

VOLUME II

Invitation for Bids
The Open University of Sri Lanka (OUSL)
AHEAD Operation
IFB No: AHEAD/CITES/OUSL/NCB/Goods/2022/03

Title of the Project: Designing, Purchasing, Supplying and Delivering, Installation and Commissioning of the Hyperconverged Server Infrastructure and Backup Solution (Total Solution) to The Open University of Sri Lanka

1. The Chairman, Department/Project Procurement Committee on behalf of the Open University of Sri Lanka/AHEAD Operation now invites sealed bids from eligible and qualified bidders for the Designing, Purchasing, Supplying and Delivering, Installation and Commissioning of the Hyperconverged Server Infrastructure and the Backup Solution (Total Solution) to The Open University of Sri Lanka, Nawala, Nugegoda. Bidding will be conducted through National Competitive Bidding (NCB) described under the Procurement Guidelines 2006.
2. Qualification requirements to qualify for the contract award may include,
 - Having valid relevant business registration in Sri Lanka.
 - The bidder must have at least 5 years of experience in design and implementation of Hyperconverged server Infrastructure or similar nature and Backup Solution.
 - Having at least one completed similar project or more during the last five (05) years.
 - Manufacturer Authorization Letter (MAL) should be provided for Servers, switches, backup solutions and for other items.
3. Technical information can be obtained from the Director or Network Manager / Information Technology Division (Contact Nos: 0112881495,0112881363) and Bidding documents may be inspected free of charge through the university website(www.ou.ac.lk). A complete set of Bidding Documents in English language may be purchased by interested bidders on the submission of a written application to the Deputy Director Procurement/AHEAD Operation, The Open University of Sri Lanka, Nawala, Nugegoda from 01st of December 2022 to 23rd of December 2022 on working days from 9.00 am - 3.00 pm, upon payment of a non-refundable fee of Rs. 10,000.00 made to the Shroff/OUSL
4. Duly filled Completed set of bidding documents in separate sealed envelopes (Envelope 1 – Qualification and Experience and Envelope 2 – Financial Bid. Envelop should be marked correctly as Envelope 1 and Envelope 2) inserting in one envelop, marked as **“DESIGNING , PURCHASING, SUPPLYING AND DELIVERING, INSTALLATION AND COMMISSIONING OF THE HYPERCONVERGED**

SERVER INFRASTRUCTURE AND BACKUP SOLUTION (TOTAL SOLUTION) TO THE OPEN UNIVERSITY OF SRI LANKA “ on the left hand corner of the envelope should either be sent by registered post addressed to the Chairman, Department/Project Procurement Committee, Supplies Division, The Open University of Sri Lanka, PO Box 21, Nawala, Nugegoda or deposited into the tender box kept at the Supplies Division of the OUSL on or before 2.30 p.m. on 23rd December 2022. Late bids will be rejected. Bids will be opened soon after closing at the presence of the bidders or their representatives. Bids should be accompanied with the payment receipt to be considered as a valid Bid.

5. All bids shall be accompanied by a Bid Security of Rs. 1,000,000.00 and valid up to 07/04/2023 issued by a Bank operating in Sri Lanka (registered in Central Bank of Sri Lanka) or cash deposit made to the shroff/OUSL
6. Bids shall be valid up to 28th of March 2023
7. A pre-bid meeting will be held on 09th December 2022 at 10.00 a.m. at the Boardroom of the Registrars' Office of the OUSL and site visits will be arranged soon after the Pre-Bid Meeting.
8. The Project Procurement Committee reserve the right to accept or reject bids.

Chairman
Department/Project Procurement Committee
The Open University of Sri Lanka/AHEAD Operation
Nawala, Nugegoda

Section II - Bidding Data

(1.1) (1.1) The Employer is: Vice Chancellor, The Open University of Sri Lanka,
AHEAD Operation

The name and identification number of the Contract is:

Designing, Purchasing, Supplying and Delivering, Installation and Commissioning of the Hyperconverged Server Infrastructure and Backup Solution (Total Solution) to The Open University of Sri Lanka

IFB No: AHAED/CITES/OUSL/NCB/Goods/2022/03

(1.2) The contract period is 05 months.

(2.2) The information required from bidders in sub-clause 2.2 is;

- (a) Experience in similar assignments
- (b) Design, Implementation, Work Plan and Methodology
- (c) Key Staff
- (d) Client reference
- (e) Equipment
- (f) Financial Capacity

Important: The bidder should attach documentary evidence to prove above requirements.

(8.4) The address for submission of Bids is:
Deputy Director/Procurement, AHEAD Operation, Supplies Division,
The Open University of Sri Lanka, PO Box 21,Nawala,Nugegoda.

(11.1) The Bid shall be valid up to 28th of March 2023

(12.1) The amount of Bid Security shall be Rs. 1,000,000.00
The bid security acceptable to the employer shall be unconditional bank guarantee from a Central Bank approved bank operating in Sri Lanka or a cash deposit. The Bid Security shall be valid up to 07/04/2023

(15.1) The deadline for submission of bid shall be on or before 2.30 pm on 23/12/2022

(17.1) Bids will be opened immediately after closing at the Supplies Division, The Open University of Sri Lanka, PO Box 21,Nawala,Nugegoda.

(26.0) The performance security acceptable to the employer shall be an unconditional guarantee as per given format from a Central Bank approved bank operating in Sri Lanka to an amount equal to 5% of the contract price or a cash deposit.

20.3 - Basic Eligibility

The following factors and methodology will be used for evaluation:

Basic Eligibility:

1. Having valid relevant business registration in Sri Lanka
2. The bidder must have at least 5 years of experience in Designing, Purchasing, Supplying and Delivering, Installation and Commissioning of the Hyperconverged Server Infrastructure and Backup Solution (Total Solution) to The Open University of Sri Lanka
3. Having at least one completed similar project or more during the last five (05) years.
4. Manufacturer Authorization Letter (MAL) should be provided for Server, switches, backup solutions and other items as specified in specification sheets included in this document. (The format is given under Section VIII)

Other Requirements:

1. The bidder who are not quoted for each, option mentioned in the bidding documents will not be qualified for the financial evaluation.

Criteria for Evaluation of qualification and experience:

Category	Criteria	Maximum Points	Minimum Points
A	Completed similar assignment of Rs.20 m or more during last five years (2 marks per project, Max 12 marks)	12	4
	Completed assignment using quoted brands of server infrastructure, network infrastructure and distributed backup solution during last five years (2 marks per project, Max 12 marks)		
B	Client references on completion of projects (3 marks per project, Max 6 marks)	6	3
C	Bidder certification (relevant ISO, Energy Star Certificate etc.) (1 marks per certificate, Audited Financial Report Max 4 marks)	4	1
	Relevant certifications from the principle for staff relating to server infrastructure and backup solution (2 marks per certificate, Max 8 marks)	8	4
D	Response time – (10 marks for a maximum of two hours, 2 marks for a maximum of four hours)	20	12
	Hardware warranty support - (10 marks for next business day)		
E	Comprehensive Analysis of the best recommended technology (15 marks)	50	36
	Detail design and implementation I for the total solution (35 marks)		
	Total	100	60

Section III. Technical Proposal Submission Form and Qualification Information

Technical Proposal Submission Form

[date]

To: *[name and address of Employer]*

Having examined the bidding documents, we offer to provide the Services *[name and identification number of Contract]* in accordance with the Conditions of Contract, Employer’s Requirements, drawings and activity schedule accompanying this Bid.

This Bid and your written acceptance of it shall constitute a binding Contract between us. We understand that you are not bound to accept the lowest or any Bid you receive.

We hereby confirm that this Bid complies with the Bid validity required by the bidding documents and specified in the Bidding Data.

Authorized Signature: _____

Name and Title of Signatory: _____

Name of Bidder: _____

Address: _____

Qualification Information

The information to be filled by bidders in the following tables. These data will be used for the purposes of evaluation as described in the instructions to bidders. (Attach additional pages as necessary)

Schedule A – Experience in Similar Assignments During Last Five Years				
(Relevant Proof Documents should be attached (e.g. Award Letters / Acceptance Letters, Purchase Orders) (enclosed in envelope marked, “ Envelope 1 ” – Qualification and Experience Information)				
tors Contract	Employer	Description of Works	Contract	Contract
Period	Responsibility Name		Amount (LKR)	(%)
		Total		

Name & Signature of the Bidder

Company seal :

Schedule B - Client's Reference

*These data will be used for the purposes of evaluation as described in the instructions to bidders.
(Attach additional pages as necessary)*

The references made by the previous clients, about the quality of the services provided by the bidder will be evaluated.

The list of satisfactory client references that includes minimum of client name, name of contract, value of contract, contract period and contact details of client.

Attach Completion Certificates, Recommendation Letters and etc. given by the clients', making references on the services executed by bidder.

(Enclosed in envelope marked, "Envelope 1" – Qualification and Experience Information)

Name & Signature of the bidder

Company Seal:

The information to be filled by bidders in the following tables. These data will be used for the purposes of evaluation as described in the instructions to bidders. (Attach additional pages as necessary)

Schedule – C – Key Staff and Certifications and report				
Qualification and Experience Information of the Bidders staff members / Engineers (e.g. Professional qualification and certification, BSc, MSc, Diploma and etc.).Service Provider should clearly mention names and qualifications of all the staff members that would be assigned to this work. (Staff members could be permanent Staff or Sub Contractor Staff) (enclosed in envelope marked, “ Envelope 1 ” – Qualification and Experience Information)				
Key Staff				
Employee Name	Employee Type (Permanent/Contract)	Position/Designation	Assigned Task	Qualification

Relevant Certificates and Report

<i>Name of the Certificate</i>		
<i>ISO</i>		
<i>Energy Star Certificate</i>		
<i>Manufacturer Authorization</i>		
<i>Audited Financial Report</i>		
<i>If Any</i>		

Name & Signature of the bidder

Company Seal:

The information to be filled by bidders in the following tables. These data will be used for the purposes of evaluation as described in the instructions to bidders. (Attach additional pages as necessary)

Schedule D – Response Time and Hardware warranty support

Details about response time and hardware support

Specify the time schedule by hours for response time for technical failures:

Specify the time schedule for Hardware warranty support for technical failures:

(enclosed in envelope marked, “**Envelope 1** – Qualification and Experience Information)

Name & Signature of the bidder

Company Seal:

Schedule E – Design Implementation, Work Plan and Methodology

The Open University of Sri Lanka is looking to build on the success of its Server Virtualization and Data protection strategies using Hyperconverged Infrastructure & storage which is an industry-proven technology and the latest Data Protection Technologies. Bidders are requested to submit the following information.

1. Provide the comprehensive solution.
2. Detail design.
3. Implementation methodology.
4. Work plan.
5. User manual, product brochures and other relevant document.

(enclosed in envelope marked, “Envelope 1 – Qualification and Experience Information)”

2.1 The date on which this Contract shall come into effect is

2.2.1 The Starting Date for the commencement of Services is

2.3 The Contract Period is : 05 months

3.5(d) The other actions are_____.

3.8 The liquidated damages rate is 0.05 percent per day

The maximum amount of liquidated damages for the whole contract is 5 percent of the final Contract Price.

The Defects Liability Period is 1 Year.

5.1 [Note: List here any assistance or exemptions that the Employer may provide under Clause 5.1. If there is no such assistance or exemptions, state “not applicable].”

6.2(a) The amount is : Selected bidder’s contract price will be inserted.

(d) Payments shall be made according to the following schedule:

- Advance for Mobilization, Materials and Supplies: 30% of the Contract Price shall be paid on the commencement date against the submission of a bank guarantee for the same.
- Progress payments in accordance with the milestones established as follows, subject to certification by the Employer, that the Services have been rendered satisfactorily, pursuant to the performance indicators:

Contract Duration	Milestones	Payment Percentage
05 Months	Delivery of all the Active and Passive Equipment and Material to the site.	30%
	Successful completion of services by the Service Provider as per Section VII: Activity Schedule and Section VI: Employer’s Requirement.	65%
One year after completion	Release of Retention	5%

Should the certification not be provided or refused in writing by the employer within one month of the date of the milestone, or of the date of receipt of the corresponding invoice, the certification will be deemed to have been provided, and the progress payment will be released at such date.

The amortization of the Advance mentioned above shall be completed when the progress payments have reached 30% of the contract price.

The bank guarantee shall be released when the total payments reach thirty (30) percent of the lump-sum amount.

Appendix A—Description of the Services

A. TECHNICAL SPECIFICATIONS

The Open University of Sri Lanka is looking to build on the success of its Server Virtualization and Data protection strategies using Hyperconverged Infrastructure & storage which is an industry-proven technology and the latest Data Protection Technologies. Vendors are requested to propose suitable solutions based on the information below.

The total solution should be covered.

- 1. System analysis and designing**
- 2. System integration and implementations.**
- 3. Testing and user training.**
- 4. Detail documentation.**

B. CURRENT ENVIRONMENT

The IT infrastructure hosted in the built Data Centre at OUSL includes servers, storage, and highly critical Cisco network switches and routers, and other Data Centre-related infrastructure by which all IT services are available to the University. The network infrastructure was designed using Cisco 3-tier architecture with a strong layer of separation of network segments using internal firewalls. This hardware and software environment is twelve years old and there was no major system upgrade.

Mainly data management tasks especially data backups mechanism are engaging with manual operation. Therefore, we are planning to automate all data backup tasks using the latest software packages.

There are mainly six physical servers existing in the production Data Center. The virtual environment is consisting of 50 virtual servers which consist of the AD/DNS server running on Windows Server 2019, ERP Systems which run on Windows server 2003, and Web servers for multiple Faculties.

Furth more the following application should be deployed with proposed solution.

1. Microservice driven MIS application deployed in docker and kubernetes clusters.
2. Database servers / Data warehouse and services.
3. LMS and web servers.
4. SSO, payment gateway.

C. FINAL CONSOLIDATED REQUIREMENT

The final Consolidated requirement is consisting of four main requirements which are listed below.

Please propose a suitably sized solution accounting for the base resource requirement accompanied by 15% annual growth based on the following Tables (Option 1,Option 2,option 3)

Please indicate the current price assuming this growth yearly.

1. First year
2. Third year
3. Fifth year

Option 1

Description	vCPU	vRAM (GB)	vStorage (TB)
Base requirement	716	747	31

Option 2

Description	vCPU	vRAM (GB)	vStorage (TB)
3rd Year Requirement	1088.95	1136.09	47.15

Option 3

Description	vCPU	vRAM (GB)	vStorage (TB)
5th Year requirement	1440.13	1502.48	62.35

Furth more the following constant should be considered.

- 1. Single server instance should be support minimum 12 core or higher physical processors.**
- 2. Total solution should be capable to upgrade by adding new server instances.**
- 3. Server service should be support for scalability of software application.**
- 4. Total solution should be managed and monitor by centralized system.**
- 5. Total solution should support virtualization.**
- 6. Physical server room space requirement should be compact and support the existing OUSL datacenter.**
- 7. Total solution should be support for backup system.**
- 8. Total solution should be synchronized with DR site and other datacenter (OUSL).**
- 9. Total solution should be supported integrated network (10 Gigabit Ethernet - 16 ports switch) environment with higher data rates.**

D. DATA PROTECTION REQUIREMENT

Please propose a suitable Backup solution for the workload mentioned below and include this in the proposal.

Description	Quantity
No. of Virtual Machines	57 nodes
No. of Terabytes to be backed up in the above Virtual Machines	35 TB

E. NETWORK SWITCHES FOR CONNECTING THE HYPER-CONVERGED INFRASTRUCTURE STORAGE SOLUTION

Please propose two High-performance network switches for providing network connection with High-Availability for the proposed Hyperconverged Infrastructure & storage.

Required No. of 10 Gigabit Ethernet ports (Fiber)	16
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F. TRAINING SESSIONS & CERTIFICATIONS ON THE PROPOSED SOLUTION

Please propose Product Training sessions to enable the In-House IT staff in Administration, Monitoring, and Quick Troubleshooting for the above-proposed solution with industrial certifications. Minimum of 25 hours technical training with proposed schedule.

G. REQUIREMENT OF RECOMMENDATION TO CATER TO THE HYPER-CONVERGED INFRASTRUCTURE STORAGE AND BACKUP REQUIREMENT

In order to cater to and establish the above final consolidated infrastructure requirement vendors are requested to provide information on the best solution with Data Protection methodology which suits the University, considering the above information and requirements.

The information should include a Comprehensive analysis of the best-recommended technology that suits our requirements with justifications.

Note: Before compiling the recommendations, Vendors can arrange a meeting with OUSL's IT team (Network Team) for clarifications.

H. FINANCIAL SPECIFICATIONS.

- Indicative Price Only – Applicable pricing should be itemized and given clearly. Exclusions must be identified.
- All applicable taxes must be itemized and quantified.
- **All bidders are required to be filled all options (Option 1, Option 2, Option 3) given in the Activity Schedule. The bidder who does not comply the above requirement will not be considered for the financial evaluation and be rejected.**

General Conditions

- The Open university of Sri Lanka expects the bidders to propose the best in breed products to meet the optimal functionality of the system with High availability and maximum reliability.
- All costs including components, accessories, etc. must be included in the proposal.
- The bidder must obtain all necessary information to ensure server requirement and back-up solution design and installation (total solution) comply with the requirements of the university.
- The bidder must provide detail design along with the proposal and obtain the approval from the Director, IT of the university prior to the deployment of the total solution.
- The Bidder should be proposed an entirely new solution without considering the existing physical servers.
- The bidder must use industry standard tools and techniques when conducting the User Acceptance Testing and submit the list of such tools expected to be used for this purpose.:-
- The bidder must provide complete set of low-level design, configuration backups once the total solution is deployed successfully
- A five (5) year comprehensive warranty for the entire solution must be provided.

