Standard Bidding Document

PROCUREMENT, INSTALLATION, CONFIGURATION, COMMISSIONING AND SUPPORT OF IN-HOUSE VIRTUALIZATION, SERVER ROOM / DATA CENTRE AND NETWORK INFRASTRUCTURE
(Goods)

National

Single Stage-One Envelope

CORRIGENDUM # 1	CORR-P210411-001
Initiation Date	November 24, 2026



November 24, 2026

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REQUEST FOR BIDS

PROCUREMENT OF GOODS

1. The **GSP-Lahore (Geological Survey of Pakistan (GSP))** has reserved Funds for the procurement planned for FY **2026-27**. The **GSP-Lahore (Geological Survey of Pakistan (GSP))** intends to apply part of the proceeds of this Fund to cover eligible payments under the contract for the " **PROCUREMENT, INSTALLATION, CONFIGURATION, COMMISSIONING AND SUPPORT OF IN-HOUSE VIRTUALIZATION, SERVER ROOM / DATA CENTRE AND NETWORK INFRASTRUCTURE**" with the reference of **"P210411"**

2. The **GSP-Lahore (Geological Survey of Pakistan (GSP))** invites sealed Bids from eligible Bidders for procurement of goods described in the bidding documents on **EPADS v2.0**.

3. **Single Stage-One Envelope** will be used by adopting **Least Cost Based Selection (LCBS)** Technique for the subject procurement, in line with the Public Procurement Rules, 2026 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 amount described in Bid Security Section in Bidding Document in the form of **Pay Order, Demand Draft** or all bids must be accompanied by bid securing declaration in the format specified in the Bidding documents

5. E-Bidding documents, containing detailed terms & conditions, specifications and requirements etc. are available on **e-Pak Acquisition and Disposal System (EPADS)** at **https://epads.gov.pk/opportunities/federal/procurements/210411** for all the interested bidders registered on **EPADS v2.0**. Bidders are required to get themselves registered on **EPADS v2.0** to participate in Bidding process.

6. The e-bids, prepared in accordance with the instructions in the e-Bidding Documents, must be submitted through **EPADS v2.0** on or before **Saturday, December 5, 2026 11:00 AM**. E-bids will be opened using **EPADS v2.0** on

the same day at **Saturday, December 5, 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**

In terms of Rule 65 of Public Procurement Rules, 2026 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.gov.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 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-2 I 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.

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

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.

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).

3.2 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.

3.3 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.

3.4 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 submission of false or misleading information or performance failure or involved in disrupting procurement process or due to breach of bid Securing Declaration.

3.5 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.

3.6 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 10.1** 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

Section IX Integrity Pact

Section X Declaration of Beneficial Ownership Information.

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 its 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 two (02) 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 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.

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.

9.3 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.

Documentary evidence established in accordance with ITB 13 that the Bidder is eligible and/or qualified for the subject bidding process;

Documentary evidence established in accordance with **ITB 03** 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;

Documentary evidence established in accordance with ITB 12 that the goods and related services to be supplied by the Bidder are eligible goods and services, and conform to the Bidding Documents;

Bid security or Bid Securing Declaration furnished in accordance with **ITB ---.**

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 Pursuant to **ITB 10,** 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 Bid

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

15. Bid Prices

15.1 The Bid 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 In the event that any item(s) in the Price Schedule are not quoted, and such omission is determined by the Procuring Agency not to materially affect the responsiveness of the Bid, the Procuring Agency may, for the sole purpose of bid evaluation and comparison, assign a price to the unquoted item(s) in accordance with the following methodology:

(a) The assigned price shall be the average of the prices quoted for the same item(s) by all substantially responsive bidders; or

(b) In cases where no comparable quotations are available, the Procuring Agency shall apply the corresponding item price from its duly approved cost estimate for evaluation purposes.

The prices so assigned shall be utilized exclusively for bid evaluation and comparison, and shall not, under any circumstances, be incorporated into or form part of the Contract Price.

15.4 The Bid price to be quoted in the Form of Bid in accordance with **ITB 13.1** 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 42 (2) of the Public Procurement Rules, 2026.

17. Bids Validity Period

17.1 Such extensions may be more than one time but the total period of such extension shall not exceed the original bid validity period.

17.2 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.

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 through EPADS v2.0,. The Bid Security provided under **ITB 17** 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 36 of the Public Procurement Rules, 2026.

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 or in another freely convertible currency, and it shall be in the form specified in the BDS which shall be in any of the following:

a) a bank guarantee, a bank draft, an irrevocable letter of credit issued by a Scheduled bank in the form provided in the Bidding Documents or another form acceptable to the Procuring Agency;

b) a cashier’s or certified cheque; or

c) another security if indicated in the BDS.

The Bid Security shall be valid for twenty-eight (28) days beyond the end of the validity of the Bid. This shall also apply if the period for 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 18.7** 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 Bid 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 documents, after whichever of the following that occurs earliest:

a. the expiry of the Bid Security;

b. 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;

c. the rejection by the Procuring Agency of all Bids;

d. cancellation of procurement proceedings.

e. the withdrawal of the Bid prior to the deadline for the submission of Bids, unless the Bid document stipulates that no such withdrawal is permitted.

18.8 The successful Bidder's Bid 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:

a. if a Bidder:

b. 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 16.2**; or

c. does not accept the correction of errors**;** or

d. in the case of a successful Bidder, if the Bidder fails:

e. to sign the contract; or

f. 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.

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 before bid submission deadline.

21.1 The Technical and Financial Bids, shall be submitted electronically through EPADS, before bid submission deadline. The bid submission option shall be automatically disabled once the deadline is over.

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 respective 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 respective 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 fails 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 at 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 respective Evaluation Committee.

23.6 No bid will be rejected at the time of bid openning except for bids whose original bid security has not been provided to the procuring agency before bid submission deadline.

24. Clarification of Bids

24.1 To assist in the examination, evaluation and comparison of Bids of the Bidders, the respective Bid Evaluation Committee 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 Bid:

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 bid(s) 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 respective Bid Evaluation Committee 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 respective Bid Evaluation Committee's determination of a Bid's responsiveness will be based on the contents of the Bid itself.

25.3 A 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.

25.4 If a Bid is not substantially responsive, it will be rejected by the respective Bid Evaluation Committee and may not subsequently be evaluated for complete technical responsiveness.

26. Examination of Terms and Conditions; Technical Evaluation

26.1 The respective Bid Evaluation Committee 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 respective Bid Evaluation Committee 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 respective Bid Evaluation Committee determines that the Bid is not substantially responsive in accordance with **ITB,** 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 price 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 respective Evaluation Committee 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 Bid, 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 respective Bid Evaluation Committee 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 For the purposes of comparison of bids quoted in different currencies, the price shall be converted into a single currency in accordance with Rule 42(2) of Public Procurement Rules,2026.

29. Evaluation of Bids

29.1 The Bids, quotations, or proposals shall be evaluated by the respective evaluation committees as per evaluation criteria prescribed in the Bidding Documents in accordance with Rule 11, 12 and 13 of the Public Procurement Rules, 2026.

29.2 While evaluating the bids, the procuring agency shall consider the following:

i. Bids will be evaluated on lump sum bid basis or items wise or Lot wise (contracts), as specified in the BDS; and the Bid Price;

ii. correction of arithmetic errors in accordance with ITB 27;

30. Domestic Preference

30.1 The respective Bid Evaluation Committee shall evaluate and compare bids, allow for preference to domestic bidders, while competing with the international bidders in accordance with the policies of the 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 **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.

31.3 **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.

31.4 **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.

31.5 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 Evaluation Criteria to be evaluated while determining the quality of the goods.

31.6 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)(xxviii) of the Public Procurement Rules, 2026.

32. Abnormally Low Financial Bids

32.1 An abnormally low bid is a bid that, in light of the Procuring Agency's cost estimate, market conditions, or other received bids, appears to be unrealistically low and may not be sustainable for successfull contract execution.

32.2 **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.**

32.3 The Procuring Agency may reject an Abnormally low financial bid in accordance with Rule 43 of the Public Procurement Rules, 2026.

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

1. Comparing the Bid price with the cost estimate;

2. Comparing the Bid price with the Bid(s) 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.

32.5 The respective Bid Evaluation Committee will determine to its satisfaction whether the Bidder that is selected as having submitted the successful bid is qualified to perform the contract satisfactorily.

32.6 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.

32.7 Respective Bid Evaluation Committee 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.

32.8 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 Bid, in which event the respective Bid Evaluation Committee 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 Successful Bidder.

34. Negotiations

34.1 In accordance with Rule 52A of Public Procurement Rules, 2026, without changing the cost and scope of work or services, the procuring agency may

negotiate with the successful bidder (with a view to streamline the work or task execution, at the time of contract finalization) on methodology, work plan, staffing and special conditions of the contract.

There shall be no limitation on the successful bidder offering voluntary reduction in bid price without affecting the quality or scope of the procurement.

35. Procuring Agency's 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 45 of the Public Procurement Rules, 2026.

36. Cancellation of Procurement

36.1 The procuring agency reserves the right to cancel the procurement proceedings in accordance with Rule 46 of the Public Procurement Rules, 2026.

37. Procuring Agency’s Right to Vary Quantities at the Time of Award

37.1 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.

38. Notification of Award

38.1 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 48 of the Public Procurement Rules, 2026.

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).

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

39. Signing of Contract

39.1 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.

39.2 Immediately after the Redressal of grievance by the GRC (if any), and **after fulfillment of all conditions precedent** of the Contract Form, the successful Bidder and the Procuring Agency shall sign the Contract.

40. Corrupt & Fraudulent Practices

40.1 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 engaging in any corrupt and fraudulent practices.

F. Grievance Redressal & Complaint Review Mechanism

41. Constitution of Grievance Redressal Committee

41.1 The Grievance Redressal Committee shall address the grievance, if any submitted by any party, including the bidder, in accordance with Rule 65 of the Public Procurement Rules, 2026 read with Redressal of Grievances Regulations, 2021.

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 65(7) of the Public Procurement Rules, 2026 to be read with Redressal of Grievances Regulations, 2021.

G. Mechanism of Blacklisting

42. Mechanism of Blacklisting

42.1 The Procuring Agency shall initiate blacklisting proceedings against any bidder, supplier, or contractor in accordance with the Rule 25 of the Public Procurement Rules, 2026.

42.2 The blacklisted/debarred bidder may file the review petition before the Authority in accordance with Rule 25 (6) of the Public Procurement Rules, 2026 to be read with Procedure of filing and disposal of Review Petitions Regulations, 2021.

43. Contract Management

43.1 For each procurement, the Procuring Agency shall designate a Contract Manager, who shall be duly responsible for the efficient management and administration of the contract in strict compliance with the provisions set forth under Rules 58, 59, and 60 of the Public Procurement Rules, 2026.

44. Inspection of goods and evaluation of services.

44.1 The Inspection Committee or the Firm shall have the right to conduct inspections of the goods in accordance with Rule 61 of the Public Procurement Rules, 2026.

45. Socio-economic development.

45.1 In accordance with Rule 63 of the Public Procurement Rules, 2026, preference may be granted to small and medium enterprises and marginalized groups in accordance with the policies notified by the Federal Government.

46. Environmental objectives

46.1 As per Rule 64 of the Public Procurement Rules, 2026, the procuring agency may seek to procure goods with a reduced environmental impact throughout their life cycle when compared to goods services with the same primary function that may otherwise be procured.

Bid Data Sheet

Bids Data Sheet (BDS)

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

BDS Clause Number
ITB Number
Amendments of, and Supplements to, Clauses in the Instruction to Bidders

A. Introduction

BDS Clause Number 1
ITB Number 1.1

Name of Procuring Agency: **GSP-Lahore (Geological Survey of Pakistan (GSP))**

The subject of procurement is: **PROCUREMENT, INSTALLATION, CONFIGURATION, COMMISSIONING AND SUPPORT OF IN-HOUSE VIRTUALIZATION, SERVER ROOM / DATA CENTRE AND NETWORK INFRASTRUCTURE**

Period for Provision of Goods:

Extension Period (if applicable):

Expected commencement date: **Friday, December 25, 2026**

BDS Clause Number 2
ITB Number 2.1

Source of funds [Enter source of funds]

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

Name and identification number of the Contract: **P210411**

Identification Number:

BDS Clause Number 3
ITB Clause Number 3.1

Eligible Bidder [Enter eligibility of bidder]

JV/Consortium or Association Allowed: **Yes**
Number of JV/Consortium Members: **3**
see section of eligibility criteria.

B. Bidding Documents

BDS Clause Number 4

ITB Clause Number 4.1

Eligible goods and related services [Enter requirements for eligible goods and related services, if any]

ITB Number 8.1

The Bidders may seek clarifications through **EPADS v2.0** : Clarification Date: Wednesday, December 2, 2026

ITB Number 8.2

The Bidders may seek clarifications through **EPADS v2.0** : Clarification Date: Wednesday, December 2, 2026

ITB Number 8.3

The Bidders may seek clarifications through **EPADS v2.0** : Clarification Date: Wednesday, December 2, 2026

ITB Number 8.5

Pre-bid meeting will be/will not be held [Tick the appropriate] If yes write down the time, and date of the pre-Bid meeting:
[The meeting should take place not later than one weeks before the deadline for Bid submission.]

C. Preparation of Bids

BDS Clause Number 5
ITB Number 10.1

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

List of documents required along with the bid: No

BDS Clause Number 6
ITB Number 11.1

Documents required / not required with bid submission [enter list of documents] Samples required / not required with the bid [Enter the names and number of samples]

Items/Lots and their related documents:

See section items and Lots

BDS Clause Number 7
ITB Number 12.1

Items / Lots Specifications:

see section of items specifications.

BDS Clause Number 8
ITB Number 15.6

The price shall be **Fixed**.

BDS Clause Number 9
ITB Number 16.1

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

BDS Clause Number 10
ITB Number 17.1

The Bids/Bid Validity period shall be: **60 Days**

BDS Clause Number 11
ITB Number 18.1

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

Instrument of Bid Security shall be in the Name of : **Director General, Geological Survey of Pakistan**

The Bid Security shall be in the form of: **Pay Order, Demand Draft**

ITB Number 18.2

The address for submission of original bid security is [Insert the address for bid security submission]

D. Submission of Bids

BDS Clause Number 12
ITB Number 20.1

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

Trade Center, Near Expo Center Johar Town, Lahore City, Lahore (District), Lahore Division (Division), Punjab (Province). before bid submission deadline.

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

The deadline for Bids submission is: **Saturday, December 5, 2026 11:00 AM**

Day *:* ***Saturday***

Date: ***Saturday, December 5, 2026***

Time *:* ***11:30 AM***

E. Opening and Evaluation of Bids

BDS Clause Number 13
ITB Number 23.1

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

Day *:* ***Saturday***

Date: ***Saturday, December 5, 2026***

Time *:* ***11:30 AM***

ITB Number 29.2

The procuring agency shall consider the following:
lump sum bid basis; or
items wise; or
Lot wise (contracts),

ITB Number 30.1

BDS Clause Number 14
ITB Number 31.1

Domestic Preference [applicable / not applicable]

ITB Number 31.2

Selection technique adopted will be:
The Procuring Agency shall use any of the following evaluation techniques for determination of successful bid.

Least Cost Base Selection (LCBS)
Quality and Cost Based Selection (QCBS)
Quality Based Selection (QBS)
[Insert the Evaluation Technique]

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

F. Review of Procurement Decisions

BDS Clause Number 15
ITB Number 41.1

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

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

ITB Number 42.2

The Address of PPRA Grievance Redressal Appellate Committee to submit a copy of grievance:

Grievance Redressal Appellate Committee,
Public Procurement Regulatory Authority
1st Floor, G-5/2, Islamabad, Pakistan
Tel: +92-51-9202254

Eligibility Criteria

All Active Taxpayers shall be eligible to participate in the procurement process, unless expressly excluded or otherwise restricted under the Eligibility Criteria specified by the Procuring Agency.

Required Registration
NADRA CITIZENSHIP (CNIC/NICOP)
FBR (NTN)
FBR (GSTN)

Evaluation Criteria

Eligibile 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)

PUBLIC PROCUREMENT REGULATORY AUTHORITY (PPRA) EPADS

Items/Lots

Lot Title : PROCUREMENT, INSTALLATION, CONFIGURATION, COMMISSIONING AND SUPPORT OF IN-HOUSE VIRTUALIZATION, SERVER ROOM / DATA CENTRE AND NETWORK INFRASTRUCTURE

Bid Security : 420000 PKR

Item	UNSPSC	Delivery Schedule	Quantity	Warranty
Enterprise Virtualization Server	High end computer server	**Address:** Geoscience Advance Research Laboratory (GARL), Chak Shahzad, Park Road, Islamabad **Schedule:** 10 Days **Quantity:** 2/Qty	2 / Qty	3 Years
Enterprise SAN Storage	Data storage and backup	**Address:** Geoscience Advance Research Laboratory (GARL), Chak Shahzad, Park Road, Islamabad **Schedule:** 10 Days **Quantity:** 1/Qty	1 / Qty	3 Years
Fibre Channel SAN Switch	Storage area network SAN switch	**Address:** Geoscience Advance Research Laboratory (GARL), Chak Shahzad, Park Road, Islamabad **Schedule:** 10 Days **Quantity:** 1/Qty	1 / Qty	3 Years
Enterprise Ethernet Switch	Network switches	**Address:** Geoscience Advance Research Laboratory (GARL), Chak Shahzad, Park Road, Islamabad **Schedule:** 10 Days **Quantity:** 1/Qty	1 / Qty	3 Years

Item	UNSPSC	Delivery Schedule	Quantity	Warranty
Application Delivery Controller_Load Balancer	Server load balancer	**Address:** Geoscience Advance Research Laboratory (GARL), Chak Shahzad, Park Road, Islamabad **Schedule:** 10 Days **Quantity:** 1/Qty	1 / Qty	1 Years
Next Generation Firewall	Firewall network security equipment	**Address:** Geoscience Advance Research Laboratory (GARL), Chak Shahzad, Park Road, Islamabad **Schedule:** 10 Days **Quantity:** 1/Qty	1 / Qty	3 Years
SOFTWARE LICENSING REQUIREMENTS	Access software	**Address:** Geoscience Advance Research Laboratory (GARL), Chak Shahzad, Park Road, Islamabad **Schedule:** 10 Days **Quantity:** 1/job	1 / job	--
SSL/TLS CERTIFICATES	Certificates	**Address:** Geoscience Advance Research Laboratory (GARL), Chak Shahzad, Park Road, Islamabad **Schedule:** 10 Days **Quantity:** 1/job	1 / job	1 Years
OPERATING SYSTEM HARDENING	Operating system programming services	**Address:** Geoscience Advance Research Laboratory (GARL), Chak Shahzad, Park Road, Islamabad **Schedule:** 10 Days **Quantity:** 1/job	1 / job	--
SERVER ROOM / DATA CENTRE INFRASTRUCTURE	Data center services	**Address:** Geoscience Advance Research Laboratory (GARL), Chak Shahzad, Park Road, Islamabad **Schedule:** 10 Days **Quantity:** 1/job	1 / job	--
Generator	Diesel generators	**Address:** Geoscience Advance Research Laboratory (GARL), Chak Shahzad, Park Road, Islamabad **Schedule:** 10 Days **Quantity:** 1/Qty	1 / Qty	2 Years

Item	UNSPSC	Delivery Schedule	Quantity	Warranty
Electrical Distribution and Earthing	Electrical fittings	**Address:** Geoscience Advance Research Laboratory (GARL), Chak Shahzad, Park Road, Islamabad **Schedule:** 10 Days **Quantity:** 1/job	1 / job	--
Installation and Configuration	Data center services	**Address:** Geoscience Advance Research Laboratory (GARL), Chak Shahzad, Park Road, Islamabad **Schedule:** 10 Days **Quantity:** 1/job	1 / job	--
Documentation, Warranty & Support	Data center services	**Address:** Trade Center, Near Expo CenteGeoscience Advance Research Laboratory (GARL), Chak Shahzad, Park Road, Islamabadr Johar Town, Lahore City, Lahore (District), Lahore Division (Division), Punjab (Province). **Schedule:** 10 Days **Quantity:** 1/job	1 / job	--
Online UPS	Power supply	**Address:** Geoscience Advance Research Laboratory (GARL), Chak Shahzad, Park Road, Islamabad **Schedule:** 10 Days **Quantity:** 1/Qty	1 / Qty	--

Related Services of Goods:

No

PROCUREMENT, INSTALLATION, CONFIGURATION, COMMISSIONING AND SUPPORT OF IN-HOUSE VIRTUALIZATION, SERVER ROOM / DATA CENTRE AND NETWORK INFRASTRUCTURE

Item	UNSPSC	Related Services
Enterprise Virtualization Server	High end computer server	• The procurement is for a complete in-house infrastructure and server-room/data-centre solution, not merely two physical servers. • The proposed architecture shall provide adequate headroom and future expansion. • All mandatory software, operating s
Enterprise SAN Storage	Data storage and backup	• The procurement is for a complete in-house infrastructure and server-room/data-centre solution, not merely two physical servers. • The proposed architecture shall provide adequate headroom and future expansion. • All mandatory software, operating s
Fibre Channel SAN Switch	Storage area network SAN switch	• The procurement is for a complete in-house infrastructure and server-room/data-centre solution, not merely two physical servers. • The proposed architecture shall provide adequate headroom and future expansion. • All mandatory software, operating s
Enterprise Ethernet Switch	Network switches	• The procurement is for a complete in-house infrastructure and server-room/data-centre solution, not merely two physical servers. • The proposed architecture shall provide adequate headroom and future expansion. • All mandatory software, operating s

Item	UNSPSC	Related Services
Application Delivery Controller_Load Balancer	Server load balancer	• The procurement is for a complete in-house infrastructure and server-room/data-centre solution, not merely two physical servers. • The proposed architecture shall provide adequate headroom and future expansion. • All mandatory software, operating s
Next Generation Firewall	Firewall network security equipment	• The procurement is for a complete in-house infrastructure and server-room/data-centre solution, not merely two physical servers. • The proposed architecture shall provide adequate headroom and future expansion. • All mandatory software, operating s
SOFTWARE LICENSING REQUIREMENTS	Access software	• The procurement is for a complete in-house infrastructure and server-room/data-centre solution, not merely two physical servers. • The proposed architecture shall provide adequate headroom and future expansion. • All mandatory software, operating s
SSL/TLS CERTIFICATES	Certificates	• The procurement is for a complete in-house infrastructure and server-room/data-centre solution, not merely two physical servers. • The proposed architecture shall provide adequate headroom and future expansion. • All mandatory software, operating s
OPERATING SYSTEM HARDENING	Operating system programming services	• The procurement is for a complete in-house infrastructure and server-room/data-centre solution, not merely two physical servers. • The proposed architecture shall provide adequate headroom and future expansion. • All mandatory software, operating s

Item	UNSPSC	Related Services
SERVER ROOM / DATA CENTRE INFRASTRUCTURE	Data center services	• The procurement is for a complete in-house infrastructure and server-room/data-centre solution, not merely two physical servers. • The proposed architecture shall provide adequate headroom and future expansion. • All mandatory software, operating s
Generator	Diesel generators	• The procurement is for a complete in-house infrastructure and server-room/data-centre solution, not merely two physical servers. • The proposed architecture shall provide adequate headroom and future expansion. • All mandatory software, operating s
Electrical Distribution and Earthing	Electrical fittings	• The procurement is for a complete in-house infrastructure and server-room/data-centre solution, not merely two physical servers. • The proposed architecture shall provide adequate headroom and future expansion. • All mandatory software, operating s
Installation and Configuration	Data center services	• The procurement is for a complete in-house infrastructure and server-room/data-centre solution, not merely two physical servers. • The proposed architecture shall provide adequate headroom and future expansion. • All mandatory software, operating s
Documentation, Warranty & Support	Data center services	• The procurement is for a complete in-house infrastructure and server-room/data-centre solution, not merely two physical servers. • The proposed architecture shall provide adequate headroom and future expansion. • All mandatory software, operating s
Online UPS	Power supply	• The procurement is for a complete in-house infrastructure and server-room/data-centre solution, not merely two physical servers.

Items/Lot Specification

Lot Title : PROCUREMENT, INSTALLATION, CONFIGURATION, COMMISSIONING AND SUPPORT OF IN-HOUSE VIRTUALIZATION, SERVER ROOM / DATA CENTRE AND NETWORK INFRASTRUCTURE

Item: Enterprise Virtualization Server

UNSPSC: High end computer server

Specifications / Requirements:

Parameter	Minimum Requirement
Form factor	Enterprise rack-mounted server or better
Processors	Enterprise server processors; minimum 24 physical cores per CPU or equivalent/better
Memory	Minimum 256 GB ECC DDR4 RAM per server; expandable to at least 1 TB
Local/Boot Storage	Minimum 2 x 375 GB enterprise NVMe/Optane-class devices configured redundantly for OS/hypervisor
Local SSD Storage	Minimum 3 × 960 GB enterprise SSD or equivalent/better
RAID	Enterprise hardware RAID/controller with protected cache and required battery/flash-backed protection
Network	Minimum 10/25 GbE ports per server plus dedicated management port

Parameter	Minimum Requirement
SAN	Dual Fibre Channel HBA or equivalent redundant SAN connectivity
Expansion	Adequate PCIe slots for proposed NIC/HBA expansion
Remote Management	Enterprise out-of-band management with remote console, power control and hardware monitoring
Power	Dual hot-plug redundant power supplies; minimum 1300 W each or adequately sized for actual configuration
Cooling	Redundant hot-plug fans
Security	TPM 2.0 or equivalent enterprise hardware security
Warranty	Minimum 3 years comprehensive onsite warranty
Support	24×7 online support for critical infrastructure.
	Onsite support in case the matter remains unresolved online.

Item: Enterprise SAN Storage

UNSPSC: Data storage and backup

Specifications / Requirements:

Parameter	Minimum Requirement

Usable Capacity	Minimum 32 TB usable capacity after RAID/protection overhead, or equivalent capacity clearly demonstrated
Architecture	Enterprise SAN with dual redundant controllers
Connectivity	Fibre Channel and/or enterprise SAN protocol appropriate to the proposed architecture
Controllers	Dual active/standby or active/active redundant controllers
Disk Technology	Enterprise SSD/SAS/NL-SAS combination as appropriate; bidder shall state configuration
Data Protection	Enterprise RAID/data protection with hot-spare capability
Cache	Protected enterprise cache
Availability	No single controller failure shall make the storage unavailable
Expansion	Expandable without replacement of the complete system
Management	Web GUI and CLI management
Power	Redundant power supplies
Warranty	Minimum 3 years

Item: Fibre Channel SAN Switch

UNSPSC: Storage area network SAN switch

Specifications / Requirements:

· Minimum 16 active Fibre Channel ports, expandable to at least 24 ports.
· Required SFP/SFP+ modules and fibre patch leads included.
· Appropriate speed for the proposed SAN architecture.
· Redundant SAN fabric shall be proposed where required to eliminate a single point of failure.
· Enterprise management and monitoring.
· Minimum 3-year warranty.

Item: Enterprise Ethernet Switch

UNSPSC: Network switches

Specifications / Requirements:

· Minimum 24 × 10 GbE SFP+ ports or better.
· Layer 2/Layer 3 switching.
· VLAN, LACP/link aggregation, STP/RSTP/MSTP and QoS.
· SNMP monitoring.
· IPv4/IPv6 support.

· Minimum 24 × 10 GbE SFP+ ports or better.
· Required SFP/SFP+ modules and DAC/fibre cables.
· Suitable for server, storage, firewall and load-balancer connectivity.
· Minimum 3-year warranty.

Item: Application Delivery Controller_Load Balancer

UNSPSC: Server load balancer

Specifications / Requirements:

· Minimum 4 × 10 GbE SFP+ ports, 8 × GbE SFP ports, 8 × GbE RJ45 ports and 1 × GbE management port, or equivalent/better.
· Minimum 256 GB onboard storage.
· Dual AC power supplies.
· Layer 4–7 load balancing.
· SSL/TLS termination/offloading.
· Health checks and service monitoring.
· Session persistence and NAT.
· IPv4/IPv6.
· Logging and reporting.

· Minimum 4 × 10 GbE SFP+ ports, 8 × GbE SFP ports, 8 × GbE RJ45 ports and 1 × GbE management port, or equivalent/better.
· Security/IP reputation service where included by the proposed platform.
· Minimum one-year comprehensive support/subscription.

Item: Next Generation Firewall

UNSPSC: Firewall network security equipment

Specifications / Requirements:

· Enterprise NGFW suitable for public-facing Geodata Portal services.
· Stateful firewall, IPS/IDS, application control and web/URL filtering.
· VPN, NAT, VLAN and IPv4/IPv6 support.
· DDoS, CSRF protection support
· SSL/TLS inspection capability where supported.
· Centralized logging and reporting.
· Appropriate 10 GbE or higher connectivity.
· High-availability capability.
· All required security subscriptions for at least one year.
· Minimum three-year hardware warranty.

Item: SOFTWARE LICENSING REQUIREMENTS

UNSPSC: Access software

Specifications / Requirements:

Software/License	Requirement	Status
Virtualization platform	Complete enterprise virtualization/hypervisor platform for both physical hosts, including central management and HA functions	Required
Windows Server	Required Windows Server 22 licenses for the proposed Windows VMs/workloads.	Required
Windows CALs	Appropriate CALs or equivalent licensing where required by the proposed Microsoft licensing model	Required where applicable
SSL/TLS certificates	Valid CA-issued SSL/TLS certificates for public-facing services; SAN/wildcard certificate where technically appropriate	Minimum 1 year
Server management	Required vendor management/monitoring licenses	Required
SAN management	Required storage management licenses	Required
Backup agents	Required licenses for proposed VM/application backup solution	Required if included

Software/License	Requirement	Status
Security subscriptions	Firewall/IPS/web filtering/reputation subscriptions required for stated functionality	Minimum 1 year
Note:	All software required to make the proposed infrastructure fully operational shall be identified, procured and provided by the bidder. GSP shall not be required to purchase additional mandatory licenses after award merely to operate the system supplied under this RFP	

Item: SSL/TLS CERTIFICATES

UNSPSC: Certificates

Specifications / Requirements:

· Certificates shall be issued by a recognized public Certificate Authority acceptable to GSP.
· Certificates shall support the public HTTPS services of the Geodata Portal and ArcGIS Enterprise/Web Adaptor as required.
· Bidder shall configure certificate installation, certificate chain, renewal documentation and service bindings.
· Where technically appropriate, a SAN or wildcard certificate may be proposed to reduce operational complexity.
· Certificate validity shall be at least one year from commissioning, with renewal requirements clearly documented.

Item: OPERATING SYSTEM HARDENING

UNSPSC: Operating system programming services

Specifications / Requirements:

· Windows Server instances shall be fully patched and hardened.
· Only required services and ports shall be enabled.
· Administrative accounts shall be controlled.
· Time synchronization, DNS and domain/service-account requirements shall be configured.
· Antivirus/endpoint protection shall be installed where required by GSP security policy and compatible with ArcGIS/portal applications.

Item: SERVER ROOM / DATA CENTRE INFRASTRUCTURE

UNSPSC: Data center services

Specifications / Requirements:

SERVER ROOM_DATA CENTRE INFRASTRUCTURE	
42U Rack	· 42U rack, minimum 600 mm wide × 1070 mm deep or better.

SERVER ROOM_DATA CENTRE INFRASTRUCTURE	
· Lockable front and rear doors.	
· Removable side panels.	
· Vertical and horizontal cable management.	
· Heavy-duty castors and leveling feet.	
· Rack earthing/bonding.	
· Vertical intelligent/basic PDUs appropriate to load.	
· All required rack mounting rails and accessories.	
Precision / In-Row Cooling	· 24×7 continuous-operation cooling suitable for server-room use.
	· Bidder shall calculate IT heat load plus UPS/network/storage losses.
	· Temperature monitoring and alarm.
	· Humidity monitoring/control where appropriate.
	· Auto restart after power restoration.
	· Integration with infrastructure monitoring where supported.
	· Complete installation kit, piping/drainage/electrical works and commissioning.

SERVER ROOM_DATA CENTRE INFRASTRUCTURE	
NOTE: Bidder shall submit a heat-load and cooling calculation. The proposed capacity shall not be based solely on nominal server-room area.	
Environmental and Infrastructure Monitoring	· Temperature and humidity sensors.
	· Water leakage detection.
	· Smoke/alarm input.
	· Door/access monitoring.
	· UPS/power status.
	· Cooling status.
	· Server/network SNMP monitoring where supported.
	· Web dashboard and event history.
	· Email/SMS or equivalent alerting where supported.
Physical Security	· Electronic access control system with card/biometric capability.
	· Minimum two IP CCTV cameras with suitable night vision.
	· Network video recorder with appropriate storage.
	· Fire alarm panel, smoke detection and audible/visual alarm.

SERVER ROOM_DATA CENTRE INFRASTRUCTURE
· All installation, cabling and commissioning.

Item: Generator

UNSPSC: Diesel generators

Specifications / Requirements:

Parameter	Minimum Requirement
Capacity	Minimum 20 kVA, or larger if required by the bidder's load calculation
Type	Diesel, 3-phase, 400/230 V, 50 Hz, suitable for continuous/standby institutional operation
Engine	Reputable enterprise/industrial engine with local service support
Alternator	Brushless, AVR-controlled, suitable for sensitive electronic loads
Automatic Transfer	Automatic Transfer Switch (ATS) with suitable interlocking and protection
Starting	Automatic electric start with battery charger
Fuel System	Integrated tank/day tank arrangement adequate for proposed operating period
Protection	Overload, short circuit, low oil pressure, high temperature and overspeed protection

Parameter	Minimum Requirement
Acoustic/Weather Protection	Weatherproof/acoustic canopy as site conditions require
Earthing	Complete generator earthing and bonding
Installation	Foundation, cabling, exhaust, ventilation and commissioning as required
Load Test	Full load/bank load testing and test report
Warranty	Minimum 2 years or manufacturer standard, whichever is better
NOTE:	The generator shall be sized on the actual connected and starting load of the server room, cooling, networking, security and associated critical equipment, with reasonable spare capacity. If 20 kVA is insufficient after the bidder's load calculation, the bidder shall quote the next appropriate capacity without compromising the required system.

Item: Electrical Distribution and Earthing

UNSPSC: Electrical fittings

Specifications / Requirements:

· Dedicated server-room electrical distribution board.
· Appropriate MCB/MCCB/RCD protection as required.
· Dedicated circuits for UPS, cooling, networking and generator.

· Dedicated server-room electrical distribution board.
· Proper rack and equipment bonding.
· Dedicated earthing system and test report.
· Power cables and accessories sized for actual load.
All cabling to be labeled and neatly routed.

Item: Installation and Configuration

UNSPSC: Data center services

Specifications / Requirements:

Installation and Configuration	
NETWORK, FIREWALL AND LOAD BALANCING	The bidder shall prepare and implement a network architecture providing logical separation of:
	· Management network.
	· Server/VM network.
	· Storage/SAN network.
	· Public/DMZ/application network.
	· Backup/management traffic where applicable.

Installation and Configuration	
The firewall and load balancer shall be configured in coordination with GSP and the Geodata Portal implementation partners. Required ports shall be documented before commissioning.	
NOTE: The final firewall rule set shall be approved by GSP. The bidder shall not open unnecessary inbound ports. Public services shall use HTTPS and the appropriate DNS records.	
STORAGE AND SAN	The SAN shall be the primary shared datastore for the virtualization cluster unless the bidder demonstrates an equivalent enterprise architecture. The bidder shall provide a storage sizing report showing raw capacity, usable capacity, RAID/protection overhead, performance assumptions, expansion capacity and expected growth.
	· Minimum 32 TB usable capacity.
	· Dual controller architecture.

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Installation and Configuration
· Redundant paths from both physical servers.
· Appropriate Fibre Channel HBAs/switching.
· Storage multipathing configured and tested.
· Disk failure/rebuild procedure documented.
· Controller failover tested.
· Storage monitoring enabled.
Backup – Mandatory Design Requirement
The SAN shall not be treated as a backup system. The bidder shall provide a backup strategy for virtual machines and critical application/database workloads.

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Installation and Configuration	
· VM-level backup.	
· Scheduled backups.	
· Retention policy.	
· Restore testing.	
· Backup monitoring.	
· Off-host backup destination where feasible.	
· RPO/RTO statement.	
VIRTUALIZATION PLATFORM	· The two physical servers shall operate as a managed virtualization cluster.
	· High availability shall be supported.
	· VM restart after host failure shall be configured and tested.
	· Live migration/maintenance migration shall be supported where provided by the proposed platform.
	· Central management shall be provided.
	· Resource pools/quotas shall be configurable.
	· Virtual networking shall support VLANs and redundant uplinks.
	· Virtual storage shall support multipathing to SAN.
	· The bidder shall provide all licenses/subscriptions necessary for the stated functions.

Installation and Configuration	
· Enterprise-supported open-source virtualization platforms may be proposed if the bidder provides appropriate enterprise support and lifecycle assurance.	
NOTE: The bidder shall state the proposed hypervisor, version, licensing model, support period and renewal cost separately.	
SECURITY, SSL AND IDENTITY REQUIREMENTS	· Firewall shall provide perimeter security for public services.
	· Public-facing applications shall use valid HTTPS certificates.
	· Administrative access shall be restricted and logged.
	· Management interfaces shall not be directly exposed to the public Internet.
	· VMs shall be logically segmented through VLANs/firewall rules.
	· Windows Server security updates shall be applied.
	· Service accounts shall follow least-privilege principles.

Installation and Configuration
· System clocks shall be synchronized.
· Audit/logging shall be enabled for critical infrastructure.
· Certificate expiry and renewal shall be documented.
· The solution shall support integration with GSP's existing domain/identity arrangements where applicable.

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Installation and Configuration	
The Geodata Portal environment is expected to include IIS-hosted application services, Umbraco, Keycloak and MS SQL Server services, in addition to ArcGIS Enterprise. The infrastructure shall support these services without requiring a separate procurement merely to make the approved application architecture operational.	
INSTALLATION, CONFIGURATION AND COMMISSIONING	1. Site survey and validation of room, electrical and cooling conditions.
	2. Detailed implementation design and bill of materials confirmation.
	3. Rack installation and earthing.
	4. UPS, generator and electrical integration.
	5. Cooling installation and commissioning.
	6. Server installation and firmware update.
	7. SAN and SAN switch installation/configuration.

Installation and Configuration
8. Ethernet switch installation/configuration.
9. Firewall and load-balancer installation/configuration.
10. Virtualization platform installation.
11. Windows Server installation/licensing and hardening.
12. SSL certificate installation/configuration.
13. Creation of agreed VMs.
14. Network, VLAN, DNS and firewall configuration.
15. Coordination with application vendors.
16. System testing and acceptance.

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Installation and Configuration	
COORDINATION / TRANSITION SUPPORT FROM NTC	GSP's primary requirement under this procurement is the establishment of the in-house infrastructure. Application-specific migration and reconfiguration shall be coordinated with the vendors responsible for the deployed systems. The successful infrastructure bidder shall facilitate the transition at the infrastructure layer.
	· Provide target VM specifications based on the approved sizing.
	· Provide VM templates/OS installations.
	· Provide storage and network connectivity.
	· Provide firewall/load-balancer configuration.
	· Provide DNS and SSL support.
	· Coordinate migration windows.
	· Provide infrastructure-level troubleshooting.
	· Participate in joint validation with GSP and application vendors.
	· Provide post-cutover infrastructure support.
	NOTE: No bidder shall be required to undertake application redevelopment, database restructuring or wholesale data migration as part of the base infrastructure scope. Any such work shall only be performed if separately quoted and approved by GSP.

Item: Documentation, Warranty & Support

UNSPSC: Data center services

Specifications / Requirements:

Documentation, Warranty & Support	
DOCUMENTATION AND TRAINING	· As-built physical and logical network diagrams.
	· Server and virtualization configuration.
	· SAN configuration and storage map.
	· IP address and VLAN plan.
	· Firewall and load-balancer configuration.
	· Rack elevation.
	· Power and UPS diagram.
	· Generator/ATS diagram.
	· Cooling and environmental monitoring configuration.
	· VM inventory.
	· Software/license certificates.
	· SSL certificate details and renewal procedure.
	· Backup configuration.
	· Operations and maintenance manuals.
	· Troubleshooting/escalation matrix.

Documentation, Warranty & Support	
· Minimum five working days hands-on training for nominated GSP technical staff.	
WARRANTY AND SUPPORT	· Minimum 3-year comprehensive onsite warranty for servers, SAN, switches, firewall, load balancer and major infrastructure hardware.
	· 24×7 online support for critical infrastructure. Onsite support in case the matter remains unresolved online.
	· Critical incident response within 2 hours.
	· High-severity incident response within 4 hours.
	· Firmware/driver updates during warranty where covered by manufacturer.
	· Replacement of defective hardware parts.
	· Escalation to OEM where required.
	· Post-commissioning stabilization support for at least 30 days.

Item: Online UPS

UNSPSC: Power supply

Specifications / Requirements:

· Minimum 6 kVA online double-conversion UPS.
· External lithium-iron -phosphate battery bank.
· Minimum 15 minutes autonomy at the agreed critical load.
· LCD/display and event logging.
· SNMP/network monitoring.
· Maintenance bypass.
· Overload, short-circuit and battery protection.
· Complete installation and commissioning.

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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]		

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EPADS

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

a. “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;

b. The “Arbitrator” is the person appointed with mutual consent of both the parties, to resolve contractual disputes as provided for in the General Conditions of the Contract GCC Clause 35 hereunder.

c. “Authority” means Public Procurement Regulatory Authority.

d. The “Commencement Date” is the date when the Supplier shall commence execution of the contract as specified in the SCC.

e. “Completion date” means the date of completion of the Contract by the Bidder as certified by the Procuring Agency.

f. “Procuring Agency” means:-

a. any Ministry, Division, Department or any Office of the Government;

b. any authority, corporation, body or organization established by or under a Law or which is owned or controlled by the Government;.

g. “The Contract” means an agreement enforceable by law;

h. “The Contract Price” means the price payable to the Bidder under the Contract for the full and proper performance of its contractual obligations;

i. “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;

j. “GCC” means the General Conditions of Contract contained in this section;

k. “SCC” means the Special Conditions of Contract by which the GCC may be amended or supplemented;

l. **“**Day” means calendar day unless indicated otherwise.

m. “Defective Goods” are those goods which are below standards, requirements or specifications stated by the Contract.

n. “Delivery” means the transfer of the goods from the supplier equipment, machinery, and /or other materials which the Supplier is required to supply to the Procuring Agency under Contract.

o. “Effective Date” means the date on which this Contract comes into force and effect.

p. “Force Majeure” means an unforeseeable event which is beyond reasonable control of either 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.

For the purposes of this Contract, “Force Majeure” means an event which is beyond the reasonable control of a Party, is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of a Party, and which makes a Party’s performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the circumstances. and includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood, epidemics, or other adverse weather conditions, strikes, lockouts or other industrial action (except where such strikes, lockouts or other industrial action are within the power of the Party invoking Force Majeure to prevent), confiscation or any other action by Government agencies.

q. The Bidder” means the individual or corporate body whose Bids to provide the Goods has been accepted by the Procuring Agency;

r. “The Project Site,” where applicable, means the place or places named in Bids Data Sheet and technical Specifications;

s. “Government” means the Government of Pakistan;

t. “Subcontractor” means any entity to which the Bidder subcontracts any part of the Goods.

u. The “Services” means the work to be performed by the Bidder pursuant to this Contract and as prescribed in the Specifications and Schedule of Activities included in the Bidder’s Bids;

v. “Party” means the Procuring Agency or the Bidder, as the case may be, and “Parties” means both of them;

w. “Foreign Currency” means any currency other than the currency of the country of the Procuring Agency;

x. “Completion Date” means the date of completion of the contract by the Bidder as certified by the Procuring Agency;

y. “In Writing” means communicated in written form with proof of receipt;

z. “Local Currency” means the currency of Pakistan;

a. “Origin” means the place where the Goods were mined, grown, or produced or from which the Services are supplied. Goods are produced when, through manufacturing, processing, or substantial and major assembly of components, a commercially recognized new produce results that is substantially different in basic characteristics or in purpose or utility from its components.

b. “Specification” means the Specification of the Goods and performance of incidental services in accordance with the relevant standards included in the Contract and any modification or addition made or approved by the Procuring Agency.

c. “Procuring Agency” means: -
any Ministry, Division, Department or any Office of the Federal Government;
any authority, corporation, body or organization established by or under a Federal Law or which is owned or controlled by the Federal Government;

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. Standard

6.1 The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, the American Standards (such as ACI, IEEE, ASME, etc.) or the Pakistani standards such as PSQCA Such standards shall be the latest issued by the concerned institution.

7. Delivery/Location

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

8. Authorized Representatives / Authority of Member in charge

8.1 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 the Contract

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 Contract, 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 16** 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, 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. However, such period shall not exceed sixty (60) days.

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);

a. If the Bidder fails to remedy a failure in the performance of its obligations hereunder, as specified in a notice of suspension;

b. 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;

c. If the Bidder fails to comply with any final decision reached as a result of arbitration proceedings;

d. 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;

e. 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.

a. 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.

b. 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.

c. If the Procuring Agency fails to comply with any final decision reached as a result of arbitration.

d. 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:

a. 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;

b. 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 16.**

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 The Performance Security (or Guarantee) shall be provided to the Procuring Agency no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form acceptable to the Procuring Agency as specified in SCC, and denominated in the types and proportions of the currencies in which the Contract Price is payable as specified in the SCC.

23.2 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

23.3 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.

23.4 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.

23.5 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.**

23.6 The bid security of the successful bidder shall not be substituted with the Performance Guarantee.

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 Upon the commencement of the Procurement Contract, any disputes arising between the contracting parties shall be resolved in accordance with Rule 66 of the Public Procurement Rules, 2026.

37.2 The procuring agency may 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.

38. Change Orders

The Procuring Agency may at any time, by a written order given to the Supplier, make changes within the general scope of the Contract in any one or more of the following:

a)Drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Procuring Agency;
b)The method of shipment or packing;
c)The place of delivery; and/or
d)The Services to be provided by the Supplier.

39. Contract Amendenments

39.1 Subject to GCC Clause 32, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

40. Sub-Contracts

40.1 The Supplier shall consult the Procuring Agency in the event of subcontracting under this contract if not already specified in the Bid. Subcontracting shall not alter the Supplier's obligations.

Special Conditions of Contract

SECTION VIII. SPECIAL CONDITIONS OF CONTRACT

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

Number of GC Clause

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

Number of GC Clause 1

Definitions

The Procuring Agency is: **GSP-Lahore (Geological Survey of Pakistan (GSP)), Chemist Trade Center, Near Expo Center Johar Town, Lahore City, Lahore (District), Lahore Division (Division), Punjab (Province).**

The Supplier is:

The title of the subject procurement is: **PROCUREMENT, INSTALLATION, CONFIGURATION, COMMISSIONING AND SUPPORT OF IN-HOUSE VIRTUALIZATION, SERVER ROOM / DATA CENTRE AND NETWORK INFRASTRUCTURE**

Number of GC Clause 3

Applicable/Governing Law:

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

Number of GC Clause 4

Language:

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

Number of GC Clause 5

Notices:

The addresses for the notices are:

The Authority:

GSP-Lahore (Geological Survey of Pakistan (GSP)), Chemist
Trade Center, Near Expo Center Johar Town, Lahore City, Lahore (District), Lahore Division (Division), Punjab (Province).
+92-321-637-2397
muhammadusman@gsp.gov.pk

Contractor/ Bidder:

[Name, address and telephone number].

The Contractor/ Bidder's Representative(s)

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

Number of GC Clause 7.1

The Authorized Representatives are:

For the Procuring Agency:

GSP-Lahore (Geological Survey of Pakistan (GSP)), Chemist
Trade Center, Near Expo Center Johar Town, Lahore City, Lahore (District), Lahore Division (Division), Punjab (Province).
+92-321-637-2397
muhammadusman@gsp.gov.pk

For the Bidder:

Name: ……

Designation: ……..

Address: ……..

Number of GC Clause 8

Effectiveness of the contract

Number of GC Clause 9

Commencement of Contract:

Number of GC Clause 11.2

Expiration of Contract:

Number of GC Clause 15

Termination

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

Number of GC Clause 17

Conflict of Interest:

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

Number of GC Clause 22

Liquidated Damages

If the Bidder fails to provide services as required under the contract or in case of any data loss/data breach or any incident compromising the data security or other such failures related to any services, the Bidder shall pay to the Procuring Agency as Liquidated Damages at a rate of **0.10%** to **5.00%** of the Contract value, in accordance with the extent of performance failure & the cost of investigating such incidents as judged by the Authority.

Number of GC Clause 23

Performance Guarantee:

Instrument of Performance Guarantee shall be in the Name of : **GSP-Lahore**

The amount of performance guarantee shall be **2.50%** of the contract price in acceptable form of **Pay Order, Demand Draft**

Number of GC Clause 32

Payment terms:

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

Number of GC Clause 33

Currency of Payment:

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

Number of GC Clause 34

Identifying Defects:

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

Inspections & Tests Requirements

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

For Physical Fitness having No Damages (Certificate from supplier)

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

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

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

Delivery & Documents

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

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

Copies of the packing list identifying contents of each package;

Insurance Certificate;

Manufacturer's or Supplier's Valid Warranty Certificate;

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

Certificate of Origin.

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

Number of GC Clause 37

Following is the guidance for Dispute Resolution

(a) For Contracts to be entered with foreign Contractor/ Service Provider:

All disputes arising in connection with the present Contract shall be finally settled under the Rules of Conciliation and Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with said Rules.

(b) For Contracts to be entered with nationals of Pakistan:

i. 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.

ii. At future of negotiation the dispute shall be resolved through mediation and mediator shall be appointed with the mutual consent of the both parties.

iii. At the event of failure of mediation to resolve the dispute relating to this contract such dispute shall finally be resolved through binding Arbitration in accordance with GCC clause 38.

iv. 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.
v. 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.

PUBLIC PROCUREMENT REGULATORY AUTHORITY (PPRA) EPADS

Bid Securing Declaration

Form 9: Bid Securing Declaration

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

Bid No.:***P210411***

Alternative No.: **[insert identification No if this is a Bid for an alternative]**

To: **GSP-Lahore (Geological Survey of Pakistan (GSP)), Chemist Trade Center, Near Expo Center Johar Town, Lahore City, Lahore (District), Lahore Division (Division), Punjab (Province).**

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.

Signed: [insert signature of person whose name and capacity are shown] In the capacity of
[insert legal capacity of person signing the Bid Securing Declaration]

Name: [insert complete name of person signing the Bid Securing Declaration]

Duly authorized to sign the Bid for and on behalf of: [insert complete name of Bidder]

Dated on day of , [insert date of signing]
Corporate Seal (where appropriate)

Contract Form

SECTION IX: CONTRACT FORMS

THIS AGREEMENT made the _____ day of _____ 20_____ between **GSP-Lahore (Geological Survey of Pakistan (GSP)), Chemist Trade Center, Near Expo Center Johar Town, Lahore City, Lahore (District), Lahore Division (Division), Punjab (Province).**

(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, INSTALLATION, CONFIGURATION, COMMISSIONING AND SUPPORT OF IN-HOUSE VIRTUALIZATION, SERVER ROOM / DATA CENTRE AND NETWORK INFRASTRUCTURE (*P210411*)** 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: ……

PUBLIC PROCUREMENT REGULATORY AUTHORITY (PPRA) EPADS

Integrity Pact

Integrity Pact

DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC. PAYABLE BYTHE 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 time 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: **GSP-Lahore (Geological Survey of Pakistan (GSP)), Chemist Trade Center, Near Expo Center Johar Town, Lahore City, Lahore (District), Lahore Division (Division), Punjab (Province).**

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 and Requirements along with Annexures A, B, C

Information (Read-Only)

See Form Under Additional Forms and Documents: **Technical Specifications and Requirements along with Annexures A, B, C** (page number: 98)

PUBLIC PROCUREMENT REGULATORY AUTHORITY (PPRA) EPADS

Procurement Forms

Financial Capacity and Net Worth Evaluation Form

See Form Under Additional Forms and Documents: **Financial Capacity and Net Worth Evaluation Form** (page number: 118)

PUBLIC PROCUREMENT REGULATORY AUTHORITY (PPRA) EPADS

PUBLIC PROCUREMENT REGULATORY AUTHORITY
(PPRA)
EPADS

Additional Forms and Documents

GEOLOGICAL SURVEY OF PAKISTAN

REQUEST FOR PROPOSALS (RFP)

PROCUREMENT, INSTALLATION, CONFIGURATION, COMMISSIONING AND SUPPORT OF IN-HOUSE VIRTUALIZATION, SERVER ROOM / DATA CENTRE AND NETWORK INFRASTRUCTURE

For Hosting of ArcGIS Enterprise, GSP Geodata Portal and Associated Applications

Particular	Details
Procuring Agency	Geological Survey of Pakistan (GSP)
Project	Accelerated Geological Mapping (AGM) / National Geological Database & Geodata Portal
Procurement Method	Single Stage – Single Envelope
Implementation Site	Geological Survey of Pakistan, Islamabad
Tender No.	_____
Date of Issue	_____
Bid Submission Deadline	_____

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1. INVITATION FOR BIDS

Geological Survey of Pakistan (GSP) invites sealed bids from reputed, technically capable and financially sound firms for the supply, installation, configuration, integration, commissioning, testing and support of an enterprise-grade in-house virtualization and server-room/data-centre infrastructure at GSP Islamabad.

The procurement shall be carried out through the **Single Stage – Single Envelope procedure** in accordance with the applicable Government of Pakistan procurement rules and the bidding conditions issued with this RFP.

The procurement is intended to establish an in-house infrastructure capable of hosting the virtualized services currently deployed on NTC virtual servers for GSP's ArcGIS Enterprise and Geodata Portal environment, together with associated web, database, authentication, application and supporting services.

NOTE: The successful bidder shall provide a complete turnkey solution. Hardware, software, licenses, subscriptions, accessories, installation, configuration, testing, documentation, training and warranty/support necessary for the proposed solution shall be included.

2. BACKGROUND

GSP has established an enterprise GIS and Geodata Portal environment for the development of its National Geological Database and digital dissemination services. The ArcGIS Enterprise environment and the GSP Geodata Portal have been deployed on virtual infrastructure hosted at National Telecommunication Corporation (NTC).

The Geodata Portal architecture includes web/application services, authentication, content management, relational database services, file storage and integration with ArcGIS Enterprise. The proposed infrastructure shall therefore be designed as an enterprise virtualization platform rather than as isolated physical servers.

GSP now intends to establish an in-house server room/data-centre environment with two enterprise physical servers configured as a virtualization cluster, shared storage, high-speed networking, security, power backup, cooling, monitoring and physical security.

3. SCOPE OF PROCUREMENT

The scope shall include, at minimum:

- Two enterprise rack-mounted physical servers.
- Enterprise shared SAN storage of minimum 32 TB usable capacity.
- Fibre Channel SAN connectivity and required SAN switching/HBAs.
- Enterprise 10/25 GbE data networking and required SFP/SFP+ modules.
- Enterprise Next Generation Firewall.
- Enterprise Application Delivery Controller / Load Balancer.
- 42U rack, PDUs and rack accessories.
- Precision/in-row cooling or equivalent suitable for the calculated server-room heat load.

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- Online UPS of minimum 6 kVA with battery bank providing up to/at least 15 minutes backup at the agreed critical load.
- Diesel generator backup, automatic transfer switch and all required installation/accessories.
- Environmental monitoring and infrastructure monitoring.
- Access control, fire alarm, CCTV and NVR.
- Dedicated electrical earthing and structured cabling.
- Rack-mount KVM.
- Virtualization software/platform and required management licenses.
- Windows Server licenses required for the proposed workloads.
- SSL/TLS certificates for public-facing GSP services, including wildcard/SAN certificates where technically appropriate.
- Required server management, monitoring, backup-agent or other infrastructure software licenses.
- Installation, configuration, integration, testing and commissioning.
- Coordination/support for transition from NTC.
- Training, documentation and warranty/technical support.

4. EXISTING ENVIRONMENT AND MIGRATION BASELINE

The existing NTC virtual infrastructure (Annexure-A) shall be used as the workload and capacity baseline for sizing the proposed GSP infrastructure.

NOTE: Migration of application data and application-level services is not the primary scope of this procurement. GSP expects the respective system/application vendors and implementation partners already responsible for the ArcGIS Enterprise and Geodata Portal deployments to perform or assist with application-specific migration, reconfiguration and validation. The infrastructure vendor shall provide the required compute, storage, networking, virtualization, OS and security environment and shall coordinate with those vendors during transition.

The infrastructure vendor shall, however, provide reasonable transition support including:

- VM inventory and infrastructure discovery.
- Creation of the target virtualization environment.
- Network, VLAN, firewall, DNS and SSL coordination.
- Creation/configuration of required virtual machines.
- Operating system installation and hardening.
- Provision of storage and file-system access.
- Provision of required service accounts and access.
- Coordination windows for cutover.
- Troubleshooting of infrastructure-related issues during transition.
- Post-transition infrastructure stabilization.

5. TARGET ARCHITECTURE

The bidder shall propose a complete architecture broadly based on the following logical arrangement:

- Two physical enterprise servers operating as a virtualization cluster.

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- Shared SAN storage connected through redundant Fibre Channel or equivalent enterprise storage connectivity.
- 10/25 GbE server/data network with VLAN segmentation.
- NGFW at the network/security boundary.
- Application Delivery Controller / Load Balancer for public-facing and application services.
- Virtual machines for ArcGIS Enterprise components and associated databases/services.
- Virtual machines for the GSP Geodata Portal, including IIS/Umbraco/Keycloak and related services as required by the approved portal design.
- Separate or logically isolated management, server, storage and public/application network segments.
- Centralized monitoring and environmental monitoring.
- Online UPS and automatic generator backup.
- Scalable architecture allowing additional VMs, storage and network devices to be added later.

6. DETAILED TECHNICAL SPECIFICATIONS

6.1 Enterprise Virtualization Server – Quantity 2

Parameter	Minimum Requirement
Form factor	Enterprise rack-mounted server or better
Processors	Current-generation enterprise server processors; minimum 24 physical cores per CPU or equivalent/better
Memory	Minimum 256 GB ECC DDR4 RAM per server; expandable to at least 1 TB
Local/Boot Storage	Minimum 2 x 375 GB enterprise NVMe/Optane-class devices configured redundantly for OS/hypervisor
Local SSD Storage	Minimum 3 × 960 GB enterprise SSD or equivalent/better
RAID	Enterprise hardware RAID/controller with protected cache and required battery/flash-backed protection
Network	Minimum 10/25 GbE ports per server plus dedicated management port
SAN	Dual Fibre Channel HBA or equivalent redundant SAN connectivity
Expansion	Adequate PCIe slots for proposed NIC/HBA expansion
Remote Management	Enterprise out-of-band management with remote console, power control and hardware monitoring
Power	Dual hot-plug redundant power supplies; minimum 1300 W each or adequately sized for actual configuration
Cooling	Redundant hot-plug fans
Security	TPM 2.0 or equivalent enterprise hardware security
Warranty	Minimum 3 years comprehensive onsite warranty
Support	24×7 online support for critical infrastructure. Onsite support in case the matter remains unresolved online.

NOTE: The bidder shall provide a server sizing report demonstrating that the two-host cluster can accommodate the existing NTC workload with not less than 25–30% practical resource headroom under normal operating conditions. Exact processor model may vary, provided the offered solution is demonstrably equivalent or better.

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6.2 Enterprise SAN Storage – Quantity 1

Parameter	Minimum Requirement
Usable Capacity	Minimum 32 TB usable capacity after RAID/protection overhead, or equivalent capacity clearly demonstrated
Architecture	Enterprise SAN with dual redundant controllers
Connectivity	Fibre Channel and/or enterprise SAN protocol appropriate to the proposed architecture
Controllers	Dual active/standby or active/active redundant controllers
Disk Technology	Enterprise SSD/SAS/NL-SAS combination as appropriate; bidder shall state configuration
Data Protection	Enterprise RAID/data protection with hot-spare capability
Cache	Protected enterprise cache
Availability	No single controller failure shall make the storage unavailable
Expansion	Expandable without replacement of the complete system
Management	Web GUI and CLI management
Power	Redundant power supplies
Warranty	Minimum 3 years

6.3 Fibre Channel SAN Switch – Quantity 1 or 2

- Minimum 16 active Fibre Channel ports, expandable to at least 24 ports.
- Required SFP/SFP+ modules and fibre patch leads included.
- Appropriate speed for the proposed SAN architecture.
- Redundant SAN fabric shall be proposed where required to eliminate a single point of failure.
- Enterprise management and monitoring.
- Minimum 3-year warranty.

6.4 Enterprise Ethernet Switch – Quantity 1

- Minimum 24 × 10 GbE SFP+ ports or better.
- Layer 2/Layer 3 switching.
- VLAN, LACP/link aggregation, STP/RSTP/MSTP and QoS.
- SNMP monitoring.
- IPv4/IPv6 support.
- Required SFP/SFP+ modules and DAC/fibre cables.
- Suitable for server, storage, firewall and load-balancer connectivity.
- Minimum 3-year warranty.

6.5 Application Delivery Controller / Load Balancer – Quantity 1

- Minimum 4 × 10 GbE SFP+ ports, 8 × GbE SFP ports, 8 × GbE RJ45 ports and 1 × GbE management port, or equivalent/better.
- Minimum 256 GB onboard storage.
- Dual AC power supplies.
- Layer 4–7 load balancing.
- SSL/TLS termination/offloading.
- Health checks and service monitoring.
- Session persistence and NAT.

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- IPv4/IPv6.
- Logging and reporting.
- Security/IP reputation service where included by the proposed platform.
- Minimum one-year comprehensive support/subscription.

6.6 Next Generation Firewall – Quantity 1

- Enterprise NGFW suitable for public-facing Geodata Portal services.
- Stateful firewall, IPS/IDS, application control and web/URL filtering.
- VPN, NAT, VLAN and IPv4/IPv6 support.
- DDoS, CSRF protection support
- SSL/TLS inspection capability where supported.
- Centralized logging and reporting.
- Appropriate 10 GbE or higher connectivity.
- High-availability capability.
- All required security subscriptions for at least one year.
- Minimum three-year hardware warranty.

7. SOFTWARE AND LICENSING REQUIREMENTS

All software required to make the proposed infrastructure fully operational shall be identified, procured and provided by the bidder. GSP shall not be required to purchase additional mandatory licenses after award merely to operate the system supplied under this RFP.

Software/License	Requirement	Status
Virtualization platform	Complete enterprise virtualization/hypervisor platform for both physical hosts, including central management and HA functions	Required
Windows Server	Required Windows Server 22 licenses for the proposed Windows VMs/workloads.	Required
Windows CALs	Appropriate CALs or equivalent licensing where required by the proposed Microsoft licensing model	Required where applicable
SSL/TLS certificates	Valid CA-issued SSL/TLS certificates for public-facing services; SAN/wildcard certificate where technically appropriate	Minimum 1 year
Server management	Required vendor management/monitoring licenses	Required
SAN management	Required storage management licenses	Required
Backup agents	Required licenses for proposed VM/application backup solution	Required if included
Security subscriptions	Firewall/IPS/web filtering/reputation subscriptions required for stated functionality	Minimum 1 year

7.1 SSL/TLS CERTIFICATES

- Certificates shall be issued by a recognized public Certificate Authority acceptable to GSP.
- Certificates shall support the public HTTPS services of the Geodata Portal and ArcGIS Enterprise/Web Adaptor as required.
- Bidder shall configure certificate installation, certificate chain, renewal documentation and service bindings.

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- Where technically appropriate, a SAN or wildcard certificate may be proposed to reduce operational complexity.
- Certificate validity shall be at least one year from commissioning, with renewal requirements clearly documented.

7.2 OPERATING SYSTEM HARDENING

- Windows Server instances shall be fully patched and hardened.
- Only required services and ports shall be enabled.
- Administrative accounts shall be controlled.
- Time synchronization, DNS and domain/service-account requirements shall be configured.
- Antivirus/endpoint protection shall be installed where required by GSP security policy and compatible with ArcGIS/portal applications.

8. SERVER ROOM / DATA CENTRE INFRASTRUCTURE

8.1 42U Rack – Quantity 1

- 42U rack, minimum 600 mm wide × 1070 mm deep or better.
- Lockable front and rear doors.
- Removable side panels.
- Vertical and horizontal cable management.
- Heavy-duty castors and leveling feet.
- Rack earthing/bonding.
- Vertical intelligent/basic PDUs appropriate to load.
- All required rack mounting rails and accessories.

8.2 Precision / In-Row Cooling

- 24×7 continuous-operation cooling suitable for server-room use.
- Bidder shall calculate IT heat load plus UPS/network/storage losses.
- Temperature monitoring and alarm.
- Humidity monitoring/control where appropriate.
- Auto restart after power restoration.
- Integration with infrastructure monitoring where supported.
- Complete installation kit, piping/drainage/electrical works and commissioning.

NOTE: Bidder shall submit a heat-load and cooling calculation. The proposed capacity shall not be based solely on nominal server-room area.

8.3 Environmental and Infrastructure Monitoring

- Temperature and humidity sensors.
- Water leakage detection.
- Smoke/alarm input.
- Door/access monitoring.
- UPS/power status.
- Cooling status.

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- Server/network SNMP monitoring where supported.
- Web dashboard and event history.
- Email/SMS or equivalent alerting where supported.

8.4 Physical Security

- Electronic access control system with card/biometric capability.
- Minimum two IP CCTV cameras with suitable night vision.
- Network video recorder with appropriate storage.
- Fire alarm panel, smoke detection and audible/visual alarm.
- All installation, cabling and commissioning.

9. POWER, UPS AND GENERATOR BACKUP

9.1 Online UPS – Quantity 1

- Minimum 6 kVA online double-conversion UPS.
- External lithium-iron -phosphate battery bank.
- Minimum 15 minutes autonomy at the agreed critical load.
- LCD/display and event logging.
- SNMP/network monitoring.
- Maintenance bypass.
- Overload, short-circuit and battery protection.
- Complete installation and commissioning.

9.2 Diesel Generator Backup – Quantity 1

Parameter	Minimum Requirement
Capacity	Minimum 20 kVA, or larger if required by the bidder's load calculation
Type	Diesel, 3-phase, 400/230 V, 50 Hz, suitable for continuous/standby institutional operation
Engine	Reputable enterprise/industrial engine with local service support
Alternator	Brushless, AVR-controlled, suitable for sensitive electronic loads
Automatic Transfer	Automatic Transfer Switch (ATS) with suitable interlocking and protection
Starting	Automatic electric start with battery charger
Fuel System	Integrated tank/day tank arrangement adequate for proposed operating period
Protection	Overload, short circuit, low oil pressure, high temperature and overspeed protection
Acoustic/Weather Protection	Weatherproof/acoustic canopy as site conditions require
Earthing	Complete generator earthing and bonding
Installation	Foundation, cabling, exhaust, ventilation and commissioning as required
Load Test	Full load/bank load testing and test report
Warranty	Minimum 2 years or manufacturer standard, whichever is better

NOTE: The generator shall be sized on the actual connected and starting load of the server room, cooling, networking, security and associated critical equipment, with reasonable spare capacity. If 20 kVA is insufficient after the bidder's load calculation, the bidder shall quote the next appropriate capacity without compromising the required system.

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9.3 Electrical Distribution and Earthing

- Dedicated server-room electrical distribution board.
- Appropriate MCB/MCCB/RCD protection as required.
- Dedicated circuits for UPS, cooling, networking and generator.
- Proper rack and equipment bonding.
- Dedicated earthing system and test report.
- Power cables and accessories sized for actual load.
- All cabling to be labeled and neatly routed.

10. NETWORK, FIREWALL AND LOAD BALANCING

The bidder shall prepare and implement a network architecture providing logical separation of:

- Management network.
- Server/VM network.
- Storage/SAN network.
- Public/DMZ/application network.
- Backup/management traffic where applicable.

The firewall and load balancer shall be configured in coordination with GSP and the Geodata Portal implementation partners. Required ports shall be documented before commissioning.

NOTE: The final firewall rule set shall be approved by GSP. The bidder shall not open unnecessary inbound ports. Public services shall use HTTPS and the appropriate DNS records.

11. STORAGE AND SAN

The SAN shall be the primary shared datastore for the virtualization cluster unless the bidder demonstrates an equivalent enterprise architecture. The bidder shall provide a storage sizing report showing raw capacity, usable capacity, RAID/protection overhead, performance assumptions, expansion capacity and expected growth.

- Minimum 32 TB usable capacity.
- Dual controller architecture.
- Redundant paths from both physical servers.
- Appropriate Fibre Channel HBAs/switching.
- Storage multipathing configured and tested.
- Disk failure/rebuild procedure documented.
- Controller failover tested.
- Storage monitoring enabled.

11.1 Backup – Mandatory Design Requirement

The SAN shall not be treated as a backup system. The bidder shall provide a backup strategy for virtual machines and critical application/database workloads.

- VM-level backup.
- Scheduled backups.

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- Retention policy.
- Restore testing.
- Backup monitoring.
- Off-host backup destination where feasible.
- RPO/RTO statement.

12. VIRTUALIZATION PLATFORM

- The two physical servers shall operate as a managed virtualization cluster.
- High availability shall be supported.
- VM restart after host failure shall be configured and tested.
- Live migration/maintenance migration shall be supported where provided by the proposed platform.
- Central management shall be provided.
- Resource pools/quotas shall be configurable.
- Virtual networking shall support VLANs and redundant uplinks.
- Virtual storage shall support multipathing to SAN.
- The bidder shall provide all licenses/subscriptions necessary for the stated functions.
- Enterprise-supported open-source virtualization platforms may be proposed if the bidder provides appropriate enterprise support and lifecycle assurance.

NOTE: The bidder shall state the proposed hypervisor, version, licensing model, support period and renewal cost separately.

13. SECURITY, SSL AND IDENTITY REQUIREMENTS

- Firewall shall provide perimeter security for public services.
- Public-facing applications shall use valid HTTPS certificates.
- Administrative access shall be restricted and logged.
- Management interfaces shall not be directly exposed to the public Internet.
- VMs shall be logically segmented through VLANs/firewall rules.
- Windows Server security updates shall be applied.
- Service accounts shall follow least-privilege principles.
- System clocks shall be synchronized.
- Audit/logging shall be enabled for critical infrastructure.
- Certificate expiry and renewal shall be documented.
- The solution shall support integration with GSP's existing domain/identity arrangements where applicable.

The Geodata Portal environment is expected to include IIS-hosted application services, Umbraco, Keycloak and MS SQL Server services, in addition to ArcGIS Enterprise. The infrastructure shall support these services without requiring a separate procurement merely to make the approved application architecture operational.

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14. INSTALLATION, CONFIGURATION AND COMMISSIONING

1. Site survey and validation of room, electrical and cooling conditions.
2. Detailed implementation design and bill of materials confirmation.
3. Rack installation and earthing.
4. UPS, generator and electrical integration.
5. Cooling installation and commissioning.
6. Server installation and firmware update.
7. SAN and SAN switch installation/configuration.
8. Ethernet switch installation/configuration.
9. Firewall and load-balancer installation/configuration.
10. Virtualization platform installation.
11. Windows Server installation/licensing and hardening.
12. SSL certificate installation/configuration.
13. Creation of agreed VMs.
14. Network, VLAN, DNS and firewall configuration.
15. Coordination with application vendors.
16. System testing and acceptance.

15. COORDINATION / TRANSITION SUPPORT FROM NTC

GSP's primary requirement under this procurement is the establishment of the in-house infrastructure. Application-specific migration and reconfiguration shall be coordinated with the vendors responsible for the deployed systems. The successful infrastructure bidder shall facilitate the transition at the infrastructure layer.

- Provide target VM specifications based on the approved sizing.
- Provide VM templates/OS installations.
- Provide storage and network connectivity.
- Provide firewall/load-balancer configuration.
- Provide DNS and SSL support.
- Coordinate migration windows.
- Provide infrastructure-level troubleshooting.
- Participate in joint validation with GSP and application vendors.
- Provide post-cutover infrastructure support.

NOTE: No bidder shall be required to undertake application redevelopment, database restructuring or wholesale data migration as part of the base infrastructure scope. Any such work shall only be performed if separately quoted and approved by GSP.

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16. TESTING AND ACCEPTANCE

The system shall pass the following minimum acceptance tests:

Test Area	Acceptance Requirement
Physical servers	Both servers operational; remote management and hardware health verified
Cluster	Both hosts joined; HA/resource management verified
SAN	32 TB usable capacity or approved equivalent; redundant paths verified
SAN failure test	Single path/controller failure does not cause loss of access
Network	10/25 GbE connectivity and VLANs verified
Firewall	Required policies, NAT/VPN/security functions verified
Load balancer	Health checks and application forwarding verified
UPS	Online operation, battery backup and monitoring verified
Generator	Automatic transfer and load test completed
Cooling	Temperature maintained within approved operating range
Monitoring	Alerts generated and visible
Windows Server	Licensing, patching and hardening verified
SSL	Public HTTPS certificates installed and valid
Virtualization	VM creation, restart and migration/HA functions verified
GIS platform	ArcGIS components reachable and functional after coordinated transition
Geodata Portal	Portal/application services reachable and functional after coordinated transition
Documentation	As-built drawings, configurations and licenses handed over

NOTE: Final acceptance shall be based on successful commissioning of the infrastructure and joint functional validation of the hosted services. A Site Acceptance Certificate shall be issued by GSP.

17. DOCUMENTATION AND TRAINING

- As-built physical and logical network diagrams.
- Server and virtualization configuration.
- SAN configuration and storage map.
- IP address and VLAN plan.
- Firewall and load-balancer configuration.
- Rack elevation.
- Power and UPS diagram.
- Generator/ATS diagram.
- Cooling and environmental monitoring configuration.
- VM inventory.
- Software/license certificates.
- SSL certificate details and renewal procedure.
- Backup configuration.
- Operations and maintenance manuals.
- Troubleshooting/escalation matrix.
- Minimum five working days hands-on training for nominated GSP technical staff.

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18. WARRANTY AND SUPPORT

- Minimum 3-year comprehensive onsite warranty for servers, SAN, switches, firewall, load balancer and major infrastructure hardware.
- 24×7 online support for critical infrastructure. Onsite support in case the matter remains unresolved online.
- Critical incident response within 2 hours.
- High-severity incident response within 4 hours.
- Firmware/driver updates during warranty where covered by manufacturer.
- Replacement of defective hardware parts.
- Escalation to OEM where required.
- Post-commissioning stabilization support for at least 30 days.

19. DELIVERY AND IMPLEMENTATION SCHEDULE

The bidder shall submit a detailed implementation schedule. As a minimum, the bidder shall plan for:

Phase	Activity	Target
1	Site survey, design confirmation and implementation plan	Within 10 days of contract
2	Equipment delivery	
3	Rack/power/cooling/network installation	Within 10 days of delivery
4	Server/SAN/network/security configuration	
5	Virtualization and OS deployment	
6	Coordination/transition support	As jointly scheduled with GSP/application vendors
7	Testing and acceptance	Within 5 working days after implementation

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20. BILL OF QUANTITIES / PRICE SCHEDULE

Bidders shall quote against every line item.

Sr.	Description	Qty
1	Enterprise Virtualization Server, complete	2
2	Enterprise SAN, minimum 32 TB usable	1
3	Fibre Channel SAN Switch, 16 active / 24 expandable	1/2
4	Enterprise 24-port 10 GbE SFP+ Switch	1
5	Application Delivery Controller / Load Balancer	1
6	Next Generation Firewall	1
7	42U Server Rack with PDU and accessories	1
8	Precision/In-Row Cooling or equivalent	1 lot
9	Environmental/Data Centre Infrastructure Monitoring	1 lot
10	Online UPS 6 kVA with battery bank	1
11	Diesel Generator with ATS and installation	1
12	2-ton AC / additional cooling as per heat-load design	1/2
13	Dedicated Earthing System	1 lot
14	Structured Ethernet/Fibre/SAN/Power Cabling	1 lot
15	17-inch rack-mount LCD KVM, 8-port	1
16	Access Control System	1 lot
17	Fire Alarm/Detection System	1 lot
18	2 × CCTV Cameras + NVR	1 lot
19	Virtualization Platform and Management Licenses	1 lot
20	Windows Server Licenses and CALs as required	1 lot
21	SSL/TLS Certificates and configuration	1 lot
22	Required security/monitoring/management subscriptions	1 lot
23	Backup software/agents and required components	1 lot
24	Installation, configuration and commissioning	1 lot
25	Infrastructure transition/coordination support with existing application vendors	1 lot
26	Training and documentation	1 lot
27	Three-year warranty/support	1 lot

Total Bid Price (including all applicable taxes): PKR _____

Bid validity: _____ days

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21. BIDDER ELIGIBILITY AND QUALIFICATION

- Legally registered firm/company in Pakistan.
- Valid NTN and applicable tax registrations.

22. TECHNICAL COMPLIANCE AND EVALUATION

Since the procurement is Single Stage – Single Envelope, the bidder shall submit technical and financial proposals in the same sealed submission in the format prescribed by GSP. Technical responsiveness shall be determined before financial comparison.

Criterion	Method
Mandatory technical specifications	Pass/Fail
Warranty/support	Pass/Fail

NOTE: GSP reserves the right to seek clarification in accordance with applicable procurement rules. Clarification shall not permit substantive alteration of the bid.

23. DELIVERY AND IMPLEMENTATION SCHEDULE

The bidder shall submit a detailed implementation schedule. As a minimum, the bidder shall plan for:

Phase	Activity	Target
1	Site survey, design confirmation and implementation plan	Within 10 days of contract
2	Equipment delivery	
3	Rack/power/cooling/network installation	Within 10 days of delivery
4	Server/SAN/network/security configuration	
5	Virtualization and OS deployment	
6	Coordination/transition support	As jointly scheduled with GSP/application vendors
7	Testing and acceptance	Within 5 working days after implementation

24. PAYMENT TERMS

Payment shall be made after issuance of satisfactory completion report

25. PERFORMANCE GUARANTEE

The successful bidder shall furnish performance guarantee of 5% of the grand total bid price at the time of signing of contract agreement.

26. GENERAL CONDITIONS

- All prices shall be inclusive of delivery, installation, configuration, testing and commissioning.
- All applicable taxes and duties shall be included in the bid price.
- Equivalent or better products shall be acceptable where they meet or exceed the mandatory technical requirements.

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- GSP may inspect offered equipment before acceptance.
- All serial numbers, license keys and warranty certificates shall be handed over.
- The bidder shall provide a complete single-point responsibility for integration of the supplied infrastructure.

27. TECHNICAL COMPLIANCE MATRIX

The bidder shall complete the following matrix. 'Comply' without supporting evidence may be treated as insufficient for evaluation.

Area	GSP Minimum Requirement	Bidder Compliance / Offered Specification
Servers	2U, dual enterprise CPUs, minimum 24 cores/CPU, 256 GB ECC RAM, expandable to 1 TB, enterprise SSD, redundant PSU	
Server networking	Minimum 10/25 GbE plus management	
SAN	Minimum 32 TB usable, dual controllers, enterprise protection	
SAN connectivity	FC HBA and required SAN switching	
LAN switch	Minimum 24 × 10 GbE SFP+	
Load balancer	Enterprise L4–L7 ADC, SSL termination, required ports	
Firewall	Enterprise NGFW with IPS/IDS, application control, VPN, logging	
Rack	42U, 600 × 1070 mm or better	
Cooling	24×7 precision/in-row/equivalent with heat-load calculation	
UPS	6 kVA online, battery bank, minimum 15 min at agreed critical load	
Generator	Minimum 20 kVA or sized above based on load calculation, with ATS	
Monitoring	Environmental + infrastructure monitoring	
Access/CCTV/fire	Complete physical security package	
Virtualization	Enterprise cluster, HA, central management	
Windows Server	All required Windows Server licenses included	
SSL	Public CA SSL/TLS certificates included	
Backup	VM/application backup strategy included	
Installation	Complete turnkey installation and commissioning	
Transition	Infrastructure-level coordination/support with existing application vendors	
Training	Minimum 5 working days	
Warranty	Minimum 3 years onsite	

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28. BID SUBMISSION FORMS

28.1 Bidder Information Form

Field	Bidder Response
Legal Name	
Registered Address	
NTN	
GST / Sales Tax Registration	
Contact Person	
Telephone	
Email	
Years in Business	
Relevant Projects	

28.2 Manufacturer / Make / Model Schedule

Sr.	Equipment	Proposed Make	Proposed Model	Country of Origin	Warranty
1	Server				
2	SAN				
3	SAN Switch				
4	Ethernet Switch				
5	Load Balancer				
6	Firewall				
7	Rack				
8	Cooling				
9	UPS				
10	Generator				
11	Monitoring				
12	KVM				
13	CCTV/NVR				

28.4 Bidder Declaration

We hereby certify that the information submitted in our technical and financial proposal is true and complete, that the proposed equipment and software meet the requirements stated in this RFP and that we accept responsibility for complete integration, installation, commissioning, warranty and support of the offered solution.

Authorized Signatory: _____

Name & Designation: _____

Company Stamp: _____

Date: _____

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ANNEX-A: INDICATIVE NTC VIRTUAL INFRASTRUCTURE BASELINE

S. No.	VM / Server Resource	Qty.	Processor / CPU	RAM	Storage	OS Platform
1	ArcGIS Server	1	06 Core	32 GB	500 GB Auto-Tiered	Windows Server 2022
2	ArcGIS Portal	1	06 Core	32 GB	500 GB Auto-Tiered	Windows Server 2022
3	ArcGIS Web Adaptor / Portal / Server / Datastore	1	04 Core	32 GB	200 GB Auto-Tiered	Windows Server 2022
4	ArcGIS Database Server	1	06 Core	32 GB	800 GB Auto-Tiered	Windows Server 2022
5	File Storage Server	1	04 Core	08 GB	01 TB Auto-Tiered	Windows Server 2022
6	Domain Server	1	04 Core	08 GB	150 GB Auto-Tiered	Windows Server 2022
7	Geodata Portal	1	04 Core	16 GB	200 GB SSD	Windows Server 2022
Total	Virtual Machines / VDS	7	—	—	—	—

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ANNEX-B: MINIMUM ACCEPTANCE TEST PLAN

No.	Test	Minimum Verification
1	Server hardware	Power-on, POST, firmware, CPU, RAM, SSD, NIC, HBA, redundant PSU/fans
2	Remote management	Remote console, power cycle and hardware monitoring
3	Cluster	Both hosts visible; HA enabled
4	VM operations	Create, start, stop, restart and migrate test VM
5	SAN	Capacity, multipathing and redundant controller/path test
6	LAN	10/25 GbE throughput/connectivity and VLAN verification
7	Firewall	Required rules, NAT, security services and logs
8	Load balancer	Backend health check and HTTPS forwarding
9	Windows	License, patching, hardening and activation
10	SSL	Certificate chain, HTTPS and expiry information
11	UPS	Online mode, battery operation and monitoring
12	Generator	ATS transfer and load-bank/site load test
13	Cooling	Temperature/alarms and continuous operation
14	Monitoring	Environmental and device alerts
15	Security	Access control, CCTV and fire alarm
16	ArcGIS	Joint functional validation with application vendor
17	Geodata Portal	Joint functional validation with application vendor
18	Documentation	All as-built drawings, credentials handover protocol, licenses and warranty documents

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ANNEX-C: IMPORTANT PROCUREMENT NOTES

- The procurement is for a complete in-house infrastructure and server-room/data-centre solution, not merely two physical servers.
- The two physical servers shall be the primary virtualization hosts for the workloads currently hosted at NTC.
- The proposed architecture shall provide adequate headroom and future expansion.
- All mandatory software, operating systems, certificates, subscriptions and licenses required to operate the supplied infrastructure shall be included.
- Application-specific ArcGIS Enterprise licensing already procured by GSP is excluded from duplication.
- Application-specific data migration/redevelopment is not the principal responsibility of the infrastructure bidder. Existing application vendors shall perform or assist with application migration and validation.
- The infrastructure bidder shall provide the environment, connectivity, security, OS, certificates and technical coordination necessary for successful transition.
- The generator shall be integrated with the UPS and electrical system through a suitable ATS and protection arrangement.
- All proposed equipment shall be enterprise-grade.
- Equivalent or better specifications shall be accepted where demonstrated by the bidder.

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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 _[insert number] years, [insert in words] (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 statements[1] 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.