

Standard Bidding Document

Procurement of Testing Equipment for HV & SC Lab, NGC, Rawat and
Faisalabad
(Goods)

National

Single Stage-Two Envelope



April 01, 2026

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Table of Contents

Instructions to Bidders	3
Bid Data Sheet	23
Bids Data Sheet (BDS)	24
Eligibility Criteria	29
Evaluation Criteria	29
Items/Lots	29
Related Services of Goods:	34
Items/Lot Specification	36
Price Schedule	42
General Conditions of Contract	45
Special Conditions of Contract	56
Bid Securing Declaration	62
Contract Form	64
Integrity Pact	67
Performance Guarantee Form	69
Annexure	71
Technical Specifications	72
Procurement Forms	73
Past Experience and Completed Contracts	1
Historical Contract Non-Performance, and Pending Litigation and Litigation History	1
Financial Capacity and Net Worth Evaluation Form	1

Average Annual Turnover	1
Additional Forms and Documents	77

INVITATION TO BIDS PROCUREMENT OF GOODS

1. The **Chief Engineer (HV&SC) Lab. NGC, Rawat (NGC)** has reserved Funds for the procurement planned for FY **2025-26**. The **Chief Engineer (HV&SC) Lab. NGC, Rawat (NGC)** intends to apply part of the proceeds of this Fund to cover eligible payments under the contract for the "**Procurement of Testing Equipment for HV & SC Lab, NGC, Rawat and Faisalabad**".
2. The **Chief Engineer (HV&SC) Lab. NGC, Rawat (NGC)** 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 **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 **Tuesday, April 28, 2026 11:00 AM**. E-bids will be opened using **EPADS v2.0** on the same day at **Tuesday, April 28, 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).

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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		
1	1.1	<p>Name of Procuring Agency: Chief Engineer (HV&SC) Lab. NGC, Rawat (NGC)</p> <p>The subject of procurement is: Procurement of Testing Equipment for HV & SC Lab, NGC, Rawat and Faisalabad</p> <p>Expected commencement date: Thursday, May 7, 2026</p>
2.	2.1	<p>Financial year for the operations of the Procuring Agency: 2025-26</p> <p>Name and identification number of the Contract: P14921</p>
3.	3.1	<p>JV/Consortium or Association Allowed: Yes</p> <p>Number of JV/Consortium Members: 2</p> <p><i>see section of eligibility criteria.</i></p>
B. Bidding Documents		

4.	8.1	The Bidders may seek clarifications through EPADS v2.0 : Clarification Date: Monday, April 20, 2026
C. Preparation of Bids		



5.

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. Technical Requirements: a). Covering Letter
2. Technical Requirements: b). Complete specifications (schedule of technical data) with supporting documents, brochures of the offered items (if applicable).
3. Technical Requirements: c). Copies of original documents defining the constitution or legal status, place of registration and principal place of business. A list showing the location of head office along with those of branch offices.
4. Technical Requirements: d). Business Registration License along with copies of documents defining the constitution or legal status, place of registration, and principal place of business.
5. Technical Requirements: e). Written Power of Attorney, duly notarized, authorizing the signatory of the bid to act for and on behalf of the bidder.
6. Technical Requirements: f). Manufacturer's Authorization Certificate or Certificate of Dealership from the original manufacturer if the bidder is not itself the manufacturer of the offered items.
7. Technical Requirements: g). Authority to seek reference from the Bidder's banks.
8. Bidders must submit documentary evidence supporting eligibility. The bidder must be a manufacturer or supplier legally registered for at least 3 years, with a valid registration certificate. The bidder must also ensure clear

6.	11.1	<p>Items/Lots and therrre relateddocuments: <i>See section items and Lots</i></p>
7.	12.1	<p>Items / Lots Specifications: <i>see section of items specifications.</i></p>
8.	15.6	<p>The price shall be Fixed.</p>
9.	16.1	<p>Currency of the Bids shall be : PKR</p>
10.	17.1	<p>The Bids/Bid Validity period shall be: 100 Days</p>
11.	18.1	<p>The amount of Bid Security shall be as defined in Bid Security Section for items and lots given in BDS 6</p> <p>The Bid Security shall be in the form of: Call at Deposit</p>
<p>D. Submission of Bids</p>		
12.	20.1	<p>Bid shall be submitted online on EPADS v2.0 whereas hard copy of the bid security should be submitted to the following;</p> <p>Chief Engineer (HV&SC) Lab. NGC, Chakbeli Road, Rawat, Islamabad before bid submission deadline.</p> <p>Bids that are not submitted on EPADS v2.0 shall be disqualified.</p> <p>The deadline for Bids submission is: Tuesday, April 28, 2026 11:00 AM</p>

E. Opening and Evaluation of Bids

13.	23.1	The Bids opening shall take place on EPADS v2.0 Day : Tuesday Date: Tuesday, April 28, 2026 Time : 11:30 AM
14.	31.1	Selection technique adopted will be: Least Cost Based Selection (LCBS) <i>see Evaluation Criteria</i>
<h2>F. Review of Procurement Decisions</h2>		
15.	41.1	Grievence 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
Any	NADRA CITIZENSHIP (CNIC/NICOP) FBR (NTN) FBR (GSTN)

Evaluation Criteria

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

Least Cost Based Selection (LCBS)

Technical Marks	100
Passing Marks	100
Fulfill all the technical requirements	
Technically Responsive (Qualitative)(Doc Required)	100

Items/Lots

Items Without Lots :

Item	UNSPSC	Delivery Schedule	Quantity	Bid Security	Manufacturer / Dealer Authorization	Warranty
High performance liquid Chromatograph (HPLC) for Determination of 2-FAL as per IEC-61198:1993 & DBPC (Phenolic inhibitor) as per IEC-60666:2010	Liquid chromatography LC columns	Address: Chief Engineer (HV&SC) Lab. NGC, Chakbeli Road, Rawat, Islamabad Schedule: 120 Days Quantity: 1	1	690000	Any	2 Years
Micro Ohm Meter (0-600A DC) Output, 230 V model	Multimeters	Address: Chief Engineer (HV&SC) Lab. NGC, Chakbeli Road, Rawat, Islamabad Schedule: 60 Days Quantity: 1	1	231000	Any	2 Years
150 kV AC Source with DC Converter as per IEC 60060-1	Power supply units	Address: Chief Engineer (HV&SC) Lab. NGC, Chakbeli Road, Rawat, Islamabad Schedule: 60 Days Quantity: 1	1	300000	Any	2 Years

Item	UNSPSC	Delivery Schedule	Quantity	Bid Security	Manufacturer / Dealer Authorization	Warranty
STANDARD RESISTANCE as per IEC-60487	Resistor or capacitor R/C networks	Address: Chief Engineer (HV&SC) Lab. NGC, Chakbeli Road, Rawat, Islamabad Schedule: 60 Days Quantity: 1	1	37500	Any	2 Years
CLAMP ON AMPERE METER as per IEC-61326:1997	Current loop meter	Address: Chief Engineer (HV&SC) Lab. NGC, Chakbeli Road, Rawat, Islamabad Schedule: 60 Days Quantity: 1	1	10000	Any	2 Years
POWER ANALYZERS as per IEC 61326-1	Ammeters	Address: Chief Engineer (HV&SC) Lab. NGC, Chakbeli Road, Rawat, Islamabad Schedule: 60 Days Quantity: 1	1	25000	Any	2 Years

Item	UNSPSC	Delivery Schedule	Quantity	Bid Security	Manufacturer / Dealer Authorization	Warranty
DATA LOGGER (TEMPERATURE, HUMIDITY AND PRESSURE DATA LOGGER WITH BUILT-IN SENSORS) as per IEC 61326-1	Metal detectors	Address: Chief Engineer (HV&SC) Lab. NGC, Chakbeli Road, Rawat, Islamabad Schedule: 60 Days Quantity: 1	1	10000	Any	2 Years
Air Ageing Oven for Insulated Conductor and PVC / XLPE Cables as per IEC IEC-60811-1-2 & ISO-188	French pressure cells	Address: Chief Engineer (HV&SC) Lab. NGC, Chakbeli Road, Rawat, Islamabad Schedule: 60 Days Quantity: 1	1	200000	Any	2 Years
Digital Universal Tensile machine (100 Ton) with Extensometer as per ISO-6892 IEC-10002	Thread counters or gauges	Address: Chief Engineer (HV&SC) Lab. NGC, Chakbeli Road, Rawat, Islamabad Schedule: 60 Days Quantity: 1	1	240000	Any	2 Years

Item	UNSPSC	Delivery Schedule	Quantity	Bid Security	Manufacturer / Dealer Authorization	Warranty
Digital Horizontal Tensile Machine (50 -Ton) with Extensometer as per ISO-6892&IEC-10002	Track cables	Address: Chief Engineer (HV&SC) Lab. NGC, Chakbeli Road, Rawat, Islamabad Schedule: 60 Days Quantity: 1	1	250000	Any	2 Years
Combined Digital Hardness Machine as per ASTM E10 &18	Hardness testers	Address: Chief Engineer (HV&SC) Lab. NGC, Chakbeli Road, Rawat, Islamabad Schedule: 60 Days Quantity: 1	1	30000	Any	2 Years
Digital Micro Ohm Meter as per IEC-61010-1 & IEC-61236 and Clamping Device (Standard length scale)	Potentiometers	Address: Chief Engineer (HV&SC) Lab. NGC, Chakbeli Road, Rawat, Islamabad Schedule: 60 Days Quantity: 1	1	126000	Any	2 Years

Item	UNSPSC	Delivery Schedule	Quantity	Bid Security	Manufacturer / Dealer Authorization	Warranty
Data Acquisition System as per IEC 61010-1 and IEC-61326-1	Rulers	Address: Chief Engineer (HV&SC) Lab. NGC, Chakbeli Road, Rawat, Islamabad Schedule: 60 Days Quantity: 1	1	55000	Any	2 Years
CRM & Accessories for Spectrometers	Chemistry quality controls or calibrators or standards	Address: Chief Engineer (HV&SC) Lab. NGC, Chakbeli Road, Rawat, Islamabad Schedule: 60 Days Quantity: 1	1	60000	Any	2 Years

Related Services of Goods:

Yes

Item	UNSPSC	Related Services
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High performance liquid Chromatograph (HPLC) for Determination of 2-FAL as per IEC-61198:1993 & DBPC (Phenolic inhibitor) as per IEC-60666:2010	Liquid chromatography LC columns	Installation, Training, Configuration, etc.
Micro Ohm Meter (0-600A DC) Output, 230 V model	Multimeters	Installation, Training, Configuration, etc.
150 kV AC Source with DC Converter as per IEC 60060-1	Power supply units	Installation, Training, Configuration, etc.
STANDARD RESISTANCE as per IEC-60487	Resistor or capacitor R/C networks	Installation, Training, Configuration, etc.
CLAMP ON AMPERE METER as per IEC-61326:1997	Current loop meter	Installation, Training, Configuration, etc.
POWER ANALYZERS as per IEC 61326-1	Ammeters	Installation, Training, Configuration, etc.
DATA LOGGER (TEMPERATURE, HUMIDITY AND PRESSURE DATA LOGGER WITH BUILT-IN SENSORS) as per IEC 61326-1	Metal detectors	Installation, Training, Configuration, etc.
Air Ageing Oven for Insulated Conductor and PVC / XLPE Cables as per IEC IEC-60811-1-2 & ISO-188	French pressure cells	Installation, Training, Configuration, etc.
Digital Universal Tensile machine (100 Ton) with Extensometer as per ISO-6892 IEC-10002	Thread counters or gauges	Installation, Training, Configuration, etc.
Digital Horizontal Tensile Machine (50 -Ton) with Extensometer as per ISO-6892&IEC-10002	Track cables	Installation, Training, Configuration, etc.

Combined Digital Hardness Machine as per ASTM E10 &18	Hardness testers	Installation, Training, Configuration, etc.
Digital Micro Ohm Meter as per IEC-61010-1 & IEC-61236 and Clamping Device (Standard length scale)	Potentiometers	Installation, Training, Configuration, etc.
Data Acquisition System as per IEC 61010-1 and IEC-61326-1	Rulers	Installation, Training, Configuration, etc.
CRM & Accessories for Spectrometers	Chemistry quality controls or calibrators or standards	Installation, Training, Configuration, etc.

Items/Lot Specification

Items Without Lots :

Item: High performance liquid Chromatograph (HPLC) for Determination of 2-FAL as per IEC-61198:1993 & DBPC (Phenolic inhibitor) as per IEC-60666:2010

UNSPSC: Liquid chromatography LC columns

Specifications / Requirements:

Specifications: ■ Gradient or isocratic high pressure Quaternary Pumping system ■ Injection device capable of injecting 10-20 µl sample or injecting loop ■ Diode array UV detector (wavelength range 190nm to 300 700nm) ■ Data acquisition system with suitable software ■ Compatible PC & printer
 Chemicals/Accessories: ■ Reverse phase column packed with octyl or octa decyl bonded silica and a similar pre-column ■ Column for DBPC: 3.9mm x 300mm C18 column having thickness of 5µm ■ Silica cartridges (having 0.6g-1g silica) ■ 25ml glass stoppered graduated cylinder ■ HPLC grade (5.0 L each): ❖ Water ❖ Acetonitrile ❖ Methanol ❖ Acetic acid (Standards of 98-99% purity) 2-Acetyl furan (2-ACF) (Standards of 98-99% purity) 2-Furan (2-FAL) (Standards of 98-99% purity) 2-Furfural(2-FOL) (Standards of 98-99% purity) 5-Hydroxymethyl-2-furfural(5-HMF) 5-Methyl-2-furfural (5-

MEF) (Standards of 98-99% purity) 2,6-ditertiarybutylpara-cresol (DBPC)(Standards of 98-99% purity)

Item: Micro Ohm Meter (0-600A DC) Output, 230 V model

UNSPSC: Multimeters

Specifications / Requirements:

Environment Application field: The instrument is intended for use in high-voltage substations and industrial environments
Temperature Operating: 0°C to +50°C (32°F to +122°F) Storage & transport: -40°C to +70°C (-40°F to +158°F) Humidity: 5% - 95% RH, non-condensing CE MARKING LVD: 2014/35/EU EMC: 2014/30/EU Environment Application field: The instrument is intended for use in high-voltage substations and industrial environments Temperature Operating: 0°C to +50°C (32°F to +122°F) Storage & transport: -40°C to +70°C (-40°F to +158°F) Humidity: 5% - 95% RH, non-condensing CE MARKING LVD: 2014/35/EU EMC: 2014/30/EU RoHS: 2011/65/EU General Mains voltage: 230 V AC, 50 / 60 Hz Power consumption (Max): 230 V, 7360 VA Protection: Miniature circuit breakers, thermal cut-outs Current cables: 2 x 10 m (30 ft), 70 mm² Sensing cables: 2 x 10 m (16 ft), 2.5 mm² Measurement section Resistance Range: 0 - 1999 μΩ Resolution: 1 μΩ Inaccuracy: ± 1% of reading +1 digit (at 100 - 600 A test current) Output, 230 V model Current: 0 - 600 A DC Open circuit voltage: 9 V DC Current shunt output: 10 mV / 100 A ±0.5%, max 60 mV, Out, max 10 V to protective earth (ground) Max. Load capacity, 230 V model Current adjustment set to 100% Output current Min Output voltage Maxload time Rest time Input current 100 A DC 8.3 V - - 6 A 300 A DC 7.2 V 2.5 min 15 min 16 A 600 A DC 5.6 V 15 s 5 min 32 A

Item: 150 kV AC Source with DC Converter as per IEC 60060-1

UNSPSC: Power supply units

Specifications / Requirements:

a) Max AC/DC Voltage: 150 kV b) Maximum system rating: 30kVA (200mA maximum current at 150kV AC output). Higher rating has been suggested in contrast with existing system of 5kVA capacity. c) Transformer type: Insulation oil immersed, suitable for operation over long test durations d) With HV Protective resistor and Voltage Divider to measure true Primary side voltage e) Automatic Digital Control Panel with Push button controls to set desired voltage f) Over voltage and over current protection. Has

option to set "test time limit" as well g) Digital display of Voltage and Current h) Input Voltage: 0-220V/380V i) Output voltage adjustable from 0 to 150kV

Item: STANDARD RESISTANCE as per IEC-60487

UNSPSC: Resistor or capacitor R/C networks

Specifications / Requirements:

- AC- Current 2000 A
- Reliably handle a wide range of high-current applications with 2000 A AC + DC
- CAT IV 600 V, CAT III 1000 V rating for added user protection
- High voltage measurement of 1000 V AC + DC True RMS, 600 V AC, and 1000 V DC
- Quickly analyze readings using the MIN, MAX, and AVG functions
- Resistance to 400K ohms coupled with a continuity beeper provides the convenience of a multimeter in a clamp meter.
- Accurately measure frequency up to 1 kHz for optimum troubleshooting

Item: CLAMP ON AMPERE METER as per IEC-61326:1997

UNSPSC: Current loop meter

Specifications / Requirements:

- 10 m Ω , 1 Ω , 10 Ω , 100 Ω , 1M Ω

Item: POWER ANALYZERS as per IEC 61326-1

UNSPSC: Ammeters

Specifications / Requirements:

- Voltage (TRMS AC+DC): 2 V to 1000 V
- Number of channels: 3U / 4I
- Number of inputs: 4V / 3I
- Current ratio: upto 60 kA
- Voltage ratio: Up to 500 kV
- Harmonic function: Yes
- Operating Frequency: 50 Hz
- Operating Temperature: -10 0C to 50 0C
- Display: Colour ¼ VGA TFT screen (320 × 240) — easy to read real-time waveforms.
- Communication: USB interface for data download and PC analysis.
- Battery & Power: Rechargeable battery (~10-13 h), plus mains adaptor option

Item: DATA LOGGER (TEMPERATURE, HUMIDITY AND PRESSURE DATA LOGGER WITH BUILT-IN SENSORS) as per IEC 61326-1

UNSPSC: Metal detectors

Specifications / Requirements:

- Data logger should record temperature, humidity and atmospheric pressure.
- Operating temperature range:
- Upper limit: +55°C.
- Lower limit: -30°C.
- Accuracy: $\pm 0.5^{\circ}\text{C}$
- Operating ambient humidity range 0 to 90% relative humidity (non-condensing).
- Memory: EPROM or equivalent non-volatile solid-state memory
- The LCD may show all this information together on the display
- Communication interfaces - USB, GSM modem

Item: Air Ageing Oven for Insulated Conductor and PVC / XLPE Cables as per IEC IEC-60811-1-2 & ISO-188

UNSPSC: French pressure cells

Specifications / Requirements:

- Temperature range: " ambient +5 to 300C0 "
- Programmable ventilation flab
- Color LCD display,
- Visual alarm in case of problem
- Floor standing
- Temp variation at 150C0 should be 1.0C0,
- Heating up time should be less than 30 min
- Stainless steel rack with clip attachment x 2,
- Sample capacity per rack 50 pcs or more,
- Power requirement single phase/ 3 phase 50 Hz,
- Sine wave UPS with dry batteries for backup of min 2 hours,
- Capacity 14 cu. ft. or more.
- Sound in operating condition should be less than 70 db.
- Automatic switch off on desired time

Item: Digital Universal Tensile machine (100 Ton) with Extensometer as per ISO-6892 IEC-10002

UNSPSC: Thread counters or gauges

Specifications / Requirements:

- Maximum Load Capacity: 100 Ton / 1000 kN (Tension, Bending & compression) with safe overload protection.
- Load Range: 2% to 100% of full scale (or better).
- Load Accuracy: $\pm 0.5\%$ or $\pm 1\%$ of reading value (preferably better class 0.5).
- Load Resolution /

Resolution of Load Cell: $\geq 1/300,000$. • Deformation Range: 2% to 100% of full scale. • Displacement Resolution: 0.01 mm or better. • Crosshead Travel Range: Minimum 250 mm (customizable). • UTM shall be a floor-standing hydraulic or servo-hydraulic system • Closed-loop servo or electro-hydraulic control with programmable test profiles. • Adjustable crosshead/piston speed (stepless). • Max. Tension test space: Approx. 650-1000 mm (or customized). • Max. Compression test space: Approx. 500-800 mm. • Effective frame width (between columns): ~440-500 mm (min). • Frame Type: Four or six-column heavy duty welded steel design • PC-based controller with USB/Ethernet interface. • Power Supply: 3-phase 400-440 V, 50 Hz (or as per local requirements). • Operating Temperature: 10-40°C; relative humidity up to $\leq 80\%$.

Item: Digital Horizontal Tensile Machine (50 -Ton) with Extensometer as per ISO-6892&IEC-10002

UNSPSC: Track cables

Specifications / Requirements:

• Maximum Load Capacity: 50 Ton (500 kN) minimum • Accuracy Class: Class 1 or better as per ISO 7500-1 • Load Measurement Range: 2% to 100% of full scale • Load Resolution: Minimum $1/300,000$ of full scale • Overload Protection: Minimum 110% of rated capacity • High precision strain-gauge load cell • 15 meter bed for conductor testing • Hydraulic wedge grips preferred • Capable of holding round specimens (minimum \varnothing 10-40 mm) • Self-aligning mechanism to minimize bending stresses • Quick grip changeover system • Anti-slip jaw design for deformed rebars Extensometer (Mandatory) The system shall be supplied with a compatible extensometer with the following minimum features: • Type: Clip-on or automatic extensometer • Gauge Length: 50 mm (or interchangeable gauge lengths) • Strain Measurement Range: Minimum 20% strain • Accuracy: $\pm 1\%$ of reading or better • Resolution: High precision digital output • Automatic removal or protection at specimen break • Fully integrated with software for: o Young's Modulus calculation o Yield Strength determination (0.2% offset method) o Elongation measurement The system shall include a PC-based digital control and data acquisition system with: • Real-time display of: o Load o Displacement o Stress o Strain • Graphical display: o Stress-Strain curve o Load-Displacement curve

Item: Combined Digital Hardness Machine as per ASTM E10 &18

UNSPSC: Hardness testers

Specifications / Requirements:

• Separate lens/scale for HRC, BHN & Rockwell • Rockwell Load Range: 60 kgf, 100 kgf, 150 kgf • Rockwell Scales: HRA, HRB, HRC, etc. • Brinell Load Range: 30 kgf – 187.5 kgf • Brinell Scales: HBW1/30, HBW2.5/31.25, etc. • Vickers Scales: HV30, HV100 • Display Resolution: ≤ 0.1 HR / 0.1 HB / 0.1 HV • Indenter Types: Diamond cone, tungsten carbide balls $\varnothing 1.588$ mm / $\varnothing 2.5$ mm / $\varnothing 5$ mm depending on test method. Measurement & Operational Features • Automatic Force Application: Controlled loading, dwell and unloading (to reduce operator error). • Statistics and Memory: Store multiple test values, provide average, min, max, reporting. • Conversion & Reporting: Hardness conversion between scales, built-in or software output, print capabilities. • Calibration: Capability for periodic calibration with standard hardness blocks. • Environmental: Operating temperature typically 10–35 °C, humidity 85 %. Optional & Advanced Features • Touchscreen Interface: For easier scale selection and result navigation. • Bluetooth / Wireless Printer: For on-site printing and wireless data transfers. • PC Software Integration: To generate detailed test reports, graphs & statistics. • CCD / Automated Measurement: High-precision optical measurement with digital image capture.

Item: Digital Micro Ohm Meter as per IEC-61010-1 & IEC-61236 and Clamping Device (Standard length scale)

UNSPSC: Potentiometers

Specifications / Requirements:

• Range: 3m Ω to 30k Ω • Resolution: 100 n Ω • Auto Temperature compensation • Current Range: 10 μ A to 10A with auto selection • Accuracy: 0.03% max. • Data logging with statistical analysis • RS-232 Interface • Display LCD graphics panel • Working temperature 0°C to 45°C • Humidity: 80% Maximum • Storage temperature -20°C to +60°C • Supply voltage: 230V +10% • Frequency: 50 Hz • Safety Standard: IEC 61010-1 • Measurement Length: 1000mm • Clamping device: 1mm² to 1500mm² • Adjustable clamping support • Maximum clamp torque: 15 Nm

Item: Data Acquisition System as per IEC 61010-1 and IEC-61326-1

UNSPSC: Rulers

Specifications / Requirements:

1.Measurement Performance AC/DC Volts • Range: 100 mV to 300 V • Resolution: 0.1µV to 1MV • Accuracy: ±0.1 % Resistance • Range: 100 Ω to 100 MΩ • Resolution: 0.1 m Ω to 100 Ω • Accuracy: ± 0.1 % Temperature measurement • Range: -50 0C to 400 0C • Resolution: 0.01 0C • Accuracy: ± 0.1 % 2.Input Module Options Connection Type: Universal (Thermocouples, RTDs, V, I) Best PRT Accuracy±0.02 °C Best TC Accuracy±0.5 °C Channel Capacity: up to 40 3.Data Security & Memory • Internal Storage: Capacity for 20,000,000 data points. • USB Port: For easy data export via CSV or image files. • Security: Features "Data Secure" mode to prevent unauthorized tampering 4.System Interface • Display: 6.5-inch color VGA display with multi-channel graphing capabilities. • Connectivity: LAN& USB, • Software Support: Fully compatible with PC

Item: CRM & Accessories for Spectrometers

UNSPSC: Chemistry quality controls or calibrators or standards

Specifications / Requirements:

Metal (Cu/Al/Fe) CRM for internal calibration of spectrometer (01 each) • Copper Standard SUS RC 11/4 • Copper Standard SUS RC 14/17 • Copper Standard SUS RC 32/26 • Copper Standard SUS RC 40/19 • Vacuum Oil 1/2 liter Metal (Cu/Al/Fe) CRM for internal calibration of spectrometer (01 each) • Copper standards BS 110 A or its alternate • Brass standards BS 464 B • Brass standards BS 360 C • Al-bronze Standards BS 623 • Bronze Standards BS 642 C • Al-Si-Mg Standard G25 D-3T • Bronze Nitrate Disk - 5mm • Bronze Nitrate Disk - 8mm

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
1	[Lot 1 Title]		







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
GCC 1	<p>Definitions</p> <p>The Procuring Agency is: Chief Engineer (HV&SC) Lab. NGC, Rawat (NGC), Chief Engineer (HV&SC) Lab. NGC, Rawat Chief Engineer (HV&SC) Lab. NGC, Chakbeli Road, Rawat, Islamabad</p> <p>The Supplier is:</p> <p>The title of the subject procurement is: Procurement of Testing Equipment for HV & SC Lab, NGC, Rawat and Faisalabad</p>
GCC 3	<p>Applicable/Governing Law:</p> <p>The Contract shall be interpreted in accordance with the laws of Islamic Republic of Pakistan</p>
GCC 4	<p>Language:</p> <p>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.</p>

<p>GCC 5</p>	<p>Notices:</p> <p>The addresses for the notices are:</p> <p>Procuring Agency:</p> <p>Chief Engineer (HV&SC) Lab. NGC, Rawat (NGC), Chief Engineer (HV&SC) Lab. NGC, Rawat Chief Engineer (HV&SC) Lab. NGC, Chakbeli Road, Rawat, Islamabad +92-335-740-1286 cehvsc@ntdc.com.pk</p> <p>Contractor/ Bidder:</p> <p>[Name, address and telephone number].</p> <p>The Contractor/ Bidder’s Representative(s)</p> <p>[Name, address, telephone number and e-mail address]</p>
<p>GCC 7.1</p>	<p>The Authorized Representatives are:</p> <p>For the Procuring Agency:</p> <p>Chief Engineer (HV&SC) Lab. NGC, Rawat (NGC), Chief Engineer (HV&SC) Lab. NGC, Rawat Chief Engineer (HV&SC) Lab. NGC, Chakbeli Road, Rawat, Islamabad +92-335-740-1286 cehvsc@ntdc.com.pk</p> <p>For the Bidder:</p> <p>Name:</p> <p>Designation:</p> <p>Address:</p>
<p>GCC 8</p>	<p>Effectiveness of the contract</p>
<p>GCC 9</p>	<p>Commencement of Contract:</p>
<p>GCC 11.2</p>	<p>Expiration of Contract:</p>

<p>GCC 15</p>	<p>Termination</p> <p>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.</p>
<p>GCC 17</p>	<p>Conflict of Interest:</p> <p>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.</p>
<p>GCC 22</p>	<p>Liquidated Damages</p> <p>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.</p>
<p>GCC 23</p>	<p>Performance Guarantee:</p> <p>The amount of performance guarantee shall be 10.00% of the contract price in acceptable form of Bank Guarantee</p>
<p>GCC 32</p>	<p>Payment terms:</p> <p>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.</p>
<p>GCC 33</p>	<p>Currency of Payment:</p> <p>All the payment to be released to the contractor/Bidder shall be in Pakistani Rupees.</p>

GCC 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

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.: **P14921**

To: **Chief Engineer (HV&SC) Lab. NGC, Rawat (NGC), Chief Engineer (HV&SC) Lab. NGC, Rawat Chief Engineer (HV&SC) Lab. NGC, Chakbeli Road, Rawat, Islamabad**

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 **Chief Engineer (HV&SC) Lab. NGC, Rawat (NGC), Chief Engineer (HV&SC) Lab. NGC, Rawat Chief Engineer (HV&SC) Lab. NGC, Chakbeli Road, Rawat, Islamabad**

(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., **Procurement of Testing Equipment for HV & SC Lab, NGC, Rawat and Faisalabad (P14921)** 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: **Chief Engineer (HV&SC) Lab. NGC, Rawat (NGC), Chief Engineer (HV&SC) Lab. NGC, Rawat**
Chief Engineer (HV&SC) Lab. NGC, Chakbeli Road, Rawat, Islamabad

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

[name of bank or financial institution]

[address]

[date]



Annexure

Technical Specifications

Technical specifications of the required items are attached.

Upload Document

Document Required

See Form Under Additional Forms and Documents: **Technical Specifications** (page number: 78)





Procurement Forms

Past Experience and Completed Contracts

Manufacturing / Supply Experience Criteria:

- i. To be awarded a contract, the bidders/manufacturers must have at least 3 years of experience in the manufacturing / supply of similar goods. Details in this regard should be submitted in the prescribed format given in QF-2, Section-V.
- ii. The bidder, other than the manufacturer, must have authorized distribution rights from the manufacturer.
- iii. The bidder must have completed similar contract(s) of supply within the last three years. The bidder must submit with the bid the supply record for the last three years.
- iv. For verification of the past performance, the seller shall submit 03 copies of the contract agreement for the goods indicated in the supply record of the Bidder pertaining to the specified and comparable equipment.
- v. The bidder must be a taxpayer; tax returns for the last three years must be submitted with the bid.

See Form Under Additional Forms and Documents: **Past Experience and Completed Contracts** (page number: 87)

Historical Contract Non-Performance, and Pending Litigation and Litigation History

Litigation History:

Bidders are requested to submit details of all litigation, arbitration, and other claims, whether pending, threatened, or resolved in the last three (03) years. The Purchaser may disqualify Bidders in the event that the total amount of pending or threatened litigation, arbitration, or other claims represents twenty-five percent (25%) of the Bidder's net worth. Details in this regard should be submitted in the prescribed format given in QF-11, Section-V. The qualification of the Bidders will be based on meeting the minimum pass/fail criteria as demonstrated by the Bidders' responses in the corresponding schedules and forms. The above-stated requirements are a minimum, and the Purchaser reserves the right to request any additional information. The Purchaser also reserves the right to reject the proposal of any Bidder if, in the opinion of the Purchaser, the qualification details are incomplete or ambiguous or the Bidder is found not qualified to satisfactorily perform the contract.

See Form Under Additional Forms and Documents: **Historical Contract Non-Performance, and Pending Litigation and Litigation History** (page number: 88)

Financial Capacity and Net Worth Evaluation Form

Copies of financial statements(balance sheets including all related notes and income statements) for the last three years (2023-2025) complying with the following conditions.

- All such documents reflect the financial situation of the bidder and not sister or parent companies.
- Historic financial statements must be audited by a certified accountant.

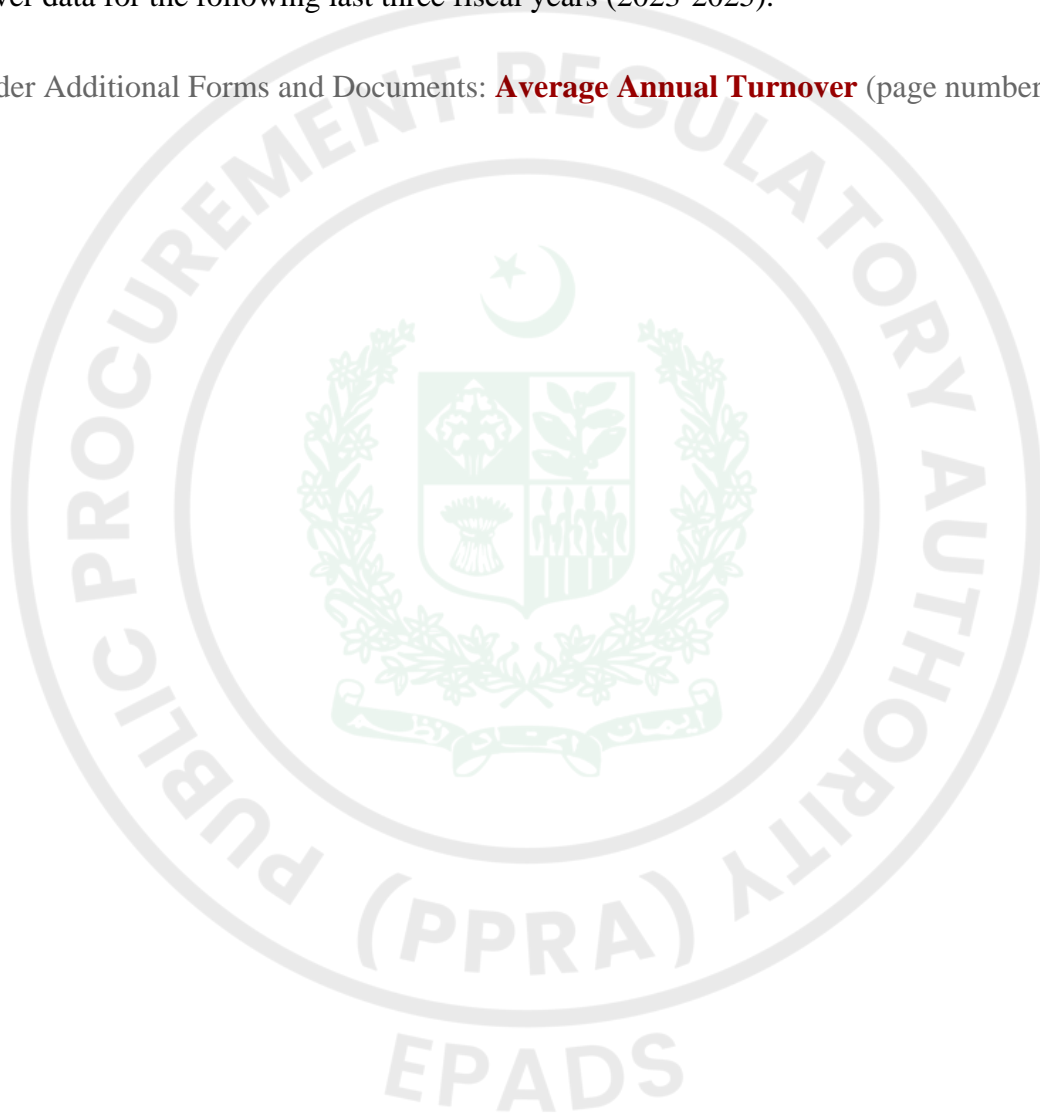
- Historic financial statements must be complete, including all notes to the financial statements.
- Historic financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted).

See Form Under Additional Forms and Documents: **Financial Capacity and Net Worth Evaluation Form** (page number: 90)

Average Annual Turnover

Annual turnover data for the following last three fiscal years (2023-2025).

See Form Under Additional Forms and Documents: **Average Annual Turnover** (page number: 92)







Additional Forms and Documents

TECHNICAL SPECIFICATIONS

S.No.	Name of equipment	Specification	Remarks
1.	High performance liquid Chromatograph (HPLC) for Determination of 2-FAL as per IEC-61198:1993 & DBPC (Phenolic inhibitor) as per IEC-60666:2010	<p>Specifications:</p> <ul style="list-style-type: none"> ▪ Gradient or isocratic high-pressure Quaternary Pumping system ▪ Injection device capable of injecting 10-20 µl sample or injecting loop ▪ Diode array UV detector (wavelength range 190nm to 300-700nm) ▪ Data acquisition system with suitable software ▪ Compatible PC & printer <p>Chemicals/Accessories:</p> <ul style="list-style-type: none"> ▪ Reverse phase column packed with octyl or octa decyl bonded silica and a similar pre-column ▪ Column for DBPC: 3.9mm x 300mm C18 column having thickness of 5µm ▪ Silica cartridges (having 0.6g-1g silica) ▪ 25ml glass stoppered graduated cylinder ▪ HPLC grade (5.0 L each): <ul style="list-style-type: none"> ❖ Water ❖ Acetonitrile ❖ Methanol ❖ Acetic acid <p>2-Acetyl furan (2-ACF) 2-Furan (2-FAL) 2-Furfural(2-FOL) 5-Hydroxymethyl-2-furfural(5-HMF) 5-Methyl-2-furfural (5-MEF) 2,6-ditertiarybutylpara-cresol (DBPC)</p>	Standards of 98-99% purity
2.	MICRO OHM METER (0-600A DC)	<p>Environment</p> <p>Application field: The instrument is intended for use in high-voltage substations and industrial environments</p> <p>Temperature Operating: 0°C to +50°C (32°F to +122°F)</p> <p>Storage & transport: -40°C to +70°C (-40°F to +158°F)</p> <p>Humidity: 5% – 95% RH, non-condensing</p> <p>CE MARKING</p> <p>LVD: 2014/35/EU EMC: 2014/30/EU RoHS: 2011/65/EU</p> <p>General</p>	

Mains voltage: 230 V AC, 50 / 60 Hz
 Power consumption (Max): 230 V, 7360 VA
 Protection: Miniature circuit breakers, thermal cut-outs
 Current cables: 2 x 10 m (30 ft), 70 mm²
 Sensing cables: 2 x 10 m (16 ft), 2.5 mm²

Measurement section

Resistance

Range: 0 – 1999 μΩ
 Resolution: 1 μΩ
 Inaccuracy: ± 1% of reading +1 digit (at 100 – 600 A test current)

Output, 230 V model

Current: 0 – 600 A DC
 Open circuit voltage: 9 V DC
 Current shunt output: 10 mV / 100 A ±0.5%, max 60 mV, Out, max 10 V to protective earth (ground)

Max. Load capacity, 230 V model

Current adjustment set to 100%

Output current	Min Output voltage	Max load time	Rest time	Input current
100 A DC	8.3 V	-	-	6 A
300 A DC	7.2 V	2.5 min	15 min	16 A
600 A DC	5.6 V	15 s	5 min	32 A

3.