- The bidder must bear all costs of maintenance, user support and repair/replacement costs for all hardware and software updates installed as part of the solution during the warranty period. The bidder's maintenance policies must be submitted along with the proposal.
- The bidder must comply with the rules, regulations, and policies of the University.
- Distributor letter to certify components are provided through them.
- The bidder must supply all the modules, accessories, licenses, and peripherals required to deploy a fully functional solution that complies with industry standards and best practices

Appendix B—Schedule of Payments and Reporting Requirements

Schedule of Payments mentioned in the Section V - Contract Data - 6.4

Reporting Requirements

The bidder must submit all the requested reports and Diagrams mentioned in **Section VI: Employer's Requirement.**

Appendix C—Key Personnel

Service Provider must provide details of Resource Allocation with respect to Schedule B - Work Plan and Methodology and Schedule C – Key staff. (Service Provider should mention which staff member will be allocated to which task and the duration of that allocation)

Appendix D—Services and Facilities Provided by the Employer

Technical briefing will provide from the IT Division

Section VI.

Employer's Requirements Schedule of Requirements

Minimum Specifications for Design and Preview, Purchasing, Supplying and Delivery, Installation and Commissioning of Server Infrastructure and Backup Solution (Total Solution) to The Open University of Sri Lanka.

- 1- single server instance should be support minimum 12 core or higher physical processors.**
- 2- Total solution should be capable to upgrade by adding new server instances.**
- 3- Server service should be support for scalability of software application.**
- 4- Total solution should be managed and monitor by centralized system.**
- 5- Total solution should support virtualization.**
- 6- Physical server room space requirement should be compact and support the existing OUSL datacenter.**

7- Total solution should be support for backup system.

8 - Total solution should be synchronized with DR site and other datacenter (OUSL).

9- Total solution should be supported integrated network (10 Gigabit Ethernet - 16 ports switch) environment with higher data rates.

Section VII

Form of Bid and

Activity Schedule

Form of Bid

[date]

To: *[name and address of Employer]*

Having examined the bidding documents, we offer to provide the Services *[name and identification number of Contract]* in accordance with the Conditions of Contract, Employer's Requirements, drawings and activity schedule accompanying this Bid for the Contract Price of *[amount in numbers]*, *[amount in words]* or any other sum derived in accordance with the said documents.

This Bid and your written acceptance of it shall constitute a binding Contract between us. We understand that you are not bound to accept the lowest or any Bid you receive.

We hereby confirm that this Bid complies with the Bid validity required by the bidding documents and specified in the Bidding Data.

Authorized Signature:

Name and Title of Signatory:

Name of Bidder:

Address:

**Activity Schedule - Envelope 2 -
 “ORIGINAL OF FINANCIAL BID”
 Activity Schedule**

	Activity Name	Description	Outcomes	QTY	Cost for the total solution	Remarks
1	Option 1 – Base Requirement	vCPU 716,vRAM(GB) 747,vStorage (TB) 31				
2	Option 2 – Third Year Requirement	vCPU 1088.95,vRAM(GB) 1136.09,vStorage (TB) 47.15				
3	Option 3 – 05 th Year Requirement	vCPU 1440.13,vRAM(GB) 1502.48,vStorage (TB) 62.35				

Option I

Description	Amount (Rs.)
Sub Total - 01	
Deduct : Discounts (if any)	
Sub Total - 02	
Add Contingencies - 10%	
Bid Price (without VAT) Carried to form of Bid	
Amount in Words:	
Add VAT 8%	
Grand Total including VAT	

Option 2

Description	Amount (Rs.)
Sub Total - 01	
Deduct : Discounts (if any)	
Sub Total - 02	
Add Contingencies - 10%	
Bid Price (without VAT) Carried to form of Bid	
Amount in Words:	
Add VAT 8%	
Grand Total including VAT	

Option 3

Description	Amount (Rs.)
Sub Total - 01	
Deduct : Discounts (if any)	
Sub Total - 02	
Add Contingencies - 10%	
Bid Price (without VAT) Carried to form of Bid	
Amount in Words:	
Add VAT 8%	
Grand Total including VAT	

Company Seal :

Signature of Bidder:

VAT Registration Number:

(VAT Registration certificate should be attached)

Date: