



MINISTRY OF DEFENCE THROUGH THE PROJECT DIRECTOR OF ITS GREENAI
PROJECT MANAGEMENT UNIT (“PROCURING AGENCY”)

CORRIGENDUM – IV

REQUEST FOR PROPOSAL
NASTP-GREENAI-AGRIVERSE-HARDWARE/RFP02/2024

FOR

ESTABLISHMENT OF “AGRIVERSE: NATIONAL PRECISION AGRICULTURE CLOUD
FACILITY (PILOT PHASE)”

AS A COMPONENT OF PSDP APPROVED PROJECT TITLED “DEVELOPMENT OF ICT
AND ARTIFICIAL INTELLIGENCE (AI) BASED PRECISION AGRICULTURE
SYSTEMS UTILIZING DUAL-USE AEROSPACE TECHNOLOGIES - GREENAI”

1. The procuring agency invites sealed bids from companies for the ESTABLISHMENT OF “AGRIVERSE: NATIONAL PRECISION AGRICULTURE CLOUD FACILITY (PILOT PHASE)” as specified in Request for Proposal document.
2. Bids prepared in accordance with instructions in the bidding document must reach the address mentioned in RFP document. With reference to requests received from multiple vendors, the date for submission of bidding document, which was originally 27 December, 2024 and revised until **20 January, 2025** in Corrigendum-III, is hereby being extended once again until **24 January, 2025 at 09:45 AM**. Technical bids will be opened on the same day i.e. **24 January, 2025 at 10:15 AM** in the presence of bidders or their authorized representatives.
3. A summary of major amendments made in the RFP is given in the ensuing paragraphs. All references to Para and Page numbers in the ensuing paragraphs are linked with the original RFP.

Bidding Process Instructions

4. Para 7, “**Last Date & Time of Submission of Bid**” has been updated as
Last Date & Time of Submission of Bid: 24 January, 2025 at 09:45 AM.
- Para 8, “**Bid Opening Date and Time**” has been updated as follows:
Bid Opening Date & Time: 24 January, 2025 at 10:15 AM.

Updated Technical Specifications and Criteria

5. In the section titled **“INVITATION TO CONTRACT AND GENERAL INSTRUCTIONS TO BIDDERS”** (Page 18), the following paragraph (i.e. paragraph 53) has been added:

The successful bidder will be responsible for providing only original NVIDIA authorized GPUs (i.e. no gray-channel procured hardware), wherever applicable.

6. On Page 27 / 28, in the **Cat “C”** hardware category, under the heading **Application Zone Nodes**, the requirement of RDMA, infiniband or equivalent (comparable low latency) has been removed. All nodes of Cat “C” are to be considered equipped with 2x10G, 2x25G and 2x100G.

7. On Page 28, in the table titled **HPC Zone Components / Nodes** for Cat “G”, NVIDIA GPU’s VRAM has been revised once again as ≥ 24 GB (in view of import restrictions on 40GB). Therefore, the **Paragraph 10 of Corrigendum-III**, would now be read as follows:

On Page 28, in the **Cat “G”** hardware category, under the heading titled **HPC Zone Components / Nodes**, the required VRAM for NVIDIA’s GPU is ≥ 24 GB with total required FP32 TFLOPS ≥ 300 (cross-refer **Corrigendum-II and Corrigendum-III**).

8. On Page 28, in the **Cat “G”** hardware category, under the heading titled **HPC Zone Components / Nodes**, the given networking requirements of “Ideally 100 Gbps (Backplane connectivity) and two (2) or more (10Gbps or 25Gbps as design demand) ports network connectivity” has been revised as follows:

2 x 100 Gbps, 2 x 25Gbps and 2 x 10Gbps ports network connectivity

9. On page 28, in the **Cat “G”** hardware category, under the heading titled **HPC Zone Components / Nodes**, the qty has been revised to “2 to 8” (from “3 to 8”).

10. Para 13 of Corrigendum III is to be treated as cancelled.

11. On page 29, under the heading of **Data Zone Components / Nodes**, the **hardware category** of “Storage (High Performance Computing Storage) (Cat “S”, Cat “F” , Cat “U”)”, the specification given as “Storage Connectivity minimum 25Gbps (depend on Vendor Solution along with -Storage (25Gbps or better)” has been updated as follows:

Storage Connectivity with 2x10 Gbps, 2x25 Gbps & 2x100 Gbps for all Data zone storage nodes

12. Para 17 of Corrigendum III is to be treated as cancelled in its entirety.

13. On page 52 of original RFP, under the heading of **Evaluation Criteria** in **Annex “II”**, the undermentioned criterion has been appended (wherever applicable):

(a) For Data Center Facility Components:- The bidder must have at least one Tier/Rated-2 or 3 (05-10 racks) Datacenter Deployment experience in Pakistan to qualify **(Mandatory)**. Reference(s) is / are to be provided”.

- (b) OEM authorization letter from manufacturer must be attached **(Mandatory)**.
- (c) Only type tested certified switchboards will be accepted **(Mandatory)**.
- (d) The bidder must have completed at least one Tier/Rated-2 or 3 Data Center Deployment with 05 or more racks with reference **(Mandatory)**
- (e) On Active Taxpayers List of FBR **(Mandatory)**
- (f) Most recent Sales Tax Return from FBR **(Mandatory)**
- (g) Most recent Income Tax Return **(Mandatory)**

14. On Page 36 of original RFP, in Appendix "A3", Paragraph 1 subpara (j) and (k) have been revised as follows:

- 1.
- (j) The following power cables are to be provided by the bidder:
 - (i) From transformer to power room, 4-core AC, length = 200 meters, capacity = 100 kVA
 - (ii) Generator to power room, 4-core AC, length = 100 meters, capacity = 100kVA
 - (iii) DC cables of appropriate rating wherever applicable
 - (k) Transformer (rated at 100 kVA) along with WAPDA connection are to be provided by the bidder (as per option stated at Paragraph 1 subparagraph (e) of the original RFP

15. On Page 5 of Corrigendum III, Paragraph 18 subparagraphs (b) and (c) relating to **UPS** have been revised as follows:

- (b) For Supply installation of 2 x three-phase online double conversion modular Uninterruptable Power System (UPS), capacity to support initial IT load of 36 kW (minimum) or higher as per vendor quoted IT solution with chassis rating \geq **90kVA** / kWatt or higher at overall 2(N+1) design configuration.
- (c) UPS Should have a safe and reliable battery solution that is housed within cabinet/Racks based cabinet. (The battery rating should be as per OEM design).

16. On page 53, the Preferred Requirements given at Para 4 (c) have been relaxed as follows:

Participating bidder should have at least one local Data Centre project experience

17. On page 61, under the heading **Quality of Bidder's (HR) Expertise (Application / Cloud)**, the description of criteria given in Row 1 for **Project Manager** (cloud, HPC storage) has been revised as "IT Qualified (mandatory) with PMP certification (preferred)".

18. On page 62, in Annex "II" of **QUALITY OF BIDDER'S (HR) EXPERTISE (APPLICATION/CLOUD)**, the criteria of "Qualified Resident Engineer dedicated to the project" has been removed from overall scope".

19. On page 62, under the heading **Quality of Bidder's (HR) Expertise (Application / Cloud)**, the description of criteria given in Row 4 for **OpenStack or Equivalent Expert (Certified)** has been revised to "Openstack or equivalent cloud related experience = qualify / else disqualify".

Updates in Annexure II of RFP

20. On page 59, under the heading "BIDDER'S EXPERIENCE (HPC SOLUTIONS)", the criteria of "Minimum of 2 deployed HPC solutions of at least 10 Tflops, involving complete design and execution completed in the last 05 years" has been revised as "**Minimum of 01 GPU-based Data Centre deployment (in Pakistan) with at least 10 TFlops involving complete design and execution**".



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Date:- 17 January, 2025

HBL ISLAMIC BANKING		Deposit Slip	
		Customer Copy	
Branch:	Date:	1 3 0 1 2 6 2 5	
Account Title:	Public Procurement Regulatory Authority Ltd.		
IBAN:	PK H A B B 0 0 0 4 5 4 0 0 1 3 1 6 0 7 0 1		
Currency:	Account Type: Current Savings		
Credit Card No.			
<input type="checkbox"/> CASH	AMOUNT		
BANK / BRANCH	CHEQUE/INSTRUMENT NO.	45000/-	
	0619211		
	TOTAL AMOUNT	45000/-	
Total Amount in Words: Forty five thousand only.			
Depositor's Name:	M. Adnan	Other Banks Cheque Deposit	
Contact No.:	0321-5757370	Branch: 53B4-1BB Ghouri Town Br	
Depositor's CNIC No.:	9201-4524320-7	From Account: XXXXXX	
Depositor's Account No.:		Account Name PK17HABB0004540013100701	
		Amount *****45,000.00 PKR	
		Charges *****.00 Date' 2025-01-13	
		Teller CL35 Time 16.21.53.398000	
Received By:	Depositor's Signature	(As per Terms & Conditions on reverse) (Not official unless validated)	
		27003783	