

INTERNATIONAL FOUNDATION FOR ELECTORAL SYSTEMS

(IFES)

Request for Quotation (RFQ) for procurement of the Microsoft software licenses and services for deploying hyperconverged infrastructure of Microsoft HCI in Ukraine

Solicitation # RFQ 10-003

October 7, 2024

1 INTRODUCTION

1.1 Purpose

The purpose of this Request for Quotation (RFQ) is to invite prospective contractors ("Bidders") to submit a written response ("Response") for the procurement of the Microsoft software licenses and services for deploying hyperconverged infrastructure of Microsoft HCI at the Central Elections Commission of Ukraine. The solicitation provides Bidders with the relevant operational and performance requirements.

1.2 Coverage & Participation

IFES reserves the right to reject any and all offers, to add, delete or modify any element of the solicitation at any time without prior notification and without any liability or obligation of any kind. This RFQ does not obligate IFES to enter into a contract nor does it obligate IFES to pay any costs incurred in the preparation of submission of any Response.

1.3 Zero Tolerance for Fraud

IFES has zero tolerance for fraud. Fraud is any act or omission that intentionally misleads, or attempts to mislead, to obtain a benefit or to avoid an obligation. If you have concerns about potential fraud in any way related to IFES projects, contracts, or activities, please contact IFES' Compliance Hotline at compliance@ifes.org or at +1 202-350-6791.

2 GENERAL INFORMATION

2.1 The Organization

IFES is an independent, non-governmental organization providing professional support to electoral democracy. IFES supports citizens' rights to participate in free and fair elections. Our independent expertise strengthens electoral systems and builds local capacity to deliver sustainable solutions.

As the global leader in democracy promotion, we advance good governance and democratic rights by:

- Providing technical assistance to election officials
- Empowering the underrepresented to participate in the political process
- Applying field-based research to improve the electoral cycle

Since 1987, IFES has worked in over 145 countries – from developing democracies, to mature democracies.

2.2 Schedule of Events

The following, tentative schedule will apply to this solicitation. The dates may change in accordance with IFES' needs or unforeseen circumstances. IFES will communicate changes to the schedule.

Issuance of RFQ October 7, 2024
 Technical Questions/Inquiries Due October 14, 2024
 Answers/Addenda from IFES October 15,2024

RFQ Closes
 October 19,2024, 23:59 Kyiv time

3 PROPOSAL PREPARATION INSTRUCTIONS

3.1 Bidders' Understanding of the Solicitation

Bidders are responsible for understanding the solicitation in its entirety and each of its elements, and should make inquiries to IFES as necessary to ensure such understanding. IFES reserves the right to disqualify any Bidder that it determines, at its sole discretion, does not understand the solicitation or any of its elements. Such disqualification shall be at no fault, cost, or liability whatsoever to IFES.

3.2 Information from IFES

All information provided by IFES in this solicitation is subject to change at any time. IFES makes no certification as to the accuracy of any item, and is not responsible or liable for any use of or reliance on the information or for any claims asserted therefrom.

3.3 Communication

All communications related to the RFQ must be in writing. Verbal communication shall not be effective unless formally confirmed in writing by the procurement official listed in 3.3.1. In no case shall verbal communication govern over written communication.

3.3.1 Point of Contact: The sole point of contact for all communication related to this solicitation is listed below.

Dovgyi Maksym, Senior Procurement Officer mdovgyi@ifes.org

3.3.2 Formal Communications shall include, but are not limited to the following:

- Questions concerning this solicitation must be submitted in writing to the point of contact identified in 3.3.1.
- Errors and omissions in this solicitation, as well as enhancements. Bidders should notify IFES of any discrepancies, errors, or omissions that may exist within this solicitation. Bidders should recommend to IFES any enhancements to the work described in the solicitation which might be in IFES' best interests.
- Inquiries about technical interpretations must be submitted in writing to the point of contact identified in 3.3.1.
- **3.3.3** Addenda: IFES will make a good-faith effort to provide a written response to the questions or requests for clarifications in the form of written responses or addenda in accordance with the *Schedule of Events*.

3.4 Submission

It is mandatory for Bidders to send proposals in electronic copy via e-mail to the point of contact identified in 3.3.1 on or prior to the closing date and time shown in the Schedule of Events.

3.5 Criteria for Selection

The evaluation of each Response to this solicitation will be based on the criteria outlined below. The purpose of this solicitation is to identify responsible Bidders that have the interest, capability, and financial strength to supply IFES with the product and/or service identified in the Scope of Work.

Evaluation Criteria:

IFES will evaluate responsive offers based on the following criteria:

- 1. COST (25%): Total cost of procurement, ownership, including initial costs and long-term maintenance. (Lowest price = 10 points = 100%).
- 2. TECHNICAL CAPABILITY (20%): Clear and detailed implementation plan. The technical solution proposed and the configuration of the team should meet the requirements of delivered services.
- 3. EXPERIENCE AND PAST PERFORMANCE (20%): Past experience of providing similar services to governmental institutions in Ukraine within the last five years. Can be proved by written positive feedback from at least two public institutions in Ukraine about the services provided.
- 4. TIMELINE (20%): The feasibility of the proposed implementation schedule. Preference will be given to the shortest delivery time.
- 5. SUPPORT AND MAINTENANCE (15%): Quality and availability of support services and maintenance plans

Evaluation Criteria Grading for Each Criterion:

Highly Exceeds Expectations - 85-100% Slightly Exceeds Expectations - 75-85% Meets Expectations - 55-75 % Meets most but not All Expectations - 45-55% Does Not Meet Expectations - <45%

3.6 Selection and Notification

IFES will evaluate Responses to identