacement of parts involved			
Response Time	2 working hour									
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	45 days if replacement of parts involved									

S. No.	Tender Requirements	Qty	Compliance	Remarks / Reference
20.5.	The bidder shall be responsible for processing all under-warranty claims and will cover all expenses involved in transportation, customs clearance, shipment, and installation of defective equipment to and from installation location (being a FOR contract).			
20.6.	Within the warranty and SLA period, the successful bidder confirms unlimited number of on-site visits and maintenance support, on an on-call basis for warranty claims at no cost to PAA, should the problem solution fail via remote facilities.			
20.7.	During the warranty period, the bidder shall share all the administrative credentials (username, login IDs, passwords etc.) for the equipment.			
21.	DEMONSTRATION			
21.1.	The bidder may be asked to arrange an online demonstration of offered machines on a no cost & no obligation basis. The demonstration shall cover all the necessary operational and technical specifications, requirements and features of offered machines.			
22.	DAMAGES			
22.1.	The bidder shall be responsible for any damage caused to existing infrastructure, equipment, or facilities during the execution of task and shall be liable to repair or undertake necessary remedial measures as assessed by PAA.			