

# Standard Bidding Document

Purchase of High End CT Scan Machine for Stroke Powered by AI Software  
(Goods)

National

Single Stage-Two Envelope



*May 23, 2026*

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## INVITATION TO BIDS PROCUREMENT OF GOODS

1. The **Purchase Department (Pakistan Institute of Medical Sciences (PIMS))** has reserved Funds for the procurement planned for FY **2026-27**. The **Purchase Department (Pakistan Institute of Medical Sciences (PIMS))** intends to apply part of the proceeds of this Fund to cover eligible payments under the contract for the "**Purchase of High End CT Scan Machine for Stroke Powered by AI Software**".
2. The **Purchase Department (Pakistan Institute of Medical Sciences (PIMS))** invites E-bids from eligible Bidders for procurement of goods described in the bidding documents on **EPADS v2.0**.
3. **Single Stage-Two Envelope** will be used by adopting **Least Cost Based Selection (LCBS)** Technique for the subject procurement, in line with the Public Procurement Rules, 2004 and any Regulations, Regulatory Guides, Procurement Guidelines or Instructions issued by the Authority from time to time.
4. All Bids must be accompanied by a Bid Security amounting described in Bid Security Section in Bidding Document in the form of **Pay Order, Call at Deposit**. Where **Bid Security** is not required by the **Procuring Agency**, Bidders are required to furnish **Bid Security Declaration** as specified in Bidding Document.
5. E-Bidding documents, containing detailed terms & conditions, specifications and requirements etc. are available on **e-Pak Acquisition and Disposal System (EPADS)** at <https://vendors.epads.gov.pk/>.
6. Bidder(s) are required to get themselves registered on **EPADS v2.0** on or before **Thursday, June 18, 2026 11:00 AM**. E-bids will be opened using **EPADS v2.0** on the same day at **Thursday, June 18, 2026 11:30 AM**. Manual submission of Bids shall not be entertained. Those vendors who have not yet registered on the new version of **EPADS v2.0**, may register themselves on <https://vendors.epads.gov.pk/>. A tutorial to explain the registration process is available at <https://www.youtube.com/watch?v=MNW6T38v7tc>

7. In terms of Rules 48 of Public Procurement Rules, 2004 Grievance Redressal Committee (GRC) is notified for the subject procurement and notification copy is available on the procuring agency's website and on Authority's website at ([www.ppra.org.pk](http://www.ppra.org.pk)).

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# Instructions to Bidders

## A. Introduction

### 1.Scope of Bids

1.1 The Procuring Agency (PA), as indicated in the **Bids Data Sheet (BDS)** invites Bids **through EPADS v2.0** for the provision of Goods for as specified in the BDS and **in Section V - Evaluation Criteria, Specifications & Schedule of Requirements**. The name, identification, and number of items/deliverables are provided in the **BDS**. The successful Bidders will be expected to provide the goods within the specified period and timeline(s) as stated in the **BDS**.

### 2. Source of Funds

2.1 Source of funds is referred in Clause-1 of Invitation for Bids.

### 3. Eligible Bidders

3.1 A Bidder may be natural person, company or firm or public or semi-public agency of Pakistan or any foreign country, or any combination of them with a formal existing agreement (on Judicial Papers) in the form of a joint venture, consortium, or association. In the case of a joint venture, consortium, or association, all members shall be jointly and severally liable for the execution of the Contract in accordance with the terms and conditions of the Contract. The joint venture, consortium, or association shall nominate a Lead Member as nominated in the BDS, who shall have the authority to conduct all business for and on behalf of any and all the members of the joint venture, consortium, or association during the Bidding process, and in case of award of contract, during the execution of the contract.

3.2 Verifiable copy of the agreement that forms a joint venture, consortium or association shall be required to be submitted as part of the Bid.

3.3 The appointment of Lead Member in the joint venture, consortium, or association shall be confirmed by submission of a valid Power of Attorney to the Procuring Agency.

3.4 Any bid submitted by the joint venture, consortium or association shall indicate the part of proposed contract to be performed by each party and each party shall be evaluated (or post qualified if required) with respect to its contribution only, and the responsibilities of each party shall not be substantially altered without prior written approval of the Procuring Agency and in line with

any instructions issued by the Authority.

*(The limit on the number of members of JV or Consortium or Association may be prescribed in BDS, in accordance with the guidelines issued by the PPRA).*

3.5 The invitation for Bids is open to all prospective suppliers, manufacturers, or authorized agents / dealers subject to any provisions of incorporation or licensing by the respective national incorporating agency or statutory body established for that particular trade or business. Procuring agencies shall specify the registration/licensing requirements for the foreign bidders keeping in view the requirement of that business.

3.6 A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest with one or more parties in this Bidding process, if they:

1. are associated or have been associated in the past, directly or indirectly with a firm or any of its affiliates which have been engaged by the Procuring Agency to provide consulting services for the preparation of the design, specifications and other documents to be used for the procurement of the Goods to be purchased under this Invitation for Bids.
2. have controlling shareholders in common; or
3. receive or have received any direct or indirect subsidy from any of them; or
4. have the same legal representative for purposes of this Bid; or
5. have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Bids of another Bidder, or influence the decisions of the Procuring Agency regarding this Bidding process; or
6. Submit more than one Bid in this Bidding process.

3.7 A Bidder may be ineligible if –

1. he is declared bankrupt or, in the case of company or firm, insolvent;
2. payments in favor of the Bidder is suspended in accordance with the judgment of a court of law other than a judgment declaring bankruptcy and resulting (in accordance with the national laws) in the total or partial loss of the right to administer and dispose of its property;

3. the Bidder is convicted, by a final judgment, of any offence involving professional conduct;

4. the Bidder is blacklisted locally or by international organizations and hence debarred due to involvement in corrupt and fraudulent practices, or performance failure or due to breach of Bid securing declaration.

3.8 As and when required, bidders shall provide to the Procuring Agency evidence of their eligibility, proof of compliance with the necessary legal requirements to carry out the contract effectively.

3.9 Bidders shall submit Bids relating to the nature, conditions and modalities of sub-contracting wherever the sub-contracting of any elements of the contract amounting to more than ten (10) percent of the Bid price is envisaged.

## 4. Eligible Goods and Related Services

4.1 All goods and related services to be supplied under the contract shall have their origin in eligible source countries, and all expenditures made under the contract will be limited to such goods and services. For purpose of this Bid, ineligible countries are the countries declared ineligible by the Federal Government.

## 5. One Bid per Bidder

5.1 A bidder shall submit only one Bid, in the same bidding process, either individually as a Bidder or as a member in a joint venture or any similar arrangement.

5.2 The Bidder shall not engage a subcontractor for any portion of the contract if the value of such subcontracting exceeds thirty percent (30%) of the total contract amount.

## 6. Cost of Bidding

6.1 Any cost incurred by the bidder relating to the preparation and submission of its Bid shall be borne by the bidder, and the Procuring Agency shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

## B. Bidding Documents

## 7. Contents of Bidding Document

7.1 The Goods required, Bidding procedures, and terms and conditions of the contract are prescribed in the Bidding Documents. In addition to the Invitation for Bids, the Bidding documents which should be read in conjunction with any addenda issued in accordance with **ITB 9.1** include:

**Section I** -Invitation to Bids

**Section II** Instructions to Bidders (ITB)

**Section III** Bid Data Sheet (BDS)

**Section IV** Evaluation Criteria, Specifications, Schedule of Requirements

**Section V** Bid Forms

**Section VI** General Conditions of Contract (GCC)

**Section VII** Special Conditions of Contract (SCC)

**Section VIII** Contract Forms

7.2 The Bidder is expected to examine all instructions, forms, terms and specifications in the Bidding documents. Failure to furnish all the information required in the Bidding documents through **EPADS v2.0** will be at the Bidder's risk and may result in the rejection of his Bids.

## 8. Clarification of Bidding documents

8.1 A prospective Bidder requiring any clarification of the Bidding documents may notify the Procuring Agency through **EPADS v2.0**.

8.2 The Procuring Agency will within three (3) working days after receiving the request for clarification, respond to any request for clarification through **EPADS v2.0** provided that such request is received not later than three (03) days prior to the deadline for the submission of Bids as prescribed in **ITB 22**

8.3 Copies of the Procuring Agency's response will be forwarded to all identified Prospective Bidders through **EPADS v2.0**, including a description of the inquiry, but without identifying its source.

8.4 Should the Procuring Agency deem it necessary to amend the Bidding document as a result of a clarification, it shall do so following the procedure under **ITB 9**.

8.5 If indicated **in the BDS**, the Bidder's designated representative is invited at the Bidder's cost to attend a pre-Bid meeting at the place, date and time mentioned **in the BDS**. During this pre-Bid meeting, prospective Bidders may request clarification of the schedule of requirement, the Evaluation Criteria or any other aspects of the Bidding document.

8.6 Minutes of the pre-Bid meeting, if applicable, including the text of the questions asked by Bidders, including those during the meeting (without identifying the source) and the responses given, together with any responses prepared after the meeting will be uploaded on **EPADS v2.0**. Any modification to the Bidding documents that may become necessary as a result of the pre-Bid meeting shall be made by the Procuring Agency exclusively through the use of an Addendum pursuant to **ITB 9**. Non-attendance at the pre-Bid meeting will not be a cause for disqualification of a Bidder.

## 9. Amendment of Bidding documents

9.1 Before the deadline for submission of Bids, the Procuring Agency for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder or Pre-Bid meeting may modify the Bidding documents by issuing addenda through **EPADS v2.0**.

9.2 The Procuring Agency shall promptly publish the addendum through **EPADS v2.0**.

9.3 Any addendum issued including the notice of any extension of the deadline shall also be communicated through EPADS v2.0 to all the bidders who have already submitted their bids. Such bidders shall have the right to withdraw their already submitted bid and re-submit the revised bid prior to the original or extended bid submission deadline.

9.4 To give prospective Bidders reasonable time in which to take an addendum/corrigendum into account in preparing their Bids, the Procuring Agency may, at its discretion, extend the deadline for the submission of Bids through **EPADS v2.0**:

Provided that the Procuring Agency shall extend the deadline for submission of Bids, if such an addendum is issued within last three (03) days of the Bids submission deadline.

## C. Preparation of Bids

## 10. Language of Bid

10.1 The Bid prepared by the bidder, as well as all correspondence and documents relating to the Bids exchanged by the Bidder and the Procuring Agency shall be written in the English language unless otherwise specified in the BDS. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant pages in the English language unless otherwise specified in the **BDS**, in which case, for purposes of interpretation of the Bidder, the translation shall govern.

## 11. Documents and samples Constituting the Bid

**11.1 The Bid prepared by the Bidder shall constitute** the documents required in the **BDS**.

Details of sample(s) where applicable and requested in the BDS.

1. Documentary evidence established in accordance with ITB that the Bidder is eligible and/or qualified for the subject bidding process;
2. Documentary evidence establish that the Bidder has been authorized by the manufacturer to deliver the goods into Pakistan, where required and where the supplier is not the manufacturer of those goods;
3. Documentary evidence establish that the goods and related services to be supplied by the Bidder are eligible goods and services, and conform to the Bidding Documents;
4. Bid security or Bid Securing Declaration furnished in accordance with **ITB 18**.

## 12. Documents Establishing Eligibility of the Goods and Conformity to Bidding documents

**12.1** To establish the conformity of the bidder to the Bidding document, the Bidder shall furnish as part of its Bids the documentary evidence that Goods provided conform to the technical specifications and standards.

## 13. Documents Establishing Eligibility and Qualification of the Bidder

**13.1** The Bidder shall furnish, as part of its Bid, all those documents establishing the Bidder's eligibility to participate in the Bidding process and/or its qualification to perform the contract if its Bid is accepted.

## 14. Form of Bids

**14.1** The Bidder shall fill the Form of Bid furnished in the Bidding documents. The Bids Form must be completed without any alterations to its format and no substitute shall be accepted.

## 15. Bids Prices

15.1 The Bids Prices quoted by the Bidder in the Form of Bid and in the Price Schedules shall conform to the requirements specified below or exclusively mentioned hereafter in the Bidding documents.

15.2 All items in the Schedule of Requirement must be listed and priced separately in the Price Schedule(s). If a Price Schedule shows items listed but not priced and neither explicitly denied, their prices shall be construed to be included in the prices of other items.

15.3 Items not listed in the Price Schedule shall be assumed not to be included in the Bid, and provided that the Bid is still substantially responsive in their absence or due to their nominal nature, the corresponding average price of the respective item(s) of the remaining substantially responsive Bidder(s) shall be construed to be the price of those missing item(s)

15.4 The Bid price to be quoted in the Form of Bid in accordance with **ITB 14.1** shall be the total price of the Bid.

15.5 The Bidder shall indicate on the appropriate Price Schedule, the unit prices (where applicable) and total Bid price of the Goods it proposes to provide under the contract.

15.6 Prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation on any account. A Bid submitted with an adjustable price will be treated as non-responsive and shall be rejected.

## 16. Bids Currencies

16.1 Prices shall be quoted in Pakistani Rupees unless otherwise specified in the BDS in accordance with Rule 30(2) of the Public Procurement Rules, 2004.

## 17. Bids Validity Period

17.1 Bids shall remain valid for the period specified in the **BDS** after the Bid submission deadline prescribed by the Procuring Agency. A Bid valid for a shorter period shall be rejected by the Procuring Agency as non-responsive. The period of Bid validity will be determined from the complementary Bid securing instrument, i.e. the expiry period of Bid Security or Bids Securing Declaration as the case may be.

17.2 The procuring agency shall ordinarily be under an obligation to process and evaluate the bid and to issue letter of award within the stipulated bid validity period.

17.3 Under exceptional circumstances, prior to the expiration of the initial Bid validity period, the Procuring Agency may request the Bidders' consent to an extension of the period of validity of their Bids only once through **EPADS v2.0**, for the period not more than the period of initial bid validity. The Bid Security provided under **ITB 18** shall also be suitably extended. A Bidder may refuse the request without forfeiting its Bid security or causing to be executed its Bid Securing Declaration. A Bidder agreeing to the request will not be required nor permitted to modify its Bid, but will be required to extend the validity of its Bid Security or Bid Securing Declaration for the period of the extension.

## 18. Bid Security or Bid Securing Declaration

18.1 The Bidder shall furnish as part of its Bid, a Bid Security in accordance with Rule 25 of the Public Procurement Rules, 2004.

18.2 The original Bid Security shall be enclosed within the sealed envelope and to be submitted physically before closing time for submission of bids. Whereas, scanned copy of bid security shall be uploaded electronically through EPADS v2.0 before closing hours for submission of bids.

18.3 The Bidder who failed to submit the original Bids security before the submission deadline shall be disqualified straightaway.

18.4 The Bid Security or Bid Securing Declaration is required to protect the Procuring Agency against the risk of Bidder's conduct which would warrant the security's forfeiture, pursuant to **ITB 18.7**.

18.5 The Bid Security shall be denominated in the local currency, and it shall be a Bank Draft in the name of the Procuring Agency and valid for twenty-eight (28) days beyond the end of the validity of the Bid. This shall also apply if the period

for Bids/Bid Validity is extended. In either case, the form must include the complete name of the Bidder.

18.6 The Bid Security shall be payable promptly upon written demand by the Procuring Agency in case any of the conditions listed in **ITB 18** are invoked.

18.7 Unsuccessful Bidders' Bid Security will be discharged or returned as promptly as possible, however in no case later than thirty (30) days after the expiration of the period of Bids Validity prescribed by the Procuring Agency pursuant to **ITB 17**. The Procuring Agency shall make no claim to the amount of the Bid Security, and shall promptly return the Bid Security document, after whichever of the following that occurs earliest:

1. the expiry of the Bid Security;
2. the entry into force of a procurement contract and the provision of a Performance Guarantee, for the performance of the contract if such a guarantee, is required by the Bid documents;
3. the rejection by the Procuring Agency of all Bids;
4. the withdrawal of the Bids prior to the deadline for the submission of Bids, unless the Bids documents stipulate that no such withdrawal is permitted.

18.8 The successful Bidder's Bids Security will be discharged upon the Bidder signing the contract, or furnishing the Performance Guarantee.

18.9 The Bid Security may be forfeited or the Bid Securing Declaration executed:

1. if a Bidder:
  2. withdraws its Bid during the period of Bid Validity as specified by the Procuring Agency, and referred by the Bidder on the Form of Bids except as provided for in **ITB 17.2**; or
  3. does not accept the correction of errors; or
  4. in the case of a successful Bidder, if the Bidder fails:
    5. to sign the contract; or
    6. to furnish Performance Guarantee.

## 19. Withdrawal, Substitution, and Modification of Bid

19.1 Before Bid submission deadline, any Bidder may withdraw, substitute, or modify its Bid after it has been submitted through EPADS v2.0. Bids requested to be withdrawn, shall be returned unopened to the Bidders through **EPADS v2.0**.

## 20. Format and Signing of Bid

20.1 The Bidder shall prepare and submit Bids with due diligence after carefully reading all the terms and condition **before bid submission deadline** through EPADS v2.0.

## D. Submission of Bids

### 21. Submission of Bids through EPADS v2.0

21.1 The Technical and Financial Bids if required to submitted, shall be submitted on **EPADS v2.0**.

### 22. Deadline for Submission of Bids

22.1 Bids shall be received by the Procuring Agency through **EPADS v2.0** before bid submission deadline.

22.2 The Procuring Agency may, under exceptional circumstances, extend the deadline for the submission of Bids, after recording reasons in writing and in an equal opportunity manner.

In such case, all rights and obligations of the Procuring Agency and the Bidders that were previously governed by the original deadline shall thereafter be subject to the revised deadline.

## E. Opening and Evaluation of Bids

### 23. Opening of Bids

23.1 The Bid Evaluation Committee of the Procuring Agency shall open all Bids through the EPADS v2.0, on the date and time specified in the Bid Data Sheet (BDS).

23.2 The Bid Evaluation Committee **shall generate minutes through EPADS v2.0 containing brief details of bid opening process.** The record of the Bid opening shall include, as a minimum: the name of the Bidder, the Bid price if applicable, and the presence or absence of a Bid Security or Bid Securing Declaration.

23.3 The procuring agency shall live broadcast the opening of bids on national media or on their website or digital channels, if the volume of procurement exceeds five hundred million rupees in case of goods and services and one thousand million rupees in case of works.

23.4 In case the date of opening of bid has been declared as public holiday or the procuring agency fail to open bid due to any EPADS v2.0 related issues, the submission and opening of bids shall be shifted to the next working day on the same time.

23.5 In case of Single Stage One Envelope Procedure, the Bidders names, the Bid prices, the total amount of each Bid and, the presence or absence of Bid Security, Bid Securing Declaration and such other details as the Procuring Agency may consider appropriate, will be announced by the Bid Evaluation Committee.

## 24. Clarification of Bids

24.1 To assist in the examination, evaluation and comparison of Bids of the Bidders, the Procuring Agency may, ask any Bidder for a clarification of its Bid including breakdown of prices.

24.2 The request for clarification and the response shall be sought through EPADS v2.0 **before three days prior to the deadline for submission of bids.** No change in the prices or substance of the Bids shall be sought, offered, or permitted.

24.3 The alteration or modification in the BIDS which in any way affect the following parameters will be considered as a change in the substance of a Bids:

1. evaluation & qualification criteria;
2. required scope of work or specifications;
3. all securities requirements;
4. tax requirements;

5. terms and conditions of Bidding documents.

6. change in the ranking of the Bidder

24.4 From the time of Bids opening to the time of Contract award if any Bidder wishes to contact the Procuring Agency on any matter related to the Bids it should do so through **EPADS v2.0**.

## 25. Preliminary Examination of Bids

25.1 Prior to the detailed evaluation of Bids, the Procuring Agency will determine whether each Bid:

1. meets the eligibility criteria defined in **ITB 3**;
2. has been prepared as per the format and contents defined by the Procuring Agency in the Bidding documents;
3. is accompanied by the required securities; and
4. is substantially responsive to the requirements of the Bidding documents.

25.2 The Procuring Agency's determination of a Bid's responsiveness will be based on the contents of the Bid itself.

25.3A substantially responsive Bid is one which conforms to all the terms, conditions, and specifications of the Bidding documents, without material deviation or reservation. A material deviation or reservation is one that: -

1. affects in any substantial way the scope, quality, or performance of the Goods;
2. limits in any substantial way, inconsistent with the Bidding documents, the Procuring Agency's rights or the Bidders obligations under the Contract; or
3. if rectified, would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.

25.3 If a Bids is not substantially responsive, it will be rejected by the Procuring Agency and may not subsequently be evaluated for complete technical responsiveness.

## 26. Examination of Terms and Conditions; Technical Evaluation

26.1 The Procuring Agency shall examine the Bids to confirm that all terms and conditions specified in the **GCC** and the **SCC** have been accepted by the Bidder without any material deviation or reservation.

26.2 The Procuring Agency shall evaluate the technical aspects of the Bids submitted, to confirm that all requirements specified in Schedule of Requirements and Technical Specifications of the Bidding documents have been met without material deviation or reservation.

26.3 If after the examination of the terms and conditions and the technical evaluation, the Procuring Agency determines that the Bid is not substantially responsive in accordance with **ITB 25.2**, it shall reject the Bid.

## 27. Correction of Errors

27.1 Bids determined to be substantially responsive will be checked for any arithmetic errors. Errors will be corrected as follows: -

1. if there is a discrepancy between unit prices and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected, unless in the opinion of the Procuring Agency there is an obvious misplacement of the decimal point in the unit price, in which the total price as quoted shall govern and the unit price shall be corrected;
2. if there is an error in a total corresponding to the addition or subtraction of sub-totals, the sub-totals shall prevail and the total shall be corrected; and
3. where there is a discrepancy between the amounts in figures and in words, the amount in words will govern.
4. Where there is discrepancy between grand total of price schedule and amount mentioned on the Form of Bids, the amount referred in Price Schedule shall be treated as correct subject to elimination of other errors.

27.2 The amount stated in the Bid will, be adjusted by the Procuring Agency in accordance with the above procedure for the correction of errors and, with the concurrence of the Bidder, shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount, its Bid will then be rejected, and the Bid Security may be forfeited or the Bids Securing Declaration may be executed.

## 28. Conversion to Single Currency

28.1 To facilitate evaluation and comparison, the Procuring Agency will convert all Bids prices expressed in the amounts in various currencies in which the Bids prices are payable. For the purposes of comparison of bids quoted in different currencies, the price shall be converted into a single currency specified in the bidding documents. The rate of exchange shall be the selling rate prevailing on the date of opening of financial bids specified in the bidding documents, in accordance with weighted average customer exchange rates list issued by the State Bank of Pakistan on that day.

## 29. Evaluation of Bids

29.1 The Bids, quotations, or proposals shall be evaluated by the respective evaluation committees as per evaluation criteria described in the Bidding Documents in accordance with Rule 29 and 30 of the Public Procurement Rules, 2004.

### **1. Least Cost Based Selection (LCBS)**

After meeting the requirements of eligibility, qualification and substantial responsiveness, the bid in compliance with all the mandatory (technical) specifications/requirements and/or requisite quality threshold (if any), and having lowest evaluated cost (or financial proposal) shall be considered Successful Bid.

### **2. Quality and Cost Based Selection (QCBS)**

In such combination, there shall be some specific weightage of both the technical features and financial aspects of the proposal. The financial marks shall be awarded on the basis of inverse proportion calculations. The successful bid shall be declared, on the basis of combined evaluation.

### **3. Quality Based Selection (QBS)**

After meeting the requirements of eligibility, qualification and substantial responsiveness the bid in compliance with all the mandatory (technical) specifications/requirements and attaining highest marks in the Technical Evaluation considering all other qualitative and/or quantitative parameters (or point rated criteria) for technical proposal(s) such as working methodology, implementation plan, resource allocation, additional functionalities, risk management approach, knowledge transfer techniques, post implementation methodology etc. shall be treated as highest ranked bid. Later on, the financial proposal of highest ranked bidder shall be opened, however, in case of failure to proceed further with such a bidder, the procuring agency may resort to second

highest bidder and so on.

29.2 In case of tie of bids, the bidders shall be provided an opportunity to offer their best and final monetary offer through EPADS v2.0. However, in no case the rates shall be higher than the original financial bids.

## 30. Domestic Preference

30.1 The procuring agency shall evaluate and compare bids, allow for preference to domestic bidders, while competing with the international bidders in accordance with the policies of Federal Government.

The percentage of preference, to be accorded shall be clearly mentioned in the bidding documents under the bid evaluation criteria.

## 31. Determination of Successful Bid

31.1 Selection technique will be adopted for determining the Successful Bid in accordance with the criteria referred in the BDS or prescribed in the separate section titled as Evaluation Criteria.

31.2 In case where the Procuring Agency adopts the Cost Based Evaluation Technique and, the Bid with the lowest evaluated price from amongst those which are eligible, compliant and substantially responsive shall be the Successful Bid.

31.3 The Procuring Agency may adopt the Quality & Cost Based Selection Technique due to the following two reasons:

1. Where the Procuring Agency knows about the main features, usage and output of the products; however not clear about the complete features, technical specifications and functionalities of the goods to be procured and requires the bidders to submit their proposals defining those features, specifications and functionalities; or
2. Where the Procuring Agency, in addition to the mandatory requirements and mandatory technical specifications, requires parameters specified in EvaluationCriteria to be evaluated while determining the quality of the goods.

31.4 In such cases, the Procuring Agency may allocate certain weightage to these factors as a part of Evaluation Criteria, and may determine the ranking of the bidders on the basis of combined evaluation in accordance with provisions of Rule 2(1)(h) of the Public Procurement Rules, 2004.

## 32. Abnormally Low Financial Bids

32.1 Where the Bid price is considered to be abnormally low, the Procuring Agency shall perform price analysis either during determination of Successful Bids or as a part of the post-qualification process.

32.2 The Procuring Agency may reject an Abnormally low financial bids.

32.3 In order to identify the Abnormally Low Bids (ALB) following approaches can be considered to minimize the scope of subjectivity:

1. Comparing the Bids price with the cost estimate;
2. Comparing the Bids price with the Bids offered by other Bidders submitting substantially responsive Bids; and
3. Comparing the Bids price with prices paid in similar contracts in the recent past either government- or development partner-funded.

32.4 The Procuring Agency will determine to its satisfaction whether the Bidder that is selected as having submitted the successful bid is qualified to perform the contract satisfactorily.

32.5 The determination will take into account the Bidder's financial, technical, and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, as well as such other information as the Procuring Agency deems necessary and appropriate. Factors not included in these Bidding documents shall not be used in the evaluation of the Bidders' qualifications.

32.6 Procuring Agency may seek "Certificate for Independent Price Determination" from the Bidder and the results of reference checks may be used in determining an award of contract.

Explanation: The Certificate shall be furnished by the Bidder. The Bidder shall certify that the price is determined keeping in view of all the essential aspects such as raw material, its processing, value addition, optimization of resources due to economy of scale, transportation, insurance and margin of profit etc.

32.7 An affirmative determination will be a prerequisite for award of the contract to the Bidder. A negative determination will result in rejection of the Bidder's Bids, in which event the Procuring Agency will proceed to the next ranked Bidder to make a similar determination of that Bidder's capabilities to perform

satisfactorily.

## F. Award of Contract

### 33. Criteria of Award

33.1 The Procuring Agency will award the Contract to the Bidder whose Bids has been determined to be substantially responsive to the Bidding documents and who has been declared as Most Advantageous Bidder.

### 34. Negotiations

34.1 The procuring agency shall not engage in negotiations with respect to scope and price with the bidder except when the procuring agency conducts a procurement using direct **or negotiated** contracting or a request for proposals with evaluation based on quality alone.

34.2 The procuring agency may negotiate with the most advantageous bid with a view to streamline the work or task execution, at the time of contract finalization on methodology, work plan, staffing, finalizing payment arrangements, delivery arrangements, minor amendments to the special conditions of the contract.

### 35. Procuring Agency Right to reject all bids

35.1 The Procuring Agency reserves the right to reject all bids or proposals at any time prior to the issuance of the Letter of Award, without incurring any liability, in accordance with Rule 33 of the Public Procurement Rules, 2004.

### 36. Procuring Agency's Right to Vary Quantities at the Time of Award

36.1 The Procuring Agency reserves the right at the time of contract award to increase or decrease the **quantity of** Goods originally specified in these Bidding documents provided this does not exceed **by** 15%, without any change in unit price or other terms and conditions of the Bids and Bidding documents.

### 37. Notification of Award

37.1 Prior to the award of contract, the procuring agency shall announce and publish the result of bid evaluation on **EPADS v2.0** in accordance with Rule 35

of the Public Procurement Rules, 2004.

37.2 The Bidder whose Bids has been accepted will be notified of the award by the Procuring Agency prior to expiration of the Bids/Bid Validity period. The Letter of Award will state the sum that the Procuring Agency will pay the successful Bidder in consideration for the delivery of Goods as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price).

37.3 The Letter of award will constitute the formation of the Contract, subject to the Bidder furnishing the Performance Guarantee and signing of the contract.

## 38. Signing of Contract

38.1 Promptly after issuance of Letter of award, Procuring Agency shall send the successful Bidder the draft Contract, incorporating all terms and conditions as agreed by the parties to the contract.

38.2 Immediately after the Redressal of grievance by the GRC (if any), mandatory standstill period in accordance with Rule 35 of the Public Procurement Rules, 2004 and **after fulfillment of all condition's precedent** of the Contract Form, the successful Bidder and the Procuring Agency shall sign the Contract.

## 39. Corrupt & Fraudulent Practices

39.1 Procuring Agencies (including beneficiaries of Government funded projects and procurement) as well as Bidders/Contractors under Government financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts, and will avoid to engage in any corrupt and fraudulent practices.

## F. Grievance Redressal & Complaint Review Mechanism

### 40. Constitution of Grievance Redressal

40.1 The Grievance Redressal Committee shall address the grievance, if any submitted by any party, including the bidder, in accordance with Rule 48 of the Public Procurement Rules, 2004 to be read with Redressal of Grievances Regulations, 2021.

40.2 In case if any party or the bidder is not satisfied with the decision of the GRC or if it fails to decide within ten days, the bidder or the party may file an appeal before the Appellate Committee of the Authority in accordance with Rule 48 of the Public Procurement Rules, 2004 to be read with Redressal of Grievances Regulations, 2021.

## G. Mechanism of Blacklisting

### 41. Mechanism of Blacklisting

41.1 The Procuring Agency shall initiate blacklisting proceedings against any bidder, supplier, or contractor in accordance with the Mechanism for Blacklisting Regulations, 2024, read with Rule 19 of the Public Procurement Rules, 2004.

41.2 The blacklisted/debarred bidder may file the review petition before the Authority in accordance with Rule 19 of the Public Procurement Rules, 2004 to be read with Procedure of filing and disposal of Review Petitions Regulations, 2021.





## Bid Data Sheet

# Bids Data Sheet (BDS)

The following specific data for the procurement of Goods to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

*BDS Clause Number*

*ITB Number*

*Amendments of, and Supplements to, Clauses in the Instruction to Bidders*

## A. Introduction

**BDS Clause Number 1**

**ITB Number 1.1**

Name of Procuring Agency: **Purchase Department (Pakistan Institute of Medical Sciences (PIMS))**

The subject of procurement is: **Purchase of High End CT Scan Machine for Stroke Powered by AI Software**

Expected commencement date: **Wednesday, July 15, 2026**

**BDS Clause Number 2**

**ITB Number 2.1**

Financial year for the operations of the Procuring Agency: **2026-27**

Name and identification number of the Contract: **P39209**

**BDS Clause Number 3**

**ITB Clause Number 3.1**

JV/Consortium or Association Allowed: **No**

Number of JV/Consortium Members: **Nil**

*see section of eligibility criteria.*

## B. Bidding Documents

**BDS Clause Number 4**

**ITB Number 8.1**

The Bidders may seek clarifications through **EPADS v2.0** : Clarification Date:  
Thursday, June 4, 2026

## C. Preparation of Bids

### **BDS Clause Number 5**

#### **ITB Number 10.1**

The Language of all correspondences and documents related to the Bids shall be in: **English**

List of documents required along with the bid:

1. All Affidavits and CDR must be submitted at the time of tender opening (hard form).
2. Original Brochures , Literature and Quoted model technical data sheet of the product.
3. Copy of tender receipt of Rs. 2000.
4. Undertaking on letter head for acceptance of terms and conditions of SBDs.

### **BDS Clause Number 6**

#### **ITB Number 11.1**

#### **Items/Lots and threere relateddocuments:**

*See section items and Lots*

### **BDS Clause Number 7**

#### **ITB Number 12.1**

#### **Items / Lots Specifications:**

*see section of items specifications.*

### **BDS Clause Number 8**

#### **ITB Number 15.6**

The price shall be **Fixed**.

### **BDS Clause Number 9**

#### **ITB Number 16.1**

Currency of the Bids shall be : **PKR**

**BDS Clause Number 10**

**ITB Number 17.1**

The Bids/Bid Validity period shall be: **180 Days**

**BDS Clause Number 11**

**ITB Number 18.1**

The amount of Bid Security shall be as defined in Bid Security Section for items and lots given in **BDS 6**

The Bid Security shall be in the form of: **Pay Order, Call at Deposit**

## D. Submission of Bids

**BDS Clause Number 12**

**ITB Number 20.1**

Bid shall be submitted online on EPADS v2.0 whereas hard copy of the bid security should be submitted to the following;

**PIMS Hospital, Sector G-8/3., Islamabad Capital Territory** before bid submission deadline.

Bids that are not submitted on EPADS v2.0 shall be disqualified.

The deadline for Bids submission is: **Thursday, June 18, 2026 11:00 AM**

## E. Opening and Evaluation of Bids

**BDS Clause Number 13**

**ITB Number 23.1**

The Bids opening shall take place on **EPADS v2.0.**

Day : **Thursday**

Date: **Thursday, June 18, 2026**

Time : **11:30 AM**

**BDS Clause Number 14**

**ITB Number 31.1**

Selection technique adopted will be: **Least Cost Based Selection (LCBS)**  
see *Evaluation Criteria*

## F. Review of Procurement Decisions

**BDS Clause Number 15**

**ITB Number 41.1**

Grievance against this procurement shall be submitted online on EPADS v2.0.

Arbitrator shall be appointed by mutual consent of the both parties.



## Eligibility Criteria

Bidder's Type	Required Registration
Sole Proprietorship	NADRA CITIZENSHIP (CNIC/NICOP)
Company (Private Limited)	FBR (NTN) FBR (GSTN) DRAP

Eligibility Criteria	Document
The firm must submit an Affidavit on Legal Stamp Paper of Rs.100/- that the firm is not blacklisted on any ground by any Government/ (Federal, Provincial), a local body or a public sector organization.	Yes
Manufacturer or their authorized sole distributor, Distributor should attach embassy attested / Apostille letter of authorization.	Yes
Compliance report to be submitted in tabulated point wise manner clearly mentioning the page / para of original catalogue/ data sheet.	Yes
Must attach original brochures.	Yes
The firm must submit the technical Bid as per the specifications along with each and every part/model/ catalogue no.	Yes
The bidder must submit the Original Tender Purchase Receipt of Rs. 2,000.	Yes

The firm must submit an Affidavit that the equipment to be supplied is brand new and of latest generation free from defects.	Yes
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## Evaluation Criteria

Eligible bidder(s) with substantially responsive bid(s) offering **Least Cost Based Selection (LCBS)** shall be considered for the award of contract(s).

### Least Cost Based Selection (LCBS)

Technical Marks	100
Passing Marks	70
Technical Evaluation Criteria	
CONFORMANCE TO THE ADVERTISED SPECIFICATIONS. (Quantitative)(Doc Required)	40
Fully Compliant <b>(40)</b>	
with 1 minor deviation <b>(38)</b>	
with 2 minor deviation <b>(36)</b>	
with 3 minor deviation <b>(34)</b>	
with 4 minor deviation <b>(32)</b>	
more than 4 minor deviation <b>(0)</b>	

<p>PERFORMANCE (RELEVANT EXPERIENCE) (Qualitative)(Doc Required)</p> <p>Previous Performance at PIMS. A satisfactory performance Report of the installed equipment and backup support certificate of the firm must be attached. The certificate must be latest (Current fiscal year) and duly signed by the hospital Authority (HOD Bio-Med). <b>(20)</b></p> <p>The firm will provide latest (05 performance reports of Medical Equipment installed in the teaching / research level institutes (01 mark per performance) <b>(5)</b></p>	20
<p>TEHNICAL STAFF (Quantitative)(Doc Required)</p> <p>01 PEC Professional Engineer (Biomedical) <b>(15)</b></p> <p>PEC Professional Engineer (Electrical/Electronics) with 10-year relevant field experience <b>(10)</b></p> <p>PEC registered Engineer (Electrical/Electronics/Biomedical) with valid PEC registration 05 marks/Engineer will be awarded. (In case of more/multiple technical staff, highest defined criteria will be followed first) <b>(5)</b></p>	15
<p>FINANCIAL CAPABILITIES (PKR) (Quantitative)(Doc Required)</p> <p>Annual turnover for the last three years of 500 million or more (PKR) <b>(5)</b></p> <p>Annual turnover for the last three years of 400 million or more (PKR) <b>(2)</b></p>	5
<p>Workshop Facility (Quantitative)(Doc Required)</p> <p>Local workshop in ICT/Rawalpindi <b>(10)</b></p> <p>Workshop outside ICT/Rawalpindi <b>(5)</b></p>	10

Brochures And Availability of Latest Model The latest model should be quoted with Latest Software version and it should be available on the current official global website of the manufacturer; The old model will not be considered, even though if it fulfills tender specifications. (Quantitative)(Doc Required)	5
Product Certifications (Qualitative)(Doc Required)	5
Certifications ISO 9001 and ISO 13485 and ISO 45001 and PNRA and 2 marks for PNRA <b>(5)</b>	
Certifications ISO 9001 or ISO 13485 or ISO 45001 or PNRA (1 mark each) <b>(4)</b>	
if none <b>(0)</b>	

## Items/Lots

### Items Without Lots :

Item	UNSPSC	Delivery Schedule	Quantity	Bid Security	Manufacturer / Dealer Authorization	Warranty
High End CT Scan Machine for Stroke Powered by AI Software	Medical computed tomography CT or CAT bone mineral content components	<b>Address:</b> PIMS Hospital, Sector G-8/3., Islamabad Capital Territory <b>Schedule:</b> 90 Days from award date <b>Quantity:</b> 1	1	1000000	Manufacturer Authorization form	2 Years

### Related Services of Goods:

Yes

Item	UNSPSC	Related Services
High End CT Scan Machine for Stroke Powered by AI Software	Medical computed tomography CT or CAT bone mineral content components	Installation, commissioning and site renovation.

## Items/Lot Specification

### Items Without Lots :

**Item:** High End CT Scan Machine for Stroke Powered by AI Software

**UNSPSC:** Medical computed tomography CT or CAT bone mineral content components

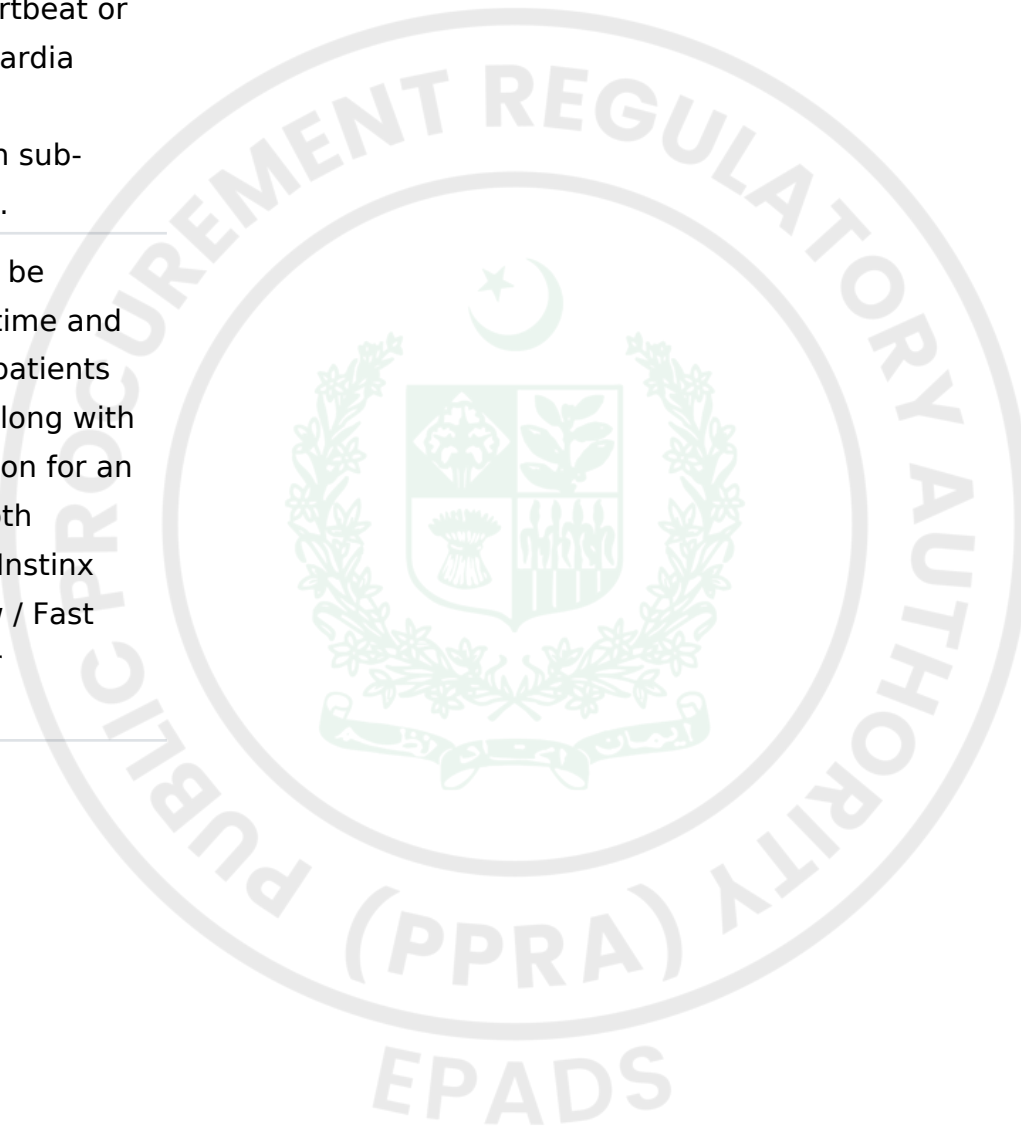
### Specifications / Requirements:

High-End latest version CT Scan for Stroke Intervention	
(A) CT Scan Specifications for Stroke Intervention:	1. Latest top of the line model having fast iterative reconstruction to minimize dose and noise with volume detector coverage area minimum of 16 cm or more in one gantry rotation.
	2. Dual Source / single source with two layers of detector/ single source with ultrafast KV switching of high and low energy, Spectral Imaging required at full 16cm area coverage for all axial and helical applications.
	3. Spectral Imaging CT scanner having 512 slices or more generation per gantry rotation along with latest hardware and software systems

## High-End latest version CT Scan for Stroke Intervention

4. System should be capable to scan whole heart within single heartbeat or less at all heart rates (Bradycardia and tachycardia) without betablockers/ medication with sub-milli Sieverts cardiac imaging.

5. Hardware/ software should be capable to scan in minimum time and lowest dose exposure to the patients with high resolution images along with workflow AI-assisted application for an optimized, efficient and smooth workflow of the CT scanner. (Instinx workflow / Effortless workflow / Fast workflow and fast planning or equivalent)



## High-End latest version CT Scan for Stroke Intervention

6. New Generation Cardiac CT scanner/ 4th Generation scanner with ceiling / gantry mounted AI-based auto positioning cameras for easy and automatic patient positioning of patient table in trauma cases. Capable anatomical structure detection in 3D for accurate position in area of interest.

7. CT scan Spatial Resolution of 32lp/cm @ 0%MTF or better.

8. The type of scan should be helical scan/ Spiral / Fixed.

9. Scan with at least 0.25 mm accuracy/ reproducibility on a 300kg patient or better.

10. One beat cardiac scan capable for producing CT Angio, calcium scoring, 4D cardiac volume etc, all in one beat scan.

11. Real time dose reduction hardware/software and with ECG modulation.

## High-End latest version CT Scan for Stroke Intervention

12. Able to calculate patient dose in milli-sieverts before image acquisition (CTDI).

13. Temporal resolution at least 20 msec or less.

14. Spectral Imaging for material decomposition, characterizing lesions, reducing the number of scans in multiphasic imaging.

(B) Gantry:

15. Gantry bore/ aperture to be at least 70 cm or more. Tilt range Digital  $\pm 30^\circ$

16. Min gantry rotation time to be at least 0.24 sec or better, Min slice thickness 0.625 mm or less in axial and helical mode.

17. Max scan field or view to be at least 50 cm for all application, in all scan modes and minimum field view (FOV) at 32 or better for paediatrics.

18. Bilateral control of gantry & table from the gantry housing & operator console.

(C) High Frequency Generator:

19. Power at least 100 KW.

20. Should have ability to vary the power (mAs) automatically in steps.

21. Should also cater for electrical fluctuation.

(D) X-Ray Tube

22. Triple Focal spot sizes should be available

23. Anode heat storage Capacity 30 MHU or more

**High-End latest version CT Scan for Stroke Intervention**

24. Tube voltage: 70-135/140 KV or better.

25. Should be able to perform paediatric scans on 70kV rate

26. mA range: 20-1250 or better.

(E) CT Angiography with Dedicated Cardiac CT Angiography:

27. Bone removal and vessel segmentation identification.

28. Tools for general vascular analysis capable of calculating intraluminal diameter, cross-sectional lumen area, length and tortuosity of vessel's segments, angle the vessels/rotatable curved MPR.

29. Ability to outline and calculate aneurysm, identify mural calcification and lining mural thrombus.

30. Calculations of dimensions of an aneurysm, the neck of the aneurysm, relationship to surrounding vascular structure, and total distance in order to non-invasively plan stent placement.

(F) Detectors:

31. Solid state crystals/ ultra-fast ceramic detectors

(G) Advanced Peripheral/ General Vessel Analysis:

32. Track and quantity diffuse lung disease including congenital lobar emphysema, destructive lung disease, pulmonary hypoplasia/ agenesis, CCAM and laryngomalacia etc.

33. Nodule analysis program.

## High-End latest version CT Scan for Stroke Intervention

34. Automated/ single click segmentation of Right and left lung with display of volume rendered and MPR view to destruction for accurate quantification and Archive, Retrieve and Print on workstation.

(H) Advanced 4D Applications:

35. 4D DSA of all body vessels.

36. 4D cerebral artery morphological analysis for aneurysm rupture acquisition of ECG gate cerebral angiography data sets and automatic extraction of cerebral angiogram in 3D.

37. Analysis software should be able to measure volume ratio, aspect ratio and diameter of angiogram to check for susceptibility to rupture thorough change caused during various cycle of the ECG.

38. Zero click 4D DSA of all brain including CTA, CT venography using direct subtraction with deformable registration technology.

39. 4D brain perfusion and stroke assessment. Providing functional information over the functionally significant areas of the brain for stroke evaluation. Allows differentiating areas of increased blood volume and decreased blood flow and ability to distinguish still viable and non-viable infarcted tissue, quantitative color maps of cerebral blood flow (CBF), cerebral blood volume (CBV), mean transit time (MTT) and time to peak (TTP).

40. Automated micro line/ centerline and selection of arterial and venous regions of interest.

**High-End latest version CT Scan for Stroke Intervention**

41. Cerebral multimodality fusion software for surgical planning and craniotomy, with fused, multi-modality images that provide an accurate overview of patient's brain and cranial anatomy.

42. Must produce multi-modality fused MRP, MIP and 3D images to integrate CT, MR and angiography images, fusion of up to 4 multimodality object is needed. Access to fused MPR or MIP view with an adjustable fused image overlay must be available.

(I) CT Lung Density Assessment:

43. Track and quantity diffuse lung disease including congenital lobar emphysema, destructive lung disease, pulmonary hypoplasia/ agenesis, CCAM and laryngomalacia etc on workstation.

44. Nodule analysis program.

45. Automated/ single click segmentation of Right and left lung with display of volume rendered and MPR view to destruction for accurate quantification and Archive, Retrieve and Print on workstation.

(J) Couch/Patient Scanning Table:

46. Dual motorized control (from console and gantry) of table movements.

47. Maximum weight allowed on the couch up to 300kg or more to achieve speeds up to 55 mm/s for same 50cm FOV and uncompromised image quality.

**High-End latest version CT Scan for Stroke Intervention**

48. Signal acquisition scans range of at least 2 meters or more.

49. Table with motorized height adjustment from 470mm to 1000mm to be offered

(K) Computer Console:

50. System architecture and operation system must be based on latest technology (64 Bit RISC/ Octa Core Processor PC or better).

51. Multitasking and parallel processing CPU System.

52. SSD of 3TB memory / capacity for image storage of at least 1.5 million (uncompressed) images or more in 512 matrix or more.

53. Reconstruction of at least 100 images per second or more with iterative reconstruction of 512 x 512 matrix.

54. Image reconstruction matrix of 512 x 512 and 1024 x 1024 should be available for full 16cm detector coverage.

55. Console color monitor x 2, TFT/LCD type of at least 24 inches or more, with maximum viewing angle.

56. DVD/ CD Writer and active USB port is mandatory.

(L) Console Software & Workstation Software:

57. Neuro and Cardiac packages both with licensed software on all workstations.

58. True isotropic volume acquisition or equivalent.

59. Prospective and retrospective ECG gated acquisition or equivalent.

## High-End latest version CT Scan for Stroke Intervention

60. Variable delay algorithm for automatically finding the best phase for cardiac CT imaging or equivalent method for acquiring image.

61. Automated contrast media bolus tracking software or equivalent.

62. 3D reconstruction & display:

63. Maximum and minimum intensity projections.

64. Multi-planer and curved planer reconstruction.

65. 3D shaded surface display.

66. 3D volume rendering software.

67. 3D virtual endoscopy/ colonoscopy / bronchoscopy.

68. 3D cone beam correction.

69. Whole organ perfusion analysis (at workstation).

70. Artifact reduction algorithm.



## High-End latest version CT Scan for Stroke Intervention

71. 3D CT fluoroscopy with real time imaging and display of at least 08 frames/sec or better with required hardware and software. One high resolution TFT monitor of 24 inch or more in CT room mobile base or ceiling mounted. as per OEM recommendations.

72. CT angiography including dedicated cardiac CT angiography for structural heart disease.

73. Dose control parameters

74. Dose Display CTDI, DLP, Dose Efficiency etc.

75. Iterative reconstruction technique with dedicated dose reduction software and hardware.

76. Automatic control of tube current over high and low attenuation areas for patient dose reduction.

77. Iso-phasic cardiac acquisition to allow for acquisition in systolic or diastolic as per user's requirement.

## High-End latest version CT Scan for Stroke Intervention

78. Whole heart myocardial perfusion or equivalent.

79. Automatic cardiac phase assessment for best phase imaging or equivalent method to achieve best phase imaging.

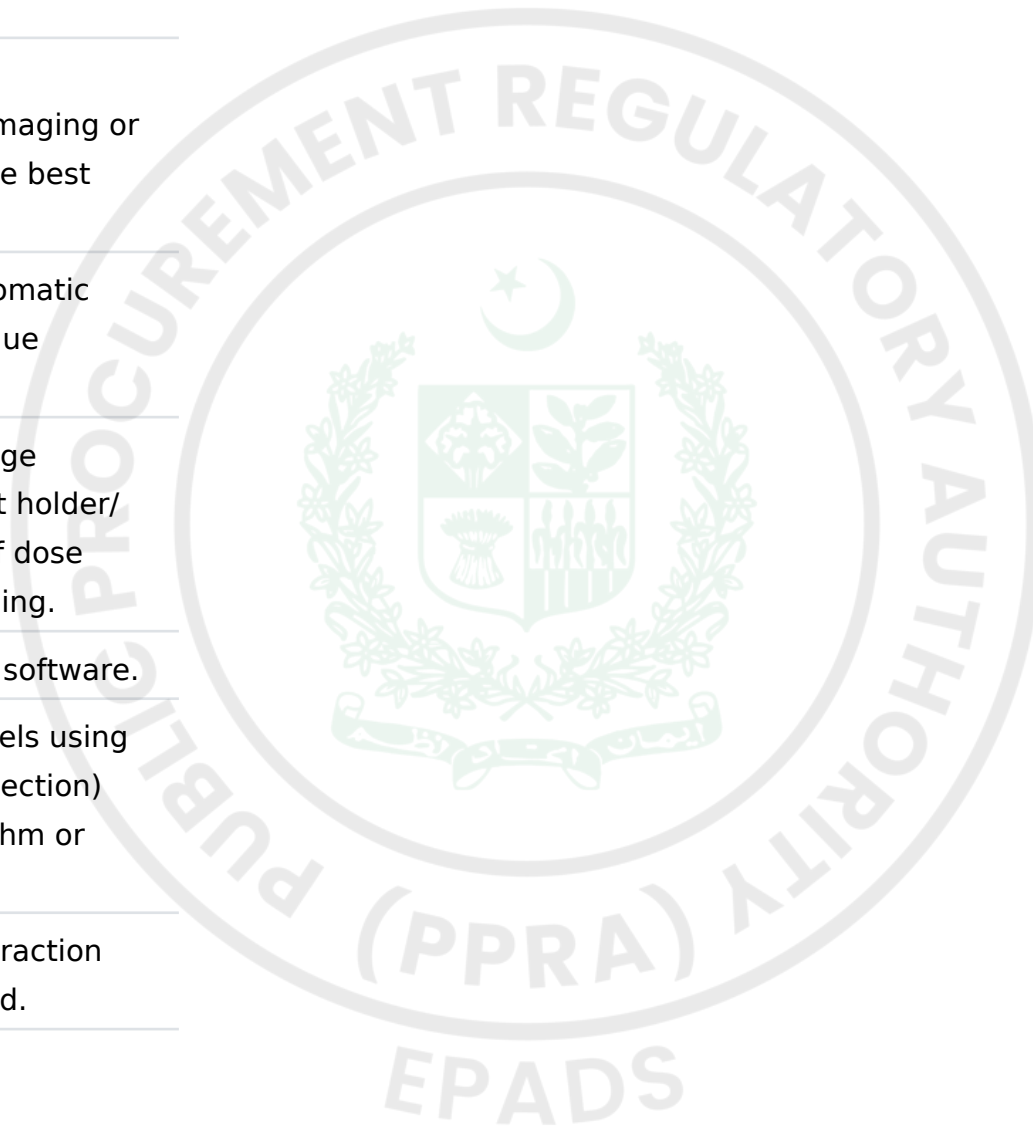
80. Plaque analysis with automatic color coding of different plaque density.

81. Pediatric scanning package including software and infant holder/immobilizer inbuilt feature of dose reduction for pediatric scanning.

82. Metal artifacts reduction software.

83. Cardiac CT Angio of vessels using MIP (maximum intensity projection) method or equivalent algorithm or method.

84. Whole body CT-DSA subtraction using deformable MIP method.



## High-End latest version CT Scan for Stroke Intervention

85. Dedicated cardiac vessel motion correction software for ultra-high resolution cardiac imaging or equivalent algorithm.

87. Latest Cardiovascular and whole-body software versions will be provided by the vendors including reporting packages including TAVI planning.

88. 3D reconstruction display.

89. Maximum and minimum intensity projections.

90. Multi-planer and curved planer reconstruction.

91. 3D Shaded Surface Display.

92. 3D volume rendering software.

93. Software for the quantitative evaluation of lung tissues and 3D based visualization of pulmonary nodules and its analysis. Lung nodule detection software be provided at console/workstation.



## High-End latest version CT Scan for Stroke Intervention

94. Direct CT lung subtraction with and without contrast using deformable registration/ dual energy for lung perfusion defect detection using color body iodine mapping for low perfused areas.

95. CT Angio (both central and peripheral) at workstation for cardiac and perfusion imaging. Vessel stenosis analysis at workstation. Plaque analysis software to differentiate between hard and soft plaque. Plaque analysis facility would be provided at console or workstation.

96. Brain perfusion software at console and workstation DICOM 3 or latest version capability to send, receive, archive, retrieve and print at console and workstation (DICOM ready to use).

## High-End latest version CT Scan for Stroke Intervention

97. CT MSK suite, complete 3D image of bone and soft tissues.

Reconstruction software should be available in main console as well as in workstation.

98. CT Fluoroscopy with real time imaging and display in frames/sec or better.

99. Contrast media based synchronizing software at console.

100. Pediatric scanning system to reduce radiation dose to the children.

101. 3D image reconstruction. Software should be available in main console as well as in workstation.

102. Low dose imaging option should be available.

103. Automatic bone removal software at console and workstation.

## High-End latest version CT Scan for Stroke Intervention

104. Spectral imaging application available in the offered model should be provided included composition analysis for renal clinical, virtual non contrast imaging, iodine mapping/ iodine overlay.

105. Liver Evaluation Software for volumetric evaluation of liver/ hepatic segmentation/ Resection planning, vascular mapping and tumor analysis.

(M) CT Perfusion:

107. Software package should be able to evaluate dynamic CT data following an injection of a compact bolus of contrast material, generating information with regards to changes in image intensity over time.

108. CT perfusion multi-organ package includes both neuro (stroke and tumor) and body tumor protocols.

109. The software provided should have quick and reliable assessment of the type and extent perfusion disturbances by providing qualitative and quantitative information on various perfusion related parameters.

110. The key perfusion parameters that CT Perfusion 4D neuro multi-organs package generates are:

a. Regional blood volume

b. Regional blood flow

**High-End latest version CT Scan for Stroke Intervention**

c. Capillary permeability surface area product (PS)

d. Time of arrival (IRF TO)

e. Transit time to IRF peak

110a. Protocols provided in CT perfusion multi-organ are:

a. Brain tumor

b. Body tumor

c. Liver

d. Pancreas

e. Prostate

f. Kidney

g. Soft tissue

h. Spleen

i. Bone

(N) Thin Client Server with 5 concurrent user licenses for Post Processing Applications (must be latest version and model of software and hardware, the same will also be verified during technical scrutiny and at the time of installation):

111. Supplied by OEM along with certificate from OEM.

112. Multimodality 5 x Client PCs with all required applications fully licensed software.

113. High speed link to operator console on DICOM network.

114. Server specifications (minimum requirements):

## High-End latest version CT Scan for Stroke Intervention

a) Processor: 4 x Intel Xeon 8-core CPU or better

b) Memory: 256GB supporting 40,000 slices or more

c) Disk drive: 6TB SSD or more

d) Network: 2x1-Gbps networks interface cards

e) Management: Dedicated Embedded Manager

f) Power: Fully redundant power and cooling

g) OS: Original and latest by OEM

h) Other standard accessories."

115. Pure sine wave UPS, switching time less than 4 milli seconds, 3 KVA or more to support full server load with maintenance free Batteries 20 min back up time for Server only.

(O) Advanced coronary vessel analysis using MIP as well as direct CT-DSA subtraction.

116. Calcium scoring ECG gating and prospective & retrospective reconstruction or equivalent.

## High-End latest version CT Scan for Stroke Intervention

117. Advanced complete cardiac package including functional analysis with automatic bone removal software.

118. Cardiac segmentation with complete cage removal.

119. Orthogonal Cross Reference View/ Globe view (2D and 3D maps overlay on Cardiac anatomy).

120. Angiography Emulation View/ IVUS view for vessel lumen inspection.

121. Complete coronary tree extraction and analysis.

122. Ventricular function assessment (ESV, EDV, CO, EF).

123. LV Function assessment.

125. Calcium scoring - giving mass, agatston and volume score.

126. Myocardial defect assessment- both visual and quantitative.

127. Color Maps on short and long axis.

**High-End latest version CT Scan for Stroke Intervention**

128. Volumetric visualization of Coronary Arteries with segmentation maps on 3D overlay.

(P) AI Based Software: Artificial Intelligence based software manufacturer's Proprietary, or third party for Neuro, Cardiac (Stroke intervention, Structural heart and whole body vessels) and Fractures Packages,

Deep Learning reconstruction software must be offered as standard.

DICOM 3.0 (or latest version) fully loaded.

130. Licensed and ready to use. Multi-vendor and multimodality compatible for send, receive, archive, retrieve, and print, on main console and workstations.

131. Remote Services: Enabled

High speed recommended Internet connection at site will be the responsibility of vendor

(Q) Special Instructions

Please provide a list showing each latest software item and part number.

(R ) Power Requirements:

132. Three-phase four wire system with line voltage of 400 VAC ± 10%, 50 Hz. The machine should have a voltage stabilizer and surge protection system.

(S) UPS:

133. Branded Online sine wave Modular UPS of 200KVA or more for whole CT Suite, with a minimum backup time of 30 minutes (Standard batteries for UPS to 12 V 7AH/26 AH from fresh lot) or more on full load and all workstations with following features:

a. Output wave shape: Pure sine wave

b. Output voltage: 400VAC ±5 % 50 Hz 3 Phase 4 wire system

c. Overload protection.

**High-End latest version CT Scan for Stroke Intervention**

d. Surge protection.

e. Built in AVR with OEM recommended voltage range.

(T) Accessories:

- 134. Programmable, Dual Head Power Injector with flow/ Volume and temperature control. Mounted on mobile base with 100 disposable syringes of 150 ml capacity and connecting tube.
- 135. Compatible Cardiac Monitor with synchronization with cardiac scan or in-built solution.
- 136. Multi modality dose analyzer (Fluke / Piranha) must be quoted as optional item.
- 138. Certified Protection Devices: Lead apron including neck coverage (x 05) with hangers, lead gloves (x 05) pairs, Thyroid Shield (x 05) and Lead goggles (x 05) all 0.5 mm Pb or equivalent.
- 139. Lead glass for control room 5 x 3 feet, minimum 2.0 mm Pb/ as per PNRA guidelines.
- 140. Standard set of phantoms for calibration of CT.  
Branded Smart LED 65" for study display and teaching purpose.
- 141. Table Accessories: Table Pad, Arm Rest, Patient Restraint Kit, IV Pole, Infant Cradle, Flat Head Holder (Original accessories from manufacturer).
- Site preparation will be the responsibility of vendor as per recommended standard including earthing, flooring, antistatic flooring, paneling, ceiling, console counter, cooling system, and other necessary furniture.

**High-End latest version CT Scan for Stroke Intervention**

(U) HMS Integration:	142. Equipment should have compatibility of integration with Hospital Management System i.e., HL 7.0 compliance or better and equipment must be DICOM 3.0 ready or latest version ready/ Worklist license & facility.
(V) Trainings:	1. One Cardiologist foreign attachment / training for one week in a centre where stroke intervention is being done.
	2. One Neurologist foreign attachment / training for one week in a centre where stroke intervention is being done.
	3. One Radiologist foreign attachment / training for one week in a centre where stroke intervention is being done.
	4. One radiographer technician foreign attachment / training for one week in a center where machine is installed.
	5. Factory training for 02 Electro Medical Engineers of PIMS. (before installation)
	6. Factory trained Application specialist must be on site after installation of system for all application training and demos to staff of Stroke Center PIMS
	Note: Vendor is bound to arrange trainings within 3 months of contract signing.
(W) Pre-Shipment Inspection	Company to arrange Pre-Shipment inspection:
	2 Electro Medical Engineer PIMS
	1 Officer to be nominated by management
(X) Warranty:	Comprehensive warranty 02 Years all OEM and third party items,

**High-End latest version CT Scan for Stroke Intervention**

Service Maintenance Contract (SMC)/ Service-Level Agreement (SLA):	143. Supplier to quote 08 year post warranty SLA including all supplied parts. The firm must provide undertaking (affidavit) of SLA (Service Level Agreement) for 8 years with parts as follows; 3rd year at rate of 3% of equipment quoted amount. 4th year at rate of 4% of equipment quoted amount. 5th year at rate of 5% of equipment quoted amount. 6th year at rate of 6% of equipment quoted amount. 7th year at rate of 7% of equipment quoted amount. 8th year at rate of 8% of equipment quoted amount. 9th year at rate of 9% of equipment quoted amount. 10th year at rate of 10% of equipment quoted amount.
(Y) Support	All the Software updates/upgradations will be the responsibility of the Vendor for life of the equipment
(Z) Quality Standards	<ul style="list-style-type: none"> <li>· Must have FDA 510k or CE MDR or MHLW</li> <li>· Compliance with local regulatory</li> </ul>

**Price Schedule**

**For Individual Items**

#	Item Title	Quantity	Unit Price (PKR)	Total Price (PKR)	Delivery Location	Delivery Period / Year	Country of Origin
1							
2							

**For Lots**

#	Lot Title	Total Lot Price (PKR)	Country of Origin
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1	[Lot 1 Title]		
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## General Conditions of Contract

## A. General

### 1. Definitions

1.1 Unless the context otherwise requires, the following terms whenever used in this Contract shall have the same meaning and shall be interpreted as indicated

1. "Applicable Law" means the laws and any other instruments having the force of law in the Government's Country, or in such other country as may be specified in the Special Conditions of the Contract (SC), as they may be issued and in force from time to time;
2. "Procuring Agency" means:-
  - 2.1. any Ministry, Division, Department or any Office of the Government;
  - 2.2. any authority, corporation, body or organization established by or under a Law or which is owned or controlled by the Government;
3. "The Contract" means an agreement enforceable by law;
4. "The Contract Price" means the price payable to the Bidder under the Contract for the full and proper performance of its contractual obligations;
5. "Ancillary Services" means those services ancillary to the provision of Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training, and other such obligations of the Bidder covered under the Contract;
6. "GCC" means the General Conditions of Contract contained in this section;
7. "SCC" means the Special Conditions of Contract by which the GCC may be amended or supplemented;
8. "Day" means calendar day unless indicated otherwise.
9. "Effective Date" means the date on which this Contract comes into force and effect.
10. "The Bidder" means the individual or corporate body whose Bids to provide the Goods has been accepted by the Procuring Agency;
11. "The Project Site," where applicable, means the place or places named in Bids Data Sheet and technical Specifications;
12. "Government" means the Government of Pakistan;
13. "Subcontractor" means any entity to which the Bidder subcontracts any part of the Goods.
14. "Service" means any object of procurement other than goods or works;
15. "Party" means the Procuring Agency or the Bidder, as the case may be, and "Parties" means both of them;
16. "Foreign Currency" means any currency other than the currency of the country of the Procuring Agency;

17. "Completion Date" means the date of completion of the contract by the Bidder as certified by the Procuring Agency;

18. "In Writing" means communicated in written form with proof of receipt;

19. "Local Currency" means the currency of Pakistan;

## **2. Application and Interpretation**

2.1 These General Conditions shall apply to the extent that they are not superseded by provisions of other parts of the Contract.

2.2 In interpreting these Conditions of Contract headings and marginal notes are used for convenience only and shall not affect their interpretations unless specifically stated; references to singular include the plural and vice versa; and masculine include the feminine. Words have their ordinary meaning under the language of the Contract unless specifically defined.

## **3. Applicable Law**

3.1 The contract shall be governed and interpreted in accordance with the laws of Pakistan, unless otherwise specified in SCC.

## **4. Governing Language**

4.1 The Contract as well as all correspondence and documents relating to the Contract exchanged between the Bidder and the Procuring Agency, shall be written in the **English language** unless otherwise stated in the SCC. Supporting documents and printed literature that are part of the Contract may be in another language provided these are accompanied by an accurate translation of the relevant passages in English, in which case, for purposes of interpretation of the Contract, this translation shall govern.

## **5. Notices**

5.1 Any notice, request, or consent made pursuant to this Contract shall be in writing and shall be deemed to have been made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent by registered mail, telex, telegram, or facsimile to such Party at the address specified in the SCC.

## **6. Delivery/Location**

6.1 The Goods shall be delivered to such locations as the Procuring Agency may approve and as specified in SCC.

## **7. Authorized Representatives / Authority of Member in charge**

7.1 Any action required or permitted to be taken, and any document required or permitted to be executed, under this Contract by the Procuring Agency or the Bidder may be taken or executed by the officials specified in the SCC.

## **B. Commencement, Completion, Modification, and Termination of Contract**

### **8. Effectiveness of Contract**

8.1 This Contract shall come into effect on the date the Contract is signed by both parties and such other later date as may be stated in the SCC.

## **9. Commencement of Services**

9.1 The Bidder shall confirm availability of Key Experts and begin carrying out the Services not later than the number of days after the Effective Date specified in the SCC.

## **10. Program**

10.1 Before commencement of the Services, the Bidder shall submit to the Procuring Agency for approval a Program showing the general methods, arrangements, order and timing for all activities. The Services shall be carried out in accordance with the approved Program as updated.

## **11. Starting Date/Expiration Date**

11.1 The Bidder shall start carrying out the Services Five (05) days after the date the Contract becomes effective, or at such other date as may be specified in the SCC.

11.2 Unless terminated earlier pursuant to Clause **GCC 15** hereof, this Contract shall expire at the end of such time period after the Effective Date as specified in the SCC.

## **12. Entire Agreement**

12.1 This Contract contains all covenants, stipulations and provisions agreed by the Parties. No agent or representative of either Party has authority to make, and the Parties shall not be bound by or be liable for, any statement, representation, promise or agreement not set forth herein.

## **13. Modification**

13.1 Any modification or variation of the terms and conditions of this Contract, including any modification or variation of the scope of the Services, may only be made by written agreement between the Parties. However, each Party shall give due consideration to any Bids for modification or variation made by the other Party.

13.2 In cases of any modifications or variations, the prior written consent of the Procuring Agency is required.

## **14. Force Majeure**

### **14.1 Definition**

For the purposes of this Contract, "Force Majeure" means an event which is beyond the reasonable control of a Party and which makes a Party's performance of its obligations under the Contract impossible or so impractical as to be considered impossible under the circumstances.

### **14.2 No Breach of Contract**

The failure of a Party to fulfill any of its obligations under the contract shall not be considered to be a breach of, or default under, this Contract in so far as such inability arises from an event of Force Majeure, provided that the Party affected by such an event (a) has taken all reasonable precautions, due care and reasonable alternative measures in order to carry out the terms and conditions of this Contract, and (b) has informed the other Party as soon as possible about the occurrence of such an event.

### **14.3 Extension of Time**

Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result

of Force Majeure.

## **14.4 Payments**

During the period of their inability to perform the Services as a result of an event of Force Majeure, the Bidder shall be entitled to continue to be paid under the terms of this Contract, as well as to be reimbursed for additional costs reasonably and necessarily incurred by them during such period for the purposes of the Services and in reactivating the Service after the end of such period.

## **15. Termination**

### **15.1 By the Procuring Agency**

The Procuring Agency may terminate this Contract in case of the occurrence of any of the events specified in paragraphs (a) through (e) of this Clause. In such an occurrence the Procuring Agency shall give at least thirty (30) calendar days' written notice of termination to the Bidder in case of the events referred to in (a) through (d); at least sixty (60) calendar days' written notice in case of the event referred to in (e);

1. If the Bidder fails to remedy a failure in the performance of its obligations hereunder, as specified in a notice of suspension;
2. If the Bidder becomes (or, if the Bidder consists of more than one entity, if any of its members becomes) insolvent or bankrupt or enter into any agreements with their creditors for relief of debt or take advantage of any law for the benefit of debtors or go into liquidation or receivership whether compulsory or voluntary;
3. If the Bidder fails to comply with any final decision reached as a result of arbitration proceedings;
4. If, as the result of Force Majeure, the Bidder is unable to perform a material portion of the Services for a period of not less than sixty (60) calendar days;
5. If the Procuring Agency, in its sole discretion and for any reason whatsoever, decides to terminate this Contract;

### **15.2 By the Bidder**

The Bidder may terminate this Contract, by not less than thirty (30) calendar days' written notice to the Procuring Agency, in case of the occurrence of any of the events specified in paragraphs (a) through (d) of this Clause.

1. If the Procuring Agency fails to pay any money due to the Bidder pursuant to this Contract and not subject to dispute within forty-five (45) calendar days after receiving written notice from the Bidder that such payment is overdue.
2. If, as the result of Force Majeure, the Bidder is unable to perform a material portion of the Services for a period of not less than sixty (60) calendar days.
3. If the Procuring Agency fails to comply with any final decision reached as a result of arbitration.
4. If the Procuring Agency is in material breach of its obligations pursuant to this Contract and has not remedied the same within forty-five (45) days (or such longer period as the Bidder may have subsequently approved in writing) following the receipt by the Procuring Agency of the Bidder's notice specifying such breach.

## **C. Obligations of the Bidder**

## **16. General**

### **16.1 Standard of Performance**

1. The Bidder shall deliver the product and carry out the Services with all due diligence, efficiency and economy, in accordance with generally accepted professional standards and practices, and shall observe sound management practices, and employ appropriate technology and safe and effective equipment, machinery, materials and methods. The Bidder shall always act, in respect of any matter relating to this Contract or to the Services, as a faithful adviser to the Procuring Agency, and shall at all times support and safeguard the Procuring Agency's legitimate interests in any dealings with the third parties.

### **16.2 Law Applicable to Goods**

The Bidder shall deliver the goods in accordance with the Contract and in accordance with the Law of Pakistan and shall take all practicable steps to ensure that any of its Experts and Sub-Bidders, comply with the Applicable Law.

## **17. Conflict of Interests**

### **17.1 Bidder Not to Benefit from Commissions and Discounts.**

The remuneration of the Bidder shall constitute the Bidder's sole remuneration in connection with this Contract or the Services, and the Bidder shall not accept for their own benefit any trade commission, discount, or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations under the Contract, and the Bidder shall use their best efforts to ensure that the Personnel, any Subcontractors, and agents of either of them similarly shall not receive any such additional remuneration.

### **17.2 Bidder and Affiliates Not to be Otherwise Interested in Project**

The Bidder agree that, during the term of this Contract and after its termination, the Bidder and its affiliates, as well as any Subcontractor and any of its affiliates, shall be disqualified from providing Goods for any project resulting from or closely related to the Services.

### **17.3 Prohibition of Conflicting Activities**

Neither the Bidder nor its Subcontractors nor the Personnel shall engage, either directly or indirectly, in any of the following activities:

1. during the term of this Contract, any business or professional activities in the Government's country which would conflict with the activities assigned to them under this Contract;
2. during the term of this Contract, neither the Bidder nor their Subcontractors shall hire public employees in active duty or on any type of leave, to perform any activity under this Contract;

## **18. Confidentiality**

18.1 Except with the prior written consent of the Procuring Agency, the Bidder and the Experts shall not at any time communicate to any person or entity any confidential information acquired in the course of the contract.

## **19. Insurance to be Taken Out by the Bidder**

19.1 The Bidder(a) shall take out and maintain, and shall cause any Subcontractors to take out and maintain, at its (or the Subcontractors', as the case may be) own cost but on terms and conditions approved by the Procuring Agency, insurance against the risks, loss or damage, and for the coverage, as shall be specified in the SCC; and (b) at the Procuring Agency's request, shall provide evidence to the Procuring Agency showing that such insurance has been taken out and maintained and that the current premiums have been paid.

## **20. Bidder's Actions Requiring Procuring Agency's Prior Approval**

20.1 The Bidder shall obtain the Procuring Agency's prior approval in writing before taking any of the following actions:

- (a) appointing such members of the Personnel not provided by the Bidder;
- (b) changing the Program of activities; and
- (c) any other action that may be specified in the SCC.

## **21. Reporting Obligations**

21.1 The Bidder shall submit to the Procuring Agency the reports and documents in the numbers, and within the periods as prescribed by the Procuring Agency.

## **22. Liquidated Damages**

22.1 If the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Procuring Agency shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in SCC of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the performance security (or guarantee) specified in SCC. Once the said maximum is reached, the Procuring Agency may consider termination of the Contract pursuant to **GCC Clause 15**.

### **22.2 Correction for Over-payment**

If the Intended Completion Date is extended after liquidated damages have been paid, the Procuring Agency shall correct any overpayment of liquidated damages by the Bidder by adjusting the next payment certificate. The Bidder shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in SCC.

### **22.3 Lack of performance penalty**

If the Bidder has not corrected a Defect within the time specified in the Procuring Agency's notice, a penalty for Lack of performance will be paid by the Bidder. The amount to be paid will be calculated as a percentage of the cost of having the Defect corrected, assessed as specified in the SCC.

## **23. Performance Guarantee**

23.1 Within Seven (07) days from the issuance of acceptance letter from the Procuring Agency, the successful Bidder shall furnish the Performance Guarantee in shape of ----- at the discretion of the PA in the amount **specified in SCC**. In case the amount of Bids security is equal or greater than

23.2 The proceeds of the Performance Guarantee shall be payable to the Procuring agency as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

23.3 The Performance Guarantee shall be denominated in the currency of the Contract, or in a freely convertible currency acceptable to the Procuring agency and shall be in the acceptable form as specified in SCC.

23.4 The Performance Guarantee will be discharged by the Procuring agency and returned to the Supplier not later than thirty (30) days following the date of completion of the Supplier's performance obligations under the Contract, including any warranty obligations, unless otherwise **specified in SCC**.

## **24. Fraud and Corruption**

24.1 The Procuring Agency requires the Supplier to disclose any commissions or fees that may have been paid or are to be paid to agents or any other party with respect to the Bidding process or execution of the Contract. The information disclosed must include at least the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity or fee.

## **25. Sustainable Procurement**

25.1 The Bidder shall conform to the sustainable procurement contractual provisions, if and as specified in the SCC.

## **D. Bidder's Personnel**

### **26. Description of Personnel**

26.1 The titles, agreed job descriptions, minimum qualifications, and estimated periods of engagement in the carrying out of the Services of the Bidder's Key Personnel. The Key Personnel listed by title as well as by name are hereby approved by the Procuring Agency.

### **27. Removal and/or Replacement of Personnel**

27.1 Except as the Procuring Agency may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Bidder, it becomes necessary to replace any of the Key Personnel, the Bidder shall provide as a replacement a person of equivalent or better qualifications.

27.2 If the Procuring Agency finds that any of the Personnel have (i) committed serious misconduct or have been charged with having committed a criminal action, or (ii) have reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Bidder shall, at the Procuring Agency's written request specifying the grounds thereof, provide as a replacement a person with qualifications and experience acceptable to the Procuring Agency.

27.3 The Bidder shall have no claim for additional costs arising out of or incidental to any removal and/or replacement of Personnel.

## **E. Obligations of the Procuring Agency**

### **28. Assistance and Exemptions**

28.1 The Procuring Agency shall use its best efforts to ensure that the Government shall provide the Bidder such assistance and exemptions as specified in the SCC.

### **29. Change in the Applicable Law**

29.1 If, after the date of this Contract, there is any change in the Applicable Law with respect to taxes and duties which increases or decreases the cost of the related Services rendered by the Bidder, then the remuneration and reimbursable expenses otherwise payable to the Bidder under this Contract shall be increased or decreased accordingly by agreement between the Parties, and corresponding adjustments shall be made to the amounts referred in the SCC.

### **30. Services and Facilities**

30.1 The Procuring Agency shall make available to the Bidder and the Experts, for the purposes of the Services and free of any charge, the services, facilities and property described , at the times and in the manner specified in the SCC or terms of reference.

30.2 In case that such services, facilities and property shall not be made available to the Bidder, the Parties shall agree on (i) any time extension that it may be appropriate to grant to the Bidder for the performance of the Services, (ii) the manner in which the Bidder shall procure any such services, facilities and property from other sources, and (iii) the additional payments, if any, to be made to the Bidder as a result thereof.

## **F. Payments to the Bidder**

### **31. Contract Price**

31.1 The price payable shall be in Pakistani Rupees unless otherwise specified in the SCC. Prices charged by the Supplier for Goods delivered under the Contract shall not vary from the prices quoted by the Supplier in its Bid.

### **32. Terms and Conditions of Payment**

32.1 Payments will be made to the Bidder according to the payment schedule stated in the SCC and as per actual invoice submitted by the Bidder.

32.2 Unless otherwise stated in the SCC, the advance payment shall be made against the provision by the Bidder of a bank guarantee for the same amount, and shall be valid for the period stated in the SCC. Any other payment shall be made after the conditions listed in the SCC for such payment have been met, and the Bidder have submitted an invoice to the Procuring Agency specifying the amount due.

### **33. Currency of Payment**

33.1 Any payment under this Contract shall be made in the currency(ies) specified in the SCC.

## **G. Quality Control**

### **34. Identifying Defects**

34.1 The principle and modalities of Inspection of the Goods by the Procuring Agency shall be as indicated in the SCC. The Procuring Agency shall check the Bidder's performance and notify him of any Defects that are found. Such checking shall not affect the Bidder's responsibilities. The Procuring Agency may instruct the Bidder to search for a Defect and to uncover and test any service that the Procuring Agency considers may have a Defect. Defect Liability Period is as defined in the SCC.

### **35. Correction of Defects, and**

#### **Lack of Performance Penalty**

35.1 The Procuring Agency shall give notice to the Bidder of any Defects before the end of the Contract. The Defects liability period shall be extended for as long as Defects remain to be corrected.

35.2 Every time notice a Defect is given, the Bidder shall correct the notified Defect within the length of time specified by the Procuring Agency's notice.

35.3 If the Bidder has not corrected a Defect within the time specified in the Procuring Agency's notice, the Procuring Agency will assess the cost of having the Defect corrected, the Bidder will pay this amount, and a Penalty for Lack of Performance.

### **36. Taxes and Duties**

36.1 A Supplier shall be entirely responsible for all taxes, duties, fees, etc., incurred until delivery of the contracted Goods to the Procuring Agency.

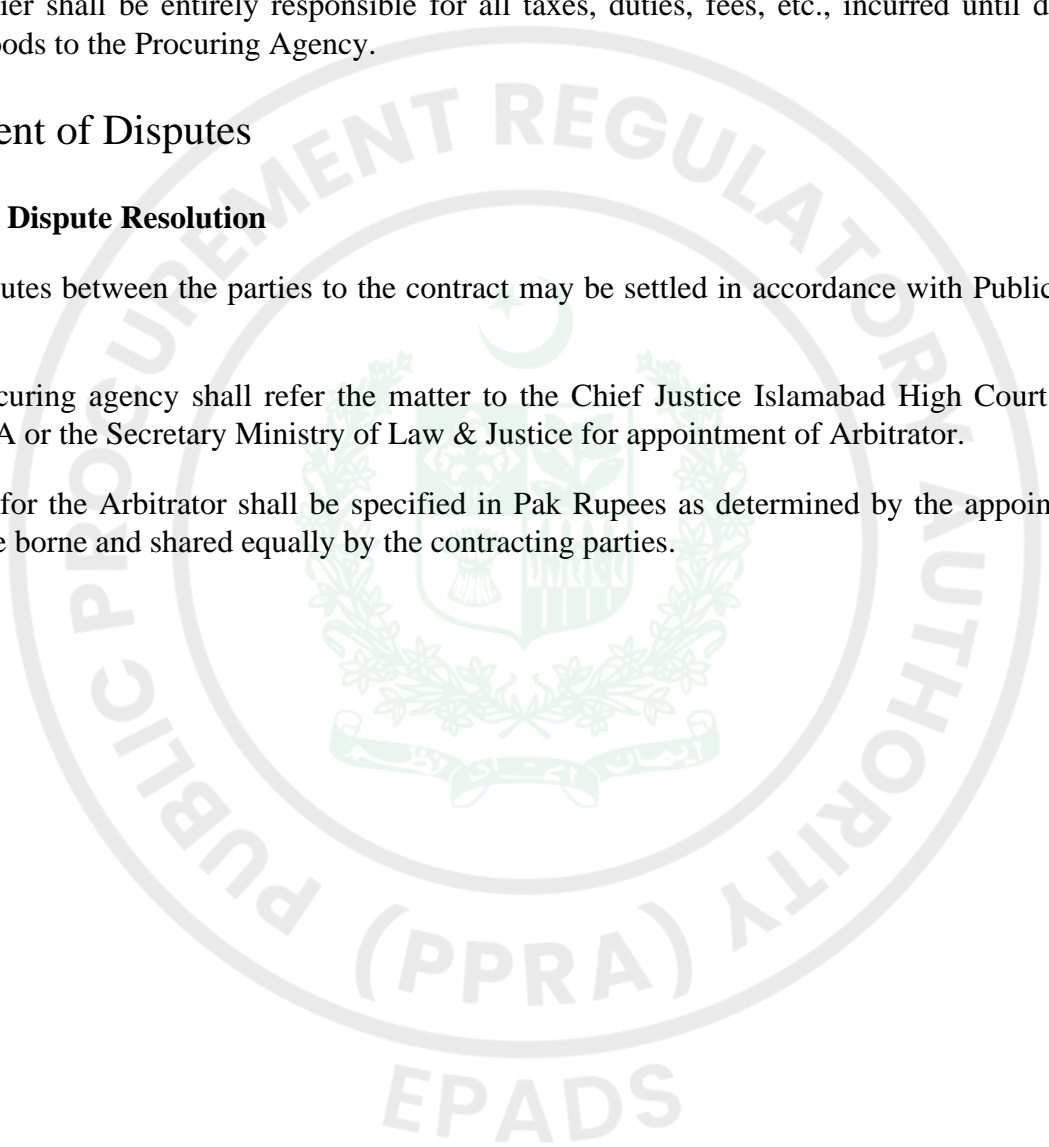
## **H. Settlement of Disputes**

### **37. Alternate Dispute Resolution**

37.1 The disputes between the parties to the contract may be settled in accordance with Public Procurement Rules, 2004.

37.2 The procuring agency shall refer the matter to the Chief Justice Islamabad High Court or Managing Director PPRA or the Secretary Ministry of Law & Justice for appointment of Arbitrator.

37.3 The fee for the Arbitrator shall be specified in Pak Rupees as determined by the appointing authority which shall be borne and shared equally by the contracting parties.





## Special Conditions of Contract

## **SECTION VIII. SPECIAL CONDITIONS OF CONTRACT**

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the Conditions of Contract. The corresponding clause number of the GCC is indicated in parentheses.

### ***Number of GC Clause***

### ***Amendments of, and Supplements to, Clauses in the General Conditions of Contract***

### **Number of GC Clause 1**

#### **Definitions**

**The Procuring Agency is:** Purchase Department (Pakistan Institute of Medical Sciences (PIMS)), Assistant Director PIMS Hospital, Sector G-8/3., Islamabad Capital Territory

#### **The Supplier is:**

**The title of the subject procurement is: Purchase of High End CT Scan Machine for Stroke Powered by AI Software**

### **Number of GC Clause 3**

#### **Applicable/Governing Law:**

The Contract shall be interpreted in accordance with the laws of Islamic Republic of Pakistan

### **Number of GC Clause 4**

#### **Language:**

The language of the Contract, all correspondence and communications to be given, and all other documentation to be prepared and supplied under the Contract shall be in **English**.

### **Number of GC Clause 5**

#### **Notices:**

#### **The addresses for the notices are:**

Procuring Agency:

Purchase Department (Pakistan Institute of Medical Sciences (PIMS)), Assistant Director  
PIMS Hospital, Sector G-8/3., Islamabad Capital Territory

+92-312-345-6789

adpurchase@pims.gov.pk

Contractor/ Bidder:

[Name, address and telephone number].

The Contractor/ Bidder's Representative(s)

[Name, address, telephone number and e-mail address]

**Number of GC Clause 7.1**

**The Authorized Representatives are:**

**For the Procuring Agency:**

Purchase Department (Pakistan Institute of Medical Sciences (PIMS)),Assistant Director  
PIMS Hospital, Sector G-8/3., Islamabad Capital Territory  
+92-312-345-6789  
adpurchase@pims.gov.pk

**For the Bidder:**

**Name:** .....

**Designation:** .....

**Address:** .....

**Number of GC Clause 8**

**Effectiveness of the contract**

**Number of GC Clause 9**

**Commencement of Contract:**

**Number of GC Clause 11.2**

**Expiration of Contract:**

**Number of GC Clause 15**

**Termination**

In the event of termination of the contract due to any reason as already defined in the General Conditions of Contract, the Bidder shall be responsible for providing to the Authority the Goods till the time of alternate arrangements.

**Number of GC Clause 17**

**Conflict of Interest:**

The Procuring Agency reserves the right to determine on a case-by-case basis whether the Bidder should be disqualified from providing goods or services due to a conflict of a nature described in Clause GCC 17.

**Number of GC Clause 22**

**Liquidated Damages**

If the Bidder fails to provide services as required under the contract or in case of any data loss/data breach or any incident compromising the data security or other such failures related to any services, the Bidder shall pay to the Procuring Agency as Liquidated Damages at a rate of **0.10%** to **10.00%** of the Contract value, in accordance with the extent of performance failure & the cost of investigating such incidents as judged by the

Authority.

### **Number of GC Clause 23**

#### **Performance Guarantee:**

The amount of performance guarantee shall be **10.00%** of the contract price in acceptable form of **Pay Order, Call at Deposit, Bank Guarantee**

### **Number of GC Clause 32**

#### **Payment terms:**

Payment will be made to the Bidder against the procured Goods and services according to the actual invoice or running bills submitted by the Bidder against the services provided within the time given in the conditions of the contract.

### **Number of GC Clause 33**

#### **Currency of Payment:**

All the payment to be released to the contractor/Bidder shall be in Pakistani Rupees.

### **Number of GC Clause 34**

#### **Identifying Defects:**

The Authority reserves the right at any time to inspect the premises of the provider to inspect the goods and monitor the goods being provided.

### **Inspections & Tests Requirements**

For being Brand New, bearing relevant reference numbers of the equipment (Certificate from supplier)

For Physical Fitness having No Damages (Certificate from supplier)

For the Country of Origin as quoted by the Supplier (Certificate from manufacturer)

For conformance to specifications and performance parameters, through Prior to delivery inspection (Inspection Report by Procurement Committee / Inspection Team)

For successful operation at site after complete installation, testing and commissioning of the equipment (Installation, Testing and Commissioning Report by Procurement Committee / Inspection Team)

### **Delivery & Documents**

Copies of the Supplier's invoice showing Goods' description, quantity, unit price, and total amount;

Original and two copies of the usual transport document (for example, a negotiable bill of lading, a non-negotiable sea waybill, an inland waterway document, an air waybill, a railway consignment note, a road consignment note, or a multimodal transport document) which the buyer may require to take the goods;

Copies of the packing list identifying contents of each package;

Insurance Certificate;

Manufacturer's or Supplier's Valid Warranty Certificate;

Inspection Certificate issued by the Nominated Inspection Agency (if any), and the Supplier's Factory Inspection Report;

Certificate of Origin.

The above documents would be required even if the equipment has already been imported and is available with the supplier ex-stock

### **Number of GC Clause 37**

### **Following is the guidance for Dispute Resolution**

1. If any dispute of any kind whatsoever shall arise between the Authority and the Bidder in connection with or arising out of the Contract, including without prejudice to the generality of foregoing, any question regarding its existence, validity, termination and the execution of the Contract – whether during developing phase or after their completion and whether before or after the termination, abandonment or breach of the Contract – the parties shall seek to resolve any such dispute or difference by mutual diligent negotiations in good faith within 14 (fourteen) days following a notice sent by one Party to the other Party in this regard.
2. At future of negotiation the dispute shall be resolved through mediation and mediator shall be appointed with the mutual consent of the both parties.
3. At the event of failure of mediation to resolve the dispute relating to this contract such dispute shall finally be resolved through binding Arbitration by sole arbitrator in accordance with Arbitration Act 1940. The arbitrator shall be appointed by mutual consent of the both parties. The Arbitration shall take place in Islamabad, Pakistan and proceedings will be conducted in English language.
4. The cost of the mediation and arbitration shall be shared by the parties in equal proportion however the both parties shall bear their own costs and lawyer's fees regarding their own participation in the mediation and arbitration. However, the Arbitrator may make an award of costs upon the conclusion of the arbitration making any party to the dispute liable to pay the costs of another party to the dispute.
5. Arbitration proceedings as mentioned in the above clause regarding resolution of disputes may be commenced prior to, during or after completion of the contract.

Notwithstanding any reference to the arbitration herein, the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree that the Authority shall pay the Bidder any monies due to the Bidder.

### **Rules of procedure for arbitration proceedings:**

Any dispute between the Authority and a Bidder who is a national of the Islamic Republic of Pakistan arising in connection with the present Contract shall be referred to adjudication or arbitration in accordance with the laws of the Islamic Republic of Pakistan including Arbitration Act 1940, however above provision shall prevail in referring the case to the Arbitrator.

### **Place of Arbitration and Award:**

The arbitration shall be conducted in English language and place of arbitration shall be at Islamabad. The award of the arbitrator shall be final and shall be binding on the parties.





Bid Securing Declaration

## Form 9: Bid Securing Declaration

Date: *[insert date (as day, month and year)]*

Bid No.: **P39209**

To: **Purchase Department (Pakistan Institute of Medical Sciences (PIMS)), Assistant Director PIMS Hospital, Sector G-8/3., Islamabad Capital Territory**

We, the undersigned, declare that:

We understand that, according to your conditions, Bids must be supported by a Bid Securing Declaration.

We accept that we will be blacklisted and henceforth cross debarred for participating in respective category of public procurement proceedings for a period of (not more than) six months, if fail to abide with a bid securing declaration, however without indulging in corrupt and fraudulent practices, if we are in breach of our obligation(s) under the Bid conditions, because we:

1. have withdrawn or modified our Bid during the period of Bid Validity specified in the Form of Bid;
2. Disagreement to arithmetical correction made to the Bid price; or
3. having been notified of the acceptance of our Bid by the Procuring Agency during the period of Bid Validity, (i) failure to sign the contract if required by Procuring Agency to do so or (ii) fail or refuse to furnish the Performance Security or to comply with any other condition precedent to signing the contract specified in the Bidding Documents.

We understand this Bid Securing Declaration shall expire if we are not the successful

Bidder, upon the earlier of (i) our receipt of your notification to us of the name of the successful Bidder; or (ii) twenty-eight (28) days after the expiration of our Bid.



Contract Form

## SECTION IX: CONTRACT FORMS

THIS AGREEMENT made the \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_ between **Purchase Department (Pakistan Institute of Medical Sciences (PIMS)), Assistant Director PIMS Hospital, Sector G-8/3., Islamabad Capital Territory**

(hereinafter called “the Procuring Agency”) of the one part and [name of Bidder] of [city and country of Bidder] (hereinafter called “the Bidder”) of the other part:

WHEREAS the Procuring Agency invited Bids for provision of goods, viz., **Purchase of High End CT Scan Machine for Stroke Powered by AI Software (P39209)** and has accepted a Bids by the Bidder for the provision of Goods in the sum of [contract price in words and figures] (hereinafter called “the Contract Price”).

### NOW THIS CONTRACT WITNESSETH AS FOLLOWS:

1. In this Contract words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.

2. The following documents shall be deemed to form and be read and construed as part of this Contract, In the event of any ambiguity or conflict between the Contract Documents listed below, the order of precedence shall be the order in which the Contract Documents are listed below:-

1. This form of Contract;
2. the Form of Bids and the Price Schedule submitted by the Bidder;
3. the Schedule of Requirements;
4. the Technical Specifications;
5. the Special Conditions of Contract;
6. the General Conditions of the Contract;
7. the Procuring Agency’s Letter of Acceptance; and
8. [add here: any other documents]

3. In consideration of the payments to be made by the Procuring Agency to the Bidder as hereinafter mentioned, the Bidder hereby covenants with the Procuring Agency to provide the Goods related services and to remedy defects therein in conformity in all respects with the provisions of the Contract.

4. The Procuring Agency hereby covenants to pay the Bidder in consideration of the provision of Goods and the remedying of defects therein, 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.

IN WITNESS whereof the parties hereto have caused this Contract to be executed in accordance with their respective laws the day and year first above written.

Signed, sealed, delivered by \_\_\_\_\_ the \_\_\_\_\_ (for the Procuring Agency)

Witness to the signatures of the Procuring Agency:

.....

Signed, sealed, delivered by \_\_\_\_\_ the \_\_\_\_\_ (for the Procuring Agency)

Witness to the signatures of the Bidder: .....





## Integrity Pact

## Integrity Pact

### **DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC. PAYABLE BY THE SUPPLIERS OF GOODS, SERVICES & WORKS IN CONTRACTS WORTH RS.10.00 MILLION OR MORE**

Contract Number: Contract Value: Contract Title:

Dated:

[Name of Supplier] hereby declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Pakistan or any administrative subdivision or agency thereof or any other entity owned or controlled by it (GoP) through any corrupt business practice.

Without limiting the generality of the foregoing [Name of Supplier] represents and warrants that it has fully declared the brokerage, commission, fee etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultations fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP, except that which has been expressly declared pursuant hereto.

[Name of Supplier] certifies that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with GoP and has not taken any action or will not take any action to circumvent the above declaration, representative or warranty.

[Name of Supplier] accepts full responsibility and strict liability for making and false declaration, not making full disclosure, misrepresenting fact or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other right and remedies available to GoP under any law, contract or other instrument, be voidable at the option of GoP.

Notwithstanding any rights and remedies exercised by GoP in this regard, [Name of Supplier] agrees to indemnify GoP for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to GoP in an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by [Name of Supplier] as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP.



## Performance Guarantee Form

# Performance Guarantee Form

To: **Purchase Department (Pakistan Institute of Medical Sciences (PIMS)),Assistant DirectorPIMS Hospital, Sector G-8/3., Islamabad Capital Territory**

WHEREAS *[name of Bidder]* (hereinafter called “the Bidder”) has undertaken, in pursuance of Contract No. *[reference number of the contract]* dated *[insert date]* for provision of Goods(hereinafter called “the Contract”).

AND WHEREAS it has been stipulated by you in the said Contract that the Bidder shall furnish you with a Bank Guarantee by a reputable bank for the sum specified therein as security for compliance with the Bidder’s performance obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Bidders guarantee:

THEREFORE, WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Bidder, up to a total of *[amount of the guarantee in words and figures]*, and we undertake to pay you, upon your first written demand declaring the Bidder to be in default under the Contract and without cavil or argument, any sum or sums within the limits of *[amount of guarantee]* as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the: *[insert date]*

Signature and seal of the Guarantors

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*[name of bank or financial institution]*

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*[address]*

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*[date]*



Annexure

# Specifications

Information (Read-Only)

See Form Under Additional Forms and Documents: **Specifications** (page number: 87)

## SLA

Information (Read-Only)

See Form Under Additional Forms and Documents: **SLA** (page number: 93)

## site plan

Information (Read-Only)

See Form Under Additional Forms and Documents: **site plan** (page number: 97)

## SLA%

Information (Read-Only)

See Form Under Additional Forms and Documents: **SLA%** (page number: 98)

## proforma

Information (Read-Only)

See Form Under Additional Forms and Documents: **proforma** (page number: 99)



## Procurement Forms







## Additional Forms and Documents

**High-End latest version CT Scan for Stroke Intervention**

<b>(A) CT Scan Specifications for Stroke Intervention:</b>	<p>1. Latest top of the line model having fast iterative reconstruction to minimize dose and noise with volume detector coverage area minimum of 16 cm or more in one gantry rotation.</p> <p>2. Dual Source / single source with two layers of detector/ single source with ultrafast KV switching of high and low energy, Spectral Imaging required at full 16cm area coverage for all axial</p> <p>3. Spectral Imaging CT scanner having 512 slices or more generation per gantry rotation along with latest hardware and software systems</p> <p>4. System should be capable to scan whole heart within single heartbeat or less at all heart rates (Bradycardia and tachycardia) without betablockers/ medication with sub-milli Sieverts cardiac imaging.</p> <p>5. Hardware/ software should be capable to scan in minimum time and lowest dose exposure to the patients with high resolution images along with workflow AI-assisted application for an optimized, efficient and smooth workflow of the CT scanner. (Instinx workflow / Effortless workflow / Fast workflow and fast planning or equivalent)</p> <p>6. New Generation Cardiac CT scanner/ 4th Generation scanner with ceiling / gantry mounted AI-based auto positioning cameras for easy and automatic patient positioning of patient table in trauma cases. Capable anatomical structure detection in 3D for accurate position in area of interest.</p> <p>7. CT scan Spatial Resolution of 32lp/cm @ 0%MTF or better.</p> <p>8. The type of scan should be helical scan/ Spiral / Fixed.</p> <p>9. Scan with at least 0.25 mm accuracy/ reproducibility on a 300kg patient or better.</p> <p>10. One beat cardiac scan capable for producing CT Angio, calcium scoring, 4D cardiac volume etc, all in one beat scan.</p> <p>11. Real time dose reduction hardware/software and with ECG modulation.</p> <p>12. Able to calculate patient dose in milli-sieverts before image acquisition (CTDI).</p> <p>13. Temporal resolution at least 20 msec or less.</p> <p>14. Spectral Imaging for material decomposition, characterizing lesions, reducing the number of scans in multiphasic imaging.</p>
<b>(B) Gantry:</b>	<p>15. Gantry bore/ aperture to be at least 70 cm or more. Tilt range Digital <math>\pm 30^\circ</math></p> <p>16. Min gantry rotation time to be at least 0.24 sec or better, Min slice thickness 0.625 mm or less in axial and helical mode.</p> <p>17. Max scan field or view to be at least 50 cm for all application, in all scan modes and minimum field view (FOV) at 32 or better for paediatrics.</p> <p>18. Bilateral control of gantry &amp; table from the gantry housing &amp; operator console.</p>
<b>(C) High Frequency Generator:</b>	<p>19. Power at least 100 KW.</p> <p>20. Should have ability to vary the power (mAs) automatically in steps.</p> <p>21. Should also cater for electrical fluctuation.</p>
<b>(D) X-Ray Tube</b>	<p>22. Triple Focal spot sizes should be available</p> <p>23. Anode heat storage Capacity 30 MHU or more</p> <p>24. Tube voltage: 70-135/140 KV or better.</p> <p>25. Should be able to perform paediatric scans on 70kV rate</p> <p>26. mA range: 20-1250 or better.</p>
<b>(E) CT Angiography with Dedicated Cardiac CT Angiography:</b>	<p>27. Bone removal and vessel segmentation identification.</p> <p>28. Tools for general vascular analysis capable of calculating intraluminal diameter, cross-sectional lumen area, length and tortuosity of vessel's segments, angle the vessels/rotatable curved MPR.</p> <p>29. Ability to outline and calculate aneurysm, identify mural calcification and lining mural thrombus.</p> <p>30. Calculations of dimensions of an aneurysm, the neck of the aneurysm, relationship to surrounding vascular structure, and total distance in order to non- invasively plan stent placement.</p>

<b>(F) Detectors:</b>	31. Solid state crystals/ ultra-fast ceramic detectors
<b>(G) Advanced Peripheral/ General Vessel Analysis:</b>	32. Track and quantity diffuse lung disease including congenital lobar emphysema, destructive lung disease, pulmonary hypoplasia/ agenesis, CCAM and laryngomalacia etc.
	33. Nodule analysis program.
	34. Automated/ single click segmentation of Right and left lung with display of volume rendered and MPR view to destruction for accurate quantification and Archive, Retrieve and Print on workstation.
<b>(H) Advanced 4D Applications:</b>	35. 4D DSA of all body vessels.
	36. 4D cerebral artery morphological analysis for aneurysm rupture acquisition of ECG gate cerebral angiography data sets and automatic extraction of cerebral angiogram in 3D.
	37. Analysis software should be able to measure volume ratio, aspect ratio and diameter of angiogram to check for susceptibility to rupture thorough change caused during various cycle of the ECG.
	38. Zero click 4D DSA of all brain including CTA, CT venography using direct subtraction with deformable registration technology.
	39. 4D brain perfusion and stroke assessment. Providing functional information over the functionally significant areas of the brain for stroke evaluation. Allows differentiating areas of increased blood volume and decreased blood flow and ability to distinguish still viable and non-viable infarcted tissue, quantitative color maps of cerebral blood flow (CBF), cerebral blood volume (CBV), mean transit time (MTT) and time to peak (TTP).
	40. Automated micro line/ centerline and selection of arterial and venous regions of interest.
	41. Cerebral multimodality fusion software for surgical planning and craniotomy, with fused, multi-modality images that provide an accurate overview of patient's brain and cranial anatomy.
	42. Must produce multi-modality fused MRP, MIP and 3D images to integrate CT, MR and angiography images, fusion of up to 4 multimodality object is needed. Access to fused MPR or MIP view with an adjustable fused image overlay must be available.
<b>(I) CT Lung Density Assessment:</b>	43. Track and quantity diffuse lung disease including congenital lobar emphysema, destructive lung disease, pulmonary hypoplasia/ agenesis, CCAM and laryngomalacia etc on workstation.
	44. Nodule analysis program.
	45. Automated/ single click segmentation of Right and left lung with display of volume rendered and MPR view to destruction for accurate quantification and Archive, Retrieve and Print on workstation.
<b>(J) Couch/Patient Scanning Table:</b>	46. Dual motorized control (from console and gantry) of table movements.
	47. Maximum weight allowed on the couch up to 300kg or more to achieve speeds up to 55 mm/s for same 50cm FOV and uncompromised image quality.
	48. Signal acquisition scans range of at least 2 meters or more.
	49. Table with motorized height adjustment from 470mm to 1000mm to be offered
<b>(K) Computer Console:</b>	50. System architecture and operation system must be based on latest technology (64 Bit RISC/ Octa Core Processor PC or better).
	51. Multitasking and parallel processing CPU System.
	52. SSD of 3TB memory / capacity for image storage of at least 1.5 million (uncompressed) images or more in 512 matrix or more.
	53. Reconstruction of at least 100 images per second or more with iterative reconstruction of 512 x 512 matrix.
	54. Image reconstruction matrix of 512 x 512 and 1024 x 1024 should be available for full 16cm detector coverage.

	55. Console color monitor x 2, TFT/LCD type of at least 24 inches or more, with maximum viewing angle.
	56. DVD/ CD Writer and active USB port is mandatory.
<b>(L) Console Software &amp; Workstation Software:</b>	57. Neuro and Cardiac packages both with licensed software on all workstations.
	58. True isotropic volume acquisition or equivalent.
	59. Prospective and retrospective ECG gated acquisition or equivalent.
	60. Variable delay algorithm for automatically finding the best phase for cardiac CT imaging or equivalent method for acquiring image.
	61. Automated contrast media bolus tracking software or equivalent.
	62. 3D reconstruction & display:
	63. Maximum and minimum intensity projections.
	64. Multi-planer and curved planer reconstruction.
	65. 3D shaded surface display.
	66. 3D volume rendering software.
	67. 3D virtual endoscopy/ colonoscopy / bronchoscopy.
	68. 3D cone beam correction.
	69. Whole organ perfusion analysis (at workstation).
	70. Artifact reduction algorithm.
	71. 3D CT fluoroscopy with real time imaging and display of at least 08 frames/sec or better with required hardware and software. One high resolution TFT monitor of 24 inch or more in CT room mobile base or ceiling mounted. as per OEM recommendations.
	72. CT angiography including dedicated cardiac CT angiography for structural heart disease.
	73. Dose control parameters
	74. Dose Display CTDI, DLP, Dose Efficiency etc.
	75. Iterative reconstruction technique with dedicated dose reduction software and hardware.
	76. Automatic control of tube current over high and low attenuation areas for patient dose reduction.
	77. Iso-phasic cardiac acquisition to allow for acquisition in systolic or diastolic as per user's requirement.
	78. Whole heart myocardial perfusion or equivalent.
	79. Automatic cardiac phase assessment for best phase imaging or equivalent method to achieve best phase imaging.
	80. Plaque analysis with automatic color coding of different plaque density.
81. Pediatric scanning package including software and infant holder/ immobilizer inbuilt feature of dose reduction for pediatric scanning.	
82. Metal artifacts reduction software.	
83. Cardiac CT Angio of vessels using MIP (maximum intensity projection) method or equivalent algorithm or method.	
84. Whole body CT-DSA subtraction using deformable MIP method.	
85. Dedicated cardiac vessel motion correction software for ultra-high resolution cardiac imaging or equivalent algorithm.	
87. Latest Cardiovascular and whole-body software versions will be provided by the vendors including reporting packages including TAVI planning.	
88. 3D reconstruction display.	
89. Maximum and minimum intensity projections.	
90. Multi-planer and curved planer reconstruction.	
91. 3D Shaded Surface Display.	
92. 3D volume rendering software.	

	93. Software for the quantitative evaluation of lung tissues and 3D based visualization off pulmonary nodules and its analysis. Lung nodule detection software be provided at console/workstation.
	94. Direct CT lung subtraction with and without contrast using deformable registration/ dual energy for lung perfusion defect detection using color body iodine mapping for low perfused areas.
	95. CT Angio (both central and peripheral) at workstation for cardiac and perfusion imaging. Vessel stenosis analysis at workstation. Plaque analysis software to differentiate between hard and soft plaque. Plaque analysis facility would be provided at console or workstation.
	96. Brain perfusion software at console and workstation DICOM 3 or latest version capability to send, receive, archive, retrieve and print at console and workstation (DICOM ready to use).
	97. CT MSK suite, complete 3D image of bone and soft tissues. Reconstruction software should be available in main console as well as in workstation.
	98. CT Fluoroscopy with real time imaging and display in frames/sec or better.
	99. Contrast media based synchronizing software at console.
	100. Pediatric scanning system to reduce radiation dose to the children.
	101. 3D image reconstruction. Software should be available in main console as well as in workstation.
	102. Low dose imagining option should be available.
	103. Automatic bone removal software at console and workstation.
	104. Spectral imaging application available in the offered model should be provided included composition analysis for renal clinical, virtual non contrast imaging, iodine mapping/ iodine overlay.
	105. Liver Evaluation Software for volumetric evaluation of liver/ hepatic segmentation/ Resection planning, vascular mapping and tumor analysis.
<b>(M) CT Perfusion:</b>	107. Software package should be able to evaluate dynamic CT data following an injection of a compact bolus of contrast material, generating information with regards to changes in image intensity over time.
	108. CT perfusion multi-organ package includes both neuro (stroke and tumor) and body tumor protocols.
	109. The software provided should have quick and reliable assessment of the type and extent perfusion disturbances by providing qualitative and quantitative information on various perfusion related parameters.
	110. The key perfusion parameters that CT Perfusion 4D neuro multi-organs package generates are:
	a. Regional blood volume
	b. Regional blood flow
	c. Capillary permeability surface area product (PS)
	d. Time of arrival (IRF TO)
	e. Transit time to IRF peak
	110a. Protocols provided in CT perfusion multi-organ are:
	a. Brain tumor
	b. Body tumor
	c. Liver
	d. Pancreas
	e. Prostate
	f. Kidney
	g. Soft tissue
	h. Spleen
	i. Bone

<b>(N) Thin Client Server with 5 concurrent user licenses for Post Processing Applications (must be latest version and model of software and hardware, the same will also be verified during technical scrutiny and at the time of installation):</b>	111. Supplied by OEM along with certificate from OEM.
	112. Multimodality 5 x Client PCs with all required applications fully licensed software.
	113. High speed link to operator console on DICOM network.
	114. Server specifications (minimum requirements):
	a) Processor: 4 x Intel Xeon 8-core CPU or better
	b) Memory: 256GB supporting 40,000 slices or more
	c) Disk drive: 6TB SSD or more
	d) Network: 2x1-Gbps networks interface cards
	e) Management: Dedicated Embedded Manager
	f) Power: Fully redundant power and cooling
<b>(O) Advanced coronary vessel analysis using MIP as well as direct CT-DSA subtraction.</b>	g) OS: Original and latest by OEM
	h) Other standard accessories."
	115. Pure sine wave UPS, switching time less than 4 milli seconds, 3 KVA or more to support full server load with maintenance free Batteries 20 min back up time for Server only.
	116. Calcium scoring ECG gating and prospective & retrospective reconstruction or equivalent.
	117. Advanced complete cardiac package including functional analysis with automatic bone removal software.
	118. Cardiac segmentation with complete cage removal.
	119. Orthogonal Cross Reference View/ Globe view (2D and 3D maps overlay on Cardiac anatomy).
	120. Angiography Emulation View/ IVUS view for vessel lumen inspection.
	121. Complete coronary tree extraction and analysis.
	122. Ventricular function assessment (ESV, EDV, CO, EF).
<b>(P) AI Based Software:</b> Artificial Intelligence based software manufacturer's Proprietary, or third party for Neuro, Cardiac (Stroke intervention, Structural heart and whole body vessels) and Fractures	123. LV Function assessment.
	125. Calcium scoring - giving mass, agatston and volume score.
	126. Myocardial defect assessment- both visual and quantitative.
	127. Color Maps on short and long axis.
	128. Volumetric visualization of Coronary Arteries with segmentation maps on 3D overlay.
	Deep Learning reconstruction software must be offered as standard.
	DICOM 3.0 (or latest version) fully loaded.
	130. Licensed and ready to use. Multi-vendor and multimodality compatible for send, receive, achieve, retrieve, and print, on main console and workstations.
	131. Remote Services: Enabled
	High speed recommended Internet connection at site will be the responsibility of vendor
<b>(Q) Special Instructions</b>	Please provide a list showing each latest software item and part number.
<b>(R) Power Requirements:</b>	132. Three-phase four wire system with line voltage of 400 VAC ± 10%, 50 Hz. The machine should have a voltage stabilizer and surge protection system.
<b>(S) UPS:</b>	133. Branded Online sine wave Modular UPS of 200KVA or more for whole CT Suite, with a minimum backup time of 30 minutes (Standard batteries for UPS to 12 V 7AH/26 AH from fresh lot) or more on full load and all workstations with following features:
	a. Output wave shape: Pure sine wave
	b. Output voltage: 400VAC ±5 % 50 Hz 3 Phase 4 wire system
	c. Overload protection.
	d. Surge protection.
	e. Built in AVR with OEM recommended voltage range.

<b>(T) Accessories:</b>	134. Programmable, Dual Head Power Injector with flow/ Volume and temperature control. Mounted on mobile base with 100 disposable syringes of 150 ml capacity and connecting tube.																
	135. Compatible Cardiac Monitor with synchronization with cardiac scan or in-built solution.																
	<b>136. Multi modality dose analyzer (Fluke / Piranha) must be quoted as optional item.</b>																
	138. Certified Protection Devices: Lead apron including neck coverage (x 05) with hangers, lead gloves (x 05) pairs, Thyroid Shield (x 05) and Lead goggles (x 05) all 0.5 mm Pb or equivalent.																
	139. Lead glass for control room 5 x 3 feet, minimum 2.0 mm Pb/ as per PNRA guidelines.																
	140. Standard set of phantoms for calibration of CT.																
	Branded Smart LED 65" for study display and teaching purpose.																
	141. Table Accessories: Table Pad, Arm Rest, Patient Restraint Kit, IV Pole, Infant Cradle, Flat Head Holder (Original accessories from manufacturer).																
	Site preparation will be the responsibility of vendor as per recommended standard including earthing, flooring, antistatic flooring, paneling, ceiling, console counter, cooling system, and other necessary furniture.																
	<b>(U) HMS Integration:</b>	142. Equipment should have compatibility of integration with Hospital Management System i.e., HL 7.0 compliance or better and equipment must be DICOM 3.0 ready or latest version ready/ Worklist license & facility.															
<b>(V) Trainings:</b>	1. One Cardiologist foreign attachment / training for one week in a centre where stroke intervention is being done.																
	2. One Neurologist foreign attachment / training for one week in a centre where stroke intervention is being done.																
	3. One Radiologist foreign attachment / training for one week in a centre where stroke intervention is being done.																
	4. One radiographer technician foreign attachment / training for one week in a center where machine is installed.																
	5. Factory training for 02 Electro Medical Engineers of PIMS. <b>(before installation)</b>																
	6. Factory trained Application specialist must be on site after installation of system for all application training and demos to staff of Stroke Center PIMS																
	<b>Note:</b> Vendor is bound to arrange trainings within 3 months of contract signing.																
<b>(W) Pre-shipment Inspection</b>	Company to arrange Pre-shipment inspection:																
	2 Electro Medical Engineer PIMS																
	1 Officer to be nominated by management																
<b>(X) Warranty:</b>	Comprehensive warranty <b>02 Years</b> all OEM and third party items,																
Service Maintenance Contract (SMC)/ Service-Level Agreement (SLA):	143. Supplier to quote 08 year post warranty SLA including all supplied parts. The firm must provide undertaking (affidavit) of SLA (Service Level Agreement) for 8 years with parts as follows; <table style="width: 100%; border: none;"> <tr> <td style="width: 70%;">of equipment quoted amount.</td> <td style="width: 30%; text-align: right;">3rd year at rate of 3%</td> </tr> <tr> <td>equipment quoted amount.</td> <td style="text-align: right;">4th year at rate of 4% of</td> </tr> <tr> <td>equipment quoted amount.</td> <td style="text-align: right;">5th year at rate of 5% of</td> </tr> <tr> <td>equipment quoted amount.</td> <td style="text-align: right;">6th year at rate of 6% of</td> </tr> <tr> <td>equipment quoted amount.</td> <td style="text-align: right;">7th year at rate of 7% of</td> </tr> <tr> <td>equipment quoted amount.</td> <td style="text-align: right;">8th year at rate of 8% of</td> </tr> <tr> <td>equipment quoted amount.</td> <td style="text-align: right;">9th year at rate of 9% of equipment</td> </tr> <tr> <td>quoted amount.</td> <td style="text-align: right;">10th year at rate of 10% of equipment quoted amount.</td> </tr> </table>	of equipment quoted amount.	3rd year at rate of 3%	equipment quoted amount.	4th year at rate of 4% of	equipment quoted amount.	5th year at rate of 5% of	equipment quoted amount.	6th year at rate of 6% of	equipment quoted amount.	7th year at rate of 7% of	equipment quoted amount.	8th year at rate of 8% of	equipment quoted amount.	9th year at rate of 9% of equipment	quoted amount.	10th year at rate of 10% of equipment quoted amount.
of equipment quoted amount.	3rd year at rate of 3%																
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equipment quoted amount.	6th year at rate of 6% of																
equipment quoted amount.	7th year at rate of 7% of																
equipment quoted amount.	8th year at rate of 8% of																
equipment quoted amount.	9th year at rate of 9% of equipment																
quoted amount.	10th year at rate of 10% of equipment quoted amount.																
<b>(Y) Support</b>	All the Software updates/upgradations will be the responsibility of the Vendor for life of the equipment																
<b>(Z) Quality Standards</b>	· Must have FDA 510k or CE MDR or MHLW																
	· Compliance with local regulatory																

SLA:

The firm must provide undertaking (affidavit) of SLA (Service Level Agreement) for 8 years with parts as follows;

- 3rd year at rate of 3% of equipment quoted amount.
- 4th year at rate of 4% of equipment quoted amount.
- 5th year at rate of 5% of equipment quoted amount.
- 6th year at rate of 6% of equipment quoted amount.
- 7th year at rate of 7% of equipment quoted amount.
- 8th year at rate of 8% of equipment quoted amount.
- 9th year at rate of 9% of equipment quoted amount.
- 10th year at rate of 10% of equipment quoted amount.

**SLA/ COMPREHENSIVE MAINTENANCE CONTRACT**

S#	TERMS & CONDITIONS
1.	This contract is made at Islamabad on _____ by and between the President of the Islamic Republic of Pakistan through Executive Director PIMS, under Ministry of National Health Services, Regulations & Coordination, Islamabad hereinafter called the Employer which terms shall include his successor assign as first part and legal representative of the second part of M/s. _____ Incorporated under the law of Pakistan of the other part (hereinafter) referred to as the contractor whereas the employer has decided that the comprehensive maintenance contract (CMC), of _____ PIMS should be carried out.
2.	WHEREAS the Employer intends that M/s _____ Maintains / repair the:- _____ called the "equipment" and "M/s _____ agrees to maintain / repair the equipment between (date) _____ and _____ both days inclusive, on the following mutually agreed terms and conditions.
3.	Contractor M/s. _____ agrees to provide the Employer Comprehensive Maintenance Services with Labour & Parts.
4.	Contractor guarantees the availability of spare parts and accessories for the system during contract period.
5.	With effect from (date) _____ service charges based on quoted value _____ for equipment requiring maintenance, will be payable every year to the contractor in four equal instalments. The contractor will submit the bill at the end of every three months.
6.	The concerned Head of Department and Head of EME department will be responsible to endorse the monthly Performance Evaluation Report (PER) of firm and said reports will be part of quarterly bills. No payment of maintenance contract will be made without Performance Evaluation Report.
7.	Pre-audit will be carried out Finance Department before clearance of the bill. The payment will be made on the submission of quarterly performance report.
<b>UPTIME GUARANTEE:</b>	
1.	Annual Uptime of 95% be considered as acceptable level of performance.
2.	Contractor shall check system performance, every month. For every month an "uptime percentage" will be calculated by the dividing "system in service" hours by "hours available

	“both measured on the basis of working hours.
3.	If the uptime percentage for the measurement period should fall short of 95% annually the following formula will be applied to determine additional days in service contract period. Courteous.
4.	The system will have the minimum uptime 95% in case of down time beyond this period the following penalty will be applied: - - 95% to 100% No penalty. - Less than 95% the warranty period will be extended 0.5 times the number of days system is down. - Less than 90% warranty period will be extended 1.5 times the down time period. - Less than 85% warranty period will be extended two (2) times the down time period and supplier is supposed to give justification of delay. - If uptime is less than 80%, The performance guarantee will be forfeited and the firm will be liable to be blacklisted until and unless the firm provides reasonable justifications to the competent authority, and hospital reserve the right to launch a complaint to the Principal/ Manufacturer to take action against the supplier and warranty will be extended three (3) time for the down time period. - PPM will not consider in the down time and PPM of the system will be done on quarterly basis. However, the down time will be calculated on annual basis.
<b>DOWN TIME</b>	
1.	Downtime is defined as failure in equipment operation to acquire or process data, resulting in inability to carry out the required procedure properly.
2.	Down time will start when the end user notifies the designated service facility verbally or in writing. The Contractor will provide the service telephone number accessible round the clock. The response time of 02 hours will be considered normal.
3.	Downtime will end once the repairs have been affected and the system is again available for required procedures / use.
4.	The installation of the system improvement and updates as per schedule by mutual agreement of both the parties as well as scheduled & preventative maintenance shall not be considered as downtime.
5.	Qualified and fully trained/ service support will be available from the contractor as a backup to the local engineers during the contract period at no cost to the client.
<b>SCOPE OF WORK</b>	
1.	Annual comprehensive maintenance of three days duration.
2.	Eleven monthly inspections of one day duration each. The annual and monthly inspections will include: Adjustment, Setting and Lubrication.
3.	Correction of detected defects which result from normal wear & tear and replacing parts, if necessary to maintain the system for smooth functioning
4.	Installation/ updating of originally purchased software whenever made available by the manufacturer.
5.	Field modification, if any, recommended by the manufacturer to improve performance and reliability.
6.	Contractor shall also carry out necessary repairs, within the scope of this agreement, as and when required by the client. Furthermore, contractor shall provide support to operating staff of the equipment as and when considered necessary.
7.	The Employer is expected to make the equipment to be maintained, available on the agreed

	dates. In case the client can't meet this requirement, he is obliged to inform the contractor to this affect at least three days prior to the agreed date.
8.	Contractor shall also carry out necessary repairs including room renovation, air condition and electrical panel
9.	Log book will be maintained for equipment(s) to record every activity performed on the equipment including room maintenance & electrical works.
<b>SPARE PARTS</b>	
1.	Contractor shall maintain spare parts inventory at a level to meet 95% uptime guarantee.
2.	Import of all parts required during the service contract period will be consigned & and will be cleared by the contractor.
3.	Faulty part(s) will be returned to the Contractor after replacement by the new parts and proper functional status of the equipment will be attained to the satisfaction of end user and EME
<b>MISCELLANEOUS</b>	
1.	In case of any representation on part of contractor, the case shall be put before the "Committee for Grievances / Redressal Committee for Settlement of Dispute" who shall act as arbitrator and its decision shall be final.
2.	The Contractor has the right to terminate the service contract agreement, if the Employer does not make the payments according to the agreed schedule, within the 60 days of receiving the notice of such delayed payment.
3.	Employer as well has the right to terminate the contract if contractor fails to provide services as per contractual conditions, after being duly notified by the Employer in writing of its short comings and allowing reasonable time for remedial action.
<b>FORCE MAJEURE</b>	
1.	The Contractor agrees to perform all services in good faith. However, in the event of Force Majeure any party shall be entitled to suspend performance of obligations. Force Majeure shall be deemed to be any event or occurrence beyond a party's control, as a results of which said party is unable to comply with obligations or can't reasonably be required to do so and shall include acts of God, civil disturbance, wars, acts of public enemy, riots, strikes or work stoppages.
2.	In case of any dispute concerning the interpretation and application of Contract. It shall be settled through arbitration; the arbitrator will be appointed with mutual consent of both parties. The award rendered by the sole arbitrator shall be final and binding on the Parties.

**Signature of accepting officer /  
Competent Authority, PIMS  
Employer**

**For & behalf of Contractor**

Signature: - \_\_\_\_\_

Name: - \_\_\_\_\_

Designation: - \_\_\_\_\_

Signature: - \_\_\_\_\_

Name: - \_\_\_\_\_

Designation: - \_\_\_\_\_

Witness-1

Signature: - \_\_\_\_\_

Name: - \_\_\_\_\_

Designation: - \_\_\_\_\_

Witness-1

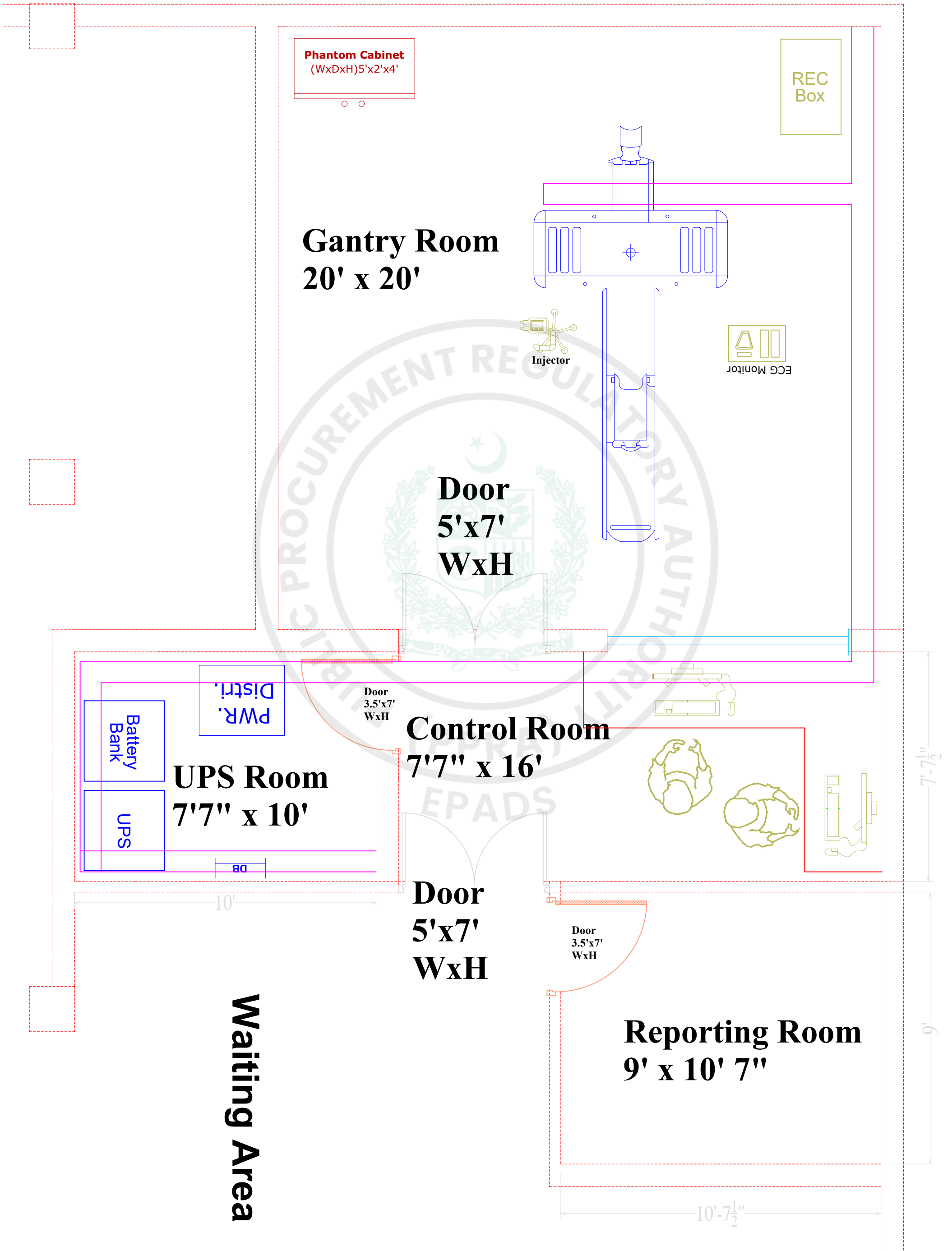
Signature: - \_\_\_\_\_

Name: - \_\_\_\_\_

Designation: - \_\_\_\_\_



# Cardiac & Stroke Center PIMS Islamabad CT Scanner Suit - Proposed Layout



The firm must provide undertaking (affidavit) of SLA (Service Level Agreement) for 8 years with parts as follows;

3rd year at rate of 3% of equipment quoted amount.

4th year at rate of 4% of equipment quoted amount.

5th year at rate of 5% of equipment quoted amount.

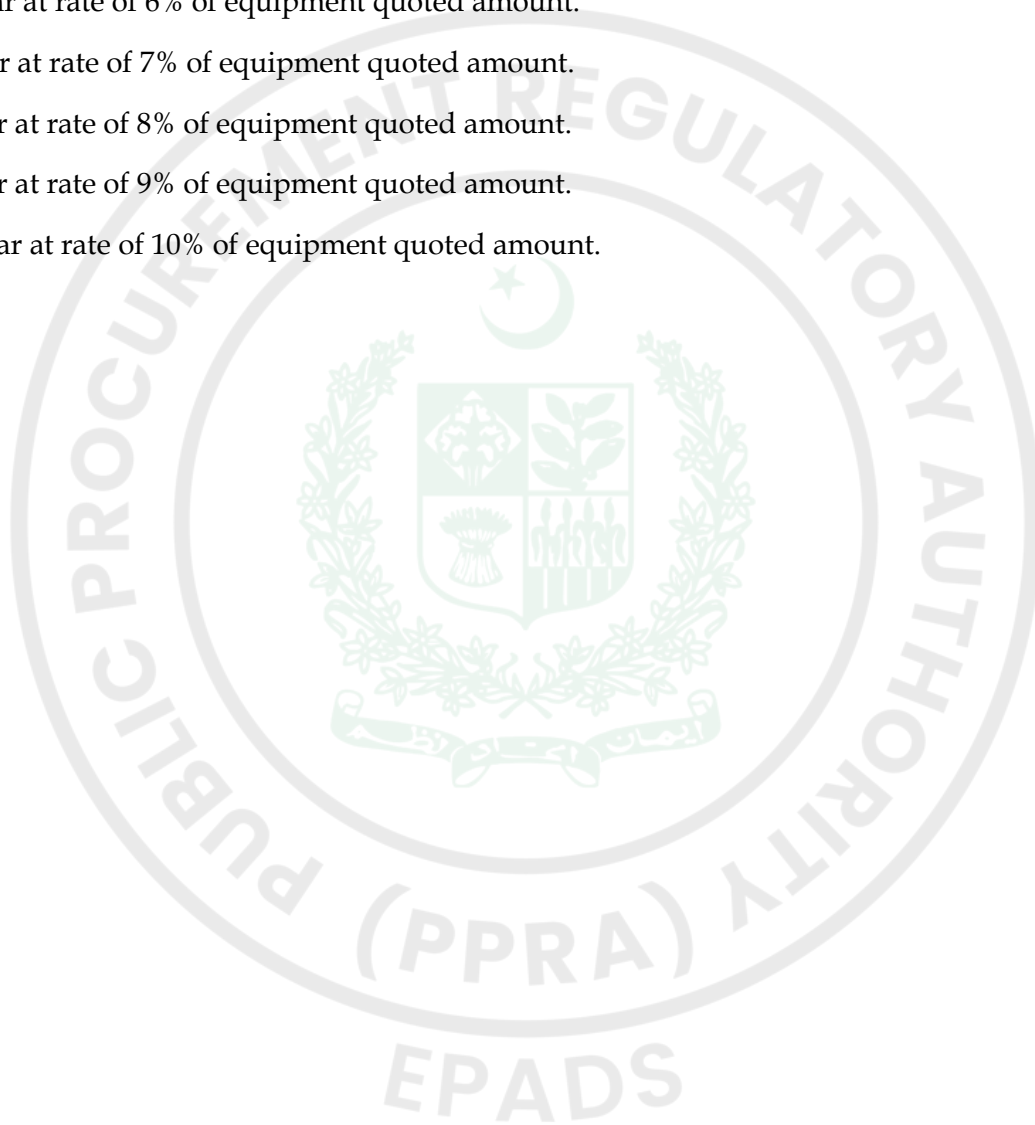
6th year at rate of 6% of equipment quoted amount.

7th year at rate of 7% of equipment quoted amount.

8th year at rate of 8% of equipment quoted amount.

9th year at rate of 9% of equipment quoted amount.

10th year at rate of 10% of equipment quoted amount.



**FINANCIAL BID PROFORMA**

<b>Equipment: -</b>	<b>Qty</b>	<b>Unit Cost inclusive of taxes in Pak Rupees</b>
<b>High End CT Scan machine for Stroke Powered by AI Software</b>	<b>01</b>	

**Optional Parts**

<b>Item</b>	<b>Unit Cost inclusive of taxes in Pak Rupees</b>
Multi-modality dose analyzer (fluke/piranha)	

**Optional item rate will not be a part to determine the successful/lowest bidder.**