150 kV AC Source with DC Converter as per IEC 60060-1

- a) Max AC/DC Voltage: 150 kV
- b) Maximum system rating: 30kVA (200mA maximum current at 150kV AC output). Higher rating has been suggested in contrast with existing system of 5kVA capacity.
- c) Transformer type: Insulation oil immersed, suitable for operation over long test durations
- d) With HV Protective resistor and Voltage Divider to measure true Primary side voltage
- e) Automatic Digital Control Panel with Push button controls to set desired voltage
- f) Over voltage and over current protection. Has option to set "test time limit" as well
- g) Digital display of Voltage and Current

Accessories:

1. Manual
2. Thermal printer
3. Calibration certificate from manufacturer & PNAC Accredited calibration lab

		<p>h) Input Voltage: 0-220V/380V</p> <p>i) Output voltage adjustable from 0 to 150kV</p>	
4.	CLAMP ON AMPERE METER as per IEC 61326:1997	<ul style="list-style-type: none"> AC- Current 2000 A Reliably handle a wide range of high-current applications with 2000 A AC + DC CAT IV 600 V, CAT III 1000 V rating for added user protection High voltage measurement of 1000 V AC + DC True RMS, 600 V AC, and 1000 V DC Quickly analyze readings using the MIN, MAX, and AVG functions Resistance to 400K ohms coupled with a continuity beeper provide the convenience of a multimeter in a clamp meter. Accurately measure frequency up to 1 kHz for optimum troubleshooting 	<p>Accessories:</p> <ol style="list-style-type: none"> Manual Thermal printer Calibration certificate from manufacturer & PNAC Accredited calibration lab
5.	STANDARD RESISTANCE as per IEC 60487	<ul style="list-style-type: none"> 10 mΩ, 1 Ω, 10 Ω, 100 Ω, 1M Ω 	<p>Accessories:</p> <ol style="list-style-type: none"> Manual Calibration certificate from manufacturer & PNAC Accredited calibration lab
6.	POWER ANALYZERS As per IEC 61326-1	<ul style="list-style-type: none"> Voltage (TRMS AC+DC): 2 V to 1000 V Number of channels: 3U / 4I Number of inputs: 4V / 3I Current ratio: upto 60 kA Voltage ratio: Up to 500 kV Harmonic function: Yes Operating Frequency: 50 Hz Operating Temperature: -10 °C to 50 °C Display: Colour ¼ VGA TFT screen (320 × 240) — easy to read real-time waveforms. Communication: USB interface for data download and PC analysis. 	<p>Accessories:</p> <ol style="list-style-type: none"> Manual Thermal printer /equipment internal printer Calibration certificate from manufacturer

		<input type="checkbox"/> Battery & Power: Rechargeable battery (~10–13 h), plus mains adaptor option	
7.	DATA LOGGER (TEMPERATURE, HUMIDITY AND PRESSURE DATA LOGGER WITH BUILT-IN SENSORS) as per IEC 61326-1	<ul style="list-style-type: none"> • Data logger should record temperature, humidity and atmospheric pressure. • Operating temperature range: • Upper limit: +55°C. • Lower limit: -30°C. • Accuracy: ±0.5°C • Operating ambient humidity range 0 to 90% relative humidity (non-condensing). • Memory: EPROM or equivalent non-volatile solid-state memory • The LCD may show all this information together on the display • Communication interfaces - USB, GSM modem 	Accessories: 1. Manual 2. Calibration certificate from manufacturer & PNAC Accredited calibration lab
8.	Air Ageing Oven for Insulated Conductor and PVC / XLPE Cables as per IEC IEC-60811-1-2 ISO-188	<ul style="list-style-type: none"> • Temperature range: " ambient +5 to 300C⁰ " • Programmable ventilation flap • Color LCD display, • Visual alarm in case of problem • Floor standing • Temp variation at 150C⁰ should be 1.0C⁰, • Heating up time should be less than 30 min • Stainless steel rack with clip attachment x 2, • Sample capacity per rack 50 pcs or more, • Power requirement single phase/ 3 phase 50 Hz, • Sine wave UPS with dry batteries for backup of min 2 hours, • Capacity 14 cu. ft. or more. • Sound in operating condition should be less than 70 db. • Automatic switch off on desired time 	Accessories: 1. Manual 3. Calibration certificate from manufacturer & PNAC Accredited calibration lab
9.	Digital Universal Tensile machine (100 Ton) with	<ul style="list-style-type: none"> • Maximum Load Capacity: 100 Ton / 1000 kN (Tension, Bending & compression) with safe overload protection. 	Accessories: 1. Manual

	<p>Extensometer as per ISO-6892 IEC-10002</p>	<ul style="list-style-type: none"> • Load Range: 2% to 100% of full scale (or better). • Load Accuracy: ±0.5% or ±1% of reading value (preferably better class 0.5). • Load Resolution / Resolution of Load Cell: ≥1/300,000. • Deformation Range: 2% to 100% of full scale. • Displacement Resolution: 0.01 mm or better. • Crosshead Travel Range: Minimum 250 mm (customizable). • UTM shall be a floor-standing hydraulic or servo-hydraulic system • Closed-loop servo or electro-hydraulic control with programmable test profiles. • Adjustable crosshead/piston speed (stepless). • Max. Tension test space: Approx. 650–1000 mm (or customized). • Max. Compression test space: Approx. 500–800 mm. • Effective frame width (between columns): ~440–500 mm (min). • Frame Type: Four or six-column heavy duty welded steel design • PC-based controller with USB/Ethernet interface. • Power Supply: 3-phase 400-440 V, 50 Hz (or as per local requirements). • Operating Temperature: 10–40°C; relative humidity up to ≤80%. 	<ol style="list-style-type: none"> 2. 10 kN Load Cell for internal calibration 3. Tool Kit 4. Calibration certificate from manufacturer
<p>10.</p>	<p>Digital Horizontal Tensile Machine (50 –Ton) with Extensometer as per ISO-6892&IEC-10002</p>	<ul style="list-style-type: none"> • Maximum Load Capacity: 50 Ton (500 kN) minimum • Accuracy Class: Class 1 or better as per ISO 7500-1 • Load Measurement Range: 2% to 100% of full scale • Load Resolution: Minimum 1/300,000 of full scale • Overload Protection: Minimum 110% of rated capacity • High precision strain-gauge load cell 	<p>Accessories:</p> <ol style="list-style-type: none"> 1. Manual 2. 10 kN Load Cell for internal calibration 3. Tool Kit 5. Calibration certificate from manufacturer

- 15-meter bed for conductor testing
- Hydraulic wedge grips preferred
- Capable of holding round specimens (minimum \varnothing 10–40 mm)

Self-aligning mechanism to minimize bending stresses

Quick grip changeover system

Anti-slip jaw design for deformed rebars

Extensometer (Mandatory)

The system shall be supplied with a compatible extensometer with the following minimum features:

- Type: Clip-on or automatic extensometer
- Gauge Length: 50 mm (or interchangeable gauge lengths)
- Strain Measurement Range: Minimum 20% strain
- Accuracy: $\pm 1\%$ of reading or better
- Resolution: High precision digital output
- Automatic removal or protection at specimen break
- Fully integrated with software for:
 - Young's Modulus calculation
 - Yield Strength determination (0.2% offset method)
 - Elongation measurement

The system shall include a PC-based digital control and data acquisition system with:

- Real-time display of:
 - Load
 - Displacement
 - Stress
 - Strain
- Graphical display:
 - Stress–Strain curve
 - Load–Displacement curve

11.

Combined Digital Hardness Machine as per ASTM E10&18

- Separate lens/scale for HRC, BHN & Rockwell
- Rockwell Load Range: 60 kgf, 100 kgf, 150 kgf
- Rockwell Scales: HRA, HRB, HRC, etc.
- Brinell Load Range: 30 kgf – 187.5 kgf
- Brinell Scales: HBW1/30, HBW2.5/31.25, etc.
- Vickers Scales: HV30, HV100
- Display Resolution: ≤ 0.1 HR / 0.1 HB / 0.1 HV
- **Indenter Types:** Diamond cone, tungsten carbide balls $\varnothing 1.588$ mm / $\varnothing 2.5$ mm / $\varnothing 5$ mm depending on test method.

Measurement & Operational

Features

- **Automatic Force Application:** Controlled loading, dwell and unloading (to reduce operator error).
- **Statistics and Memory:** Store multiple test values, provide average, min, max, reporting.
- **Conversion & Reporting:** Hardness conversion between scales, built-in or software output, print capabilities.
- **Calibration:** Capability for periodic calibration with standard hardness blocks.
- **Environmental:** Operating temperature typically 10–35 °C, humidity < 85 %.

Optional & Advanced Features

- **Touchscreen Interface:** For easier scale selection and result navigation.
- **Bluetooth / Wireless Printer:** For on-site printing and wireless data transfers.
- **PC Software Integration:** To generate detailed test reports, graphs & statistics.
- **CCD / Automated Measurement:** High-precision optical measurement with digital image capture.

Accessories:

1. Manual
2. Tool Kit
3. Calibration certificate from manufacturer
4. BHN, VH and Rockwell standards for internal calibration

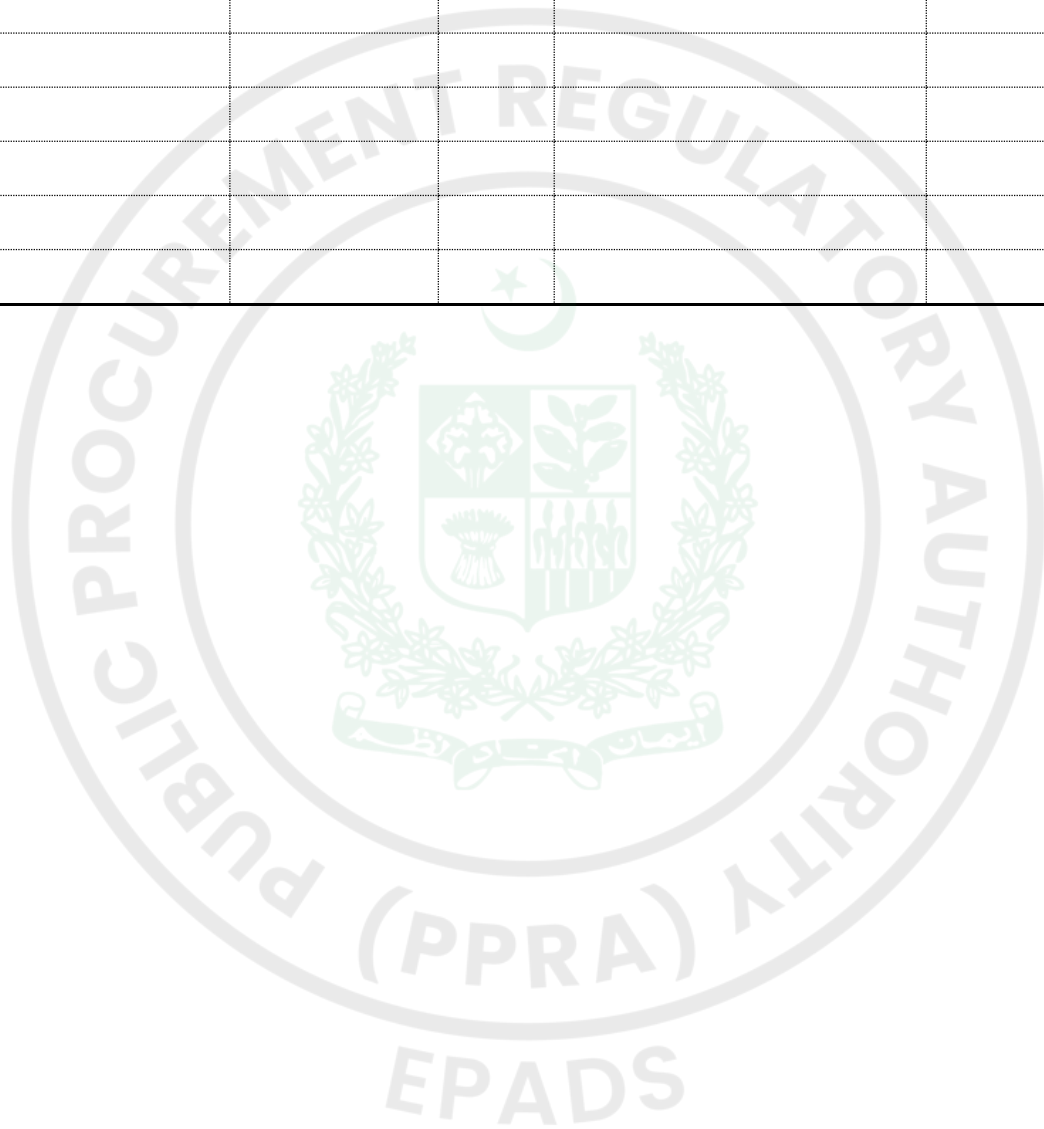
12.	<p>Micro Ohm Meter as per IEC-61010-1 IEC-61236</p>	<ul style="list-style-type: none"> • Range: 3mΩ to 30kΩ • Resolution: 100 nΩ • Auto Temperature compensation • Current Range: 10μA to 10A with auto selection • Accuracy: 0.03% max. • Data logging with statistical analysis • RS-232 Interface • Display LCD graphics panel • Working temperature 0°C to 45°C • Humidity: 80% Maximum • Storage temperature -20°C to +60°C • Supply voltage: 230V ±10% • Frequency: 50 Hz • Safety Standard: IEC 61010-1 	<p>Accessories:</p> <ol style="list-style-type: none"> 1. Manual 2. Thermal printer 3. Calibration certificate from manufacturer 4. One standard resistance of equipment range
	<p>Clamping Device (Standard length scale)</p>	<ul style="list-style-type: none"> • Measurement Length: 1000mm • Clamping device: 1mm² to 1500mm² • Adjustable clamping support • Maximum clamp torque: 15 Nm 	<p>One-meter length with manufacturer calibration certificate</p>
13	<p>Data Acquisition System as per IEC 61010-1 and IEC-61326-1</p>	<p>1.Measurement Performance AC/DC Volts</p> <ul style="list-style-type: none"> • Range: 100 mV to 300 V • Resolution: 0.1μV to 1MV • Accuracy: ±0.1 % <p>Resistance</p> <ul style="list-style-type: none"> • Range: 100 Ω to 100 MΩ • Resolution: 0.1 m Ω to 100 Ω • Accuracy: ± 0.1 % <p>Temperature measurement</p> <ul style="list-style-type: none"> • Range: -50 °C to 400 °C • Resolution: 0.01 °C • Accuracy: ± 0.1 % <p>2.Input Module Options</p> <p>Connection Type: Universal (Thermocouples, RTDs, V, I)</p> <p>Best PRT Accuracy±0.02 °C</p> <p>Best TC Accuracy±0.5 °C</p> <p>Channel Capacity: up to 40</p> <p>3.Data Security & Memory</p> <p><input type="checkbox"/> Internal Storage: Capacity for 20,000,000 data points.</p> <p><input type="checkbox"/> USB Port: For easy data export via CSV or image files.</p>	<p>Accessories:</p> <ol style="list-style-type: none"> 1. Manual 2. Thermal printer 3. Calibration certificate from manufacturer 4. Thermocouple lead - 40 no.

		<input type="checkbox"/> Security: Features "Data Secure" mode to prevent unauthorized tampering 4.System Interface <ul style="list-style-type: none"> • Display: 6.5-inch color VGA display with multi-channel graphing capabilities. • Connectivity: LAN& USB, • Software Support: Fully compatible with PC 	
14	CRM & Accessories for Spectrometer (GNR-Italy)	Metal (Cu/Al/Fe) CRM for internal calibration of spectrometer (01 each) <ul style="list-style-type: none"> • Copper Standard SUS RC 11/4 • Copper Standard SUS RC 14/17 • Copper Standard SUS RC 32/26 • Copper Standard SUS RC 40/19 • Vacuum Oil 1/2 liter 	04 No. std. & misc. Items
	CRM & Accessories for Spectrometer (Baird-USA)	Metal (Cu/Al/Fe) CRM for internal calibration of spectrometer (01 each) <ul style="list-style-type: none"> • Copper standards BS 110 A or its alternate • Brass standards BS 464 B • Brass standards BS 360 C • Al-bronze Standards BS 623 • -bronze Standards BS 642 C • Al-Si-Mg Standard G25 D-3T • Bronze Nitrate Disk-5mm • Bronze Nitrate Disk-8mm 	06 No. std. & misc. Items

Past Experience / Contracts

Contracts over *[insert amount]* during the last three years:

Procuring Agency	Value	Year	Goods/Services Supplied	Country of Destination



Historical Contract Non-Performance, and Pending Litigation and Litigation History

[The following table shall be filled in for the Applicant and for each member of a Joint Venture]

Applicant's Name: *[insert full name]*

Date: *[insert day, month, year]*

Joint Venture Member Name: *[insert full name]*

IFP No. and title: *[insert IFP number and title]*

Page *[insert page number]* of *[insert total number]* pages

<input type="checkbox"/> Not debarred due to deviation from commitment of Bid Securing Declaration- <input type="checkbox"/> Not debarred due to non-performance			
Year	Non-performed portion of contract	Contract Identification	Total Contract Amount (current value, currency, exchange rate and PKR equivalent)
<i>[insert year]</i>	<i>[insert amount and percentage]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Procuring Agency: <i>[insert full name]</i> Address of Procuring Agency: <i>[insert street/city/country]</i> Reason(s) for nonperformance: <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>
Pending Litigation, in accordance with Section III, Qualification Criteria and Requirements			
<input type="checkbox"/> Pending litigation in accordance with Section III, Qualification Criteria and Requirements, Sub-Factor 2.3 as indicated below.			
Year of dispute	Amount in dispute (currency)	Contract Identification	Total Contract Amount (currency), US\$ PKR Equivalent (exchange rate)

<i>[insert year]</i>	<i>[insert amount]</i>	<p>Contract Identification: [indicate complete contract name, number, and any other identification] Name of Procuring Agency: <i>[insert full name]</i> Address of Procuring Agency: <i>[insert street/city/country]</i> Matter in dispute: <i>[indicate main issues in dispute]</i> Party who initiated the dispute: <i>[indicate "Procuring Agency" or "Supplier"]</i> Status of dispute: <i>[Indicate if it is being treated by the Adjudicator, under Arbitration or being dealt with by the Judiciary]</i></p>	<i>[insert amount]</i>
<input type="checkbox"/> No consistent history of court/arbitral award decisions in accordance with Section III, Qualification Criteria and Requirements, Sub-Factor 2.4. <input type="checkbox"/> Consistent history of court/arbitral award decisions in accordance with Section III, Qualification Criteria and Requirements, Sub-Factor 2.4 as indicated below.			
Year of award	Outcome as percentage of Net Worth	Contract Identification	Total Contract Amount (currency), PKR Equivalent (exchange rate)
<i>[insert year]</i>	<i>[insert percentage]</i>	<p>Contract Identification: [indicate complete contract name, number, and any other identification] Name of Procuring Agency: <i>[insert full name]</i> Address of Procuring Agency: <i>[insert street/city/country]</i> Matter in dispute: <i>[indicate main issues in dispute]</i> Party who initiated the dispute: <i>[indicate "Procuring Agency" or "Supplier"]</i> Court/ arbitral award decision: <i>[Indicate if the award decision was against the Applicant or any member of a joint venture.]y]</i></p>	<i>[insert amount]</i>

Financial Situation and Performance

[The following table shall be filled in for the Applicant and for each member of a Joint Venture]

Applicant's Name: *[insert full name]*

Date: *[insert day, month, year]*

Joint Venture Member Name: *[insert full name]*

IFP No. and title: *[insert IFP number and title]*

Page *[insert page number]* of *[insert total number]* pages

1. Financial data

Type of Financial information in (currency)	Historic information for previous <i>[insert number]</i> years, <i>[insert in words]</i> (amount in currency, currency, exchange rate*, PKR equivalent)				
	Year 1	Year 2	Year 3		
Statement of Financial Position (Information from Balance Sheet)					
Total Assets (TA)					
Total Liabilities (TL)					
Total Equity/Net Worth (NW)					
Current Assets (CA)					
Current Liabilities (CL)					
Working Capital (WC)					
Information from Income Statement					
Total Revenue (TR)					
Profits Before Taxes (PBT)					
Cash Flow Information					
Cash Flow from Operating Activities					

* Refer ITA 14 for the exchange rate

3. Financial documents

The Applicant and in case of JV, members of JV shall provide copies of financial statements for *[number]* years pursuant Section III, Qualifications Criteria and Requirements. The financial statements shall:

- (a) reflect the financial situation of the Applicant or in case of JV member, and not an affiliated entity (such as parent company or group member).
 - (b) be independently audited or certified in accordance with local legislation.
 - (c) be complete, including all notes to the financial statements.
 - (d) correspond to accounting periods already completed and audited.
- Attached are copies of financial statements¹ for the *[number]* years required above; and complying with the requirements.

¹ If the most recent set of financial statements is for a period earlier than 12 months from the date of Application, the reason for this should be justified.

Average Annual Turnover (Annual Sales Value)

[The following table shall be filled in for the Applicant and for each member of a Joint Venture]

Applicant's Name: *[insert full name]*

Date: *[insert day, month, year]*

Joint Venture Member Name: *[insert full name]*

IFP No. and title: *[insert IFP number and title]*

Page *[insert page number]* of *[insert total number]* pages

Annual Turnover Data			
Year	Amount Currency	Exchange rate* (If applicable)	PKR equivalent
<i>[indicate calendar year]</i>	<i>[insert amount and indicate currency]</i>		
		Average Annual Turnover **	

* Refer ITA for date and source of exchange rate.

** Total PKR equivalent for all years divided by the total number of years. See Section III, Qualification Criteria and Requirements, ITA.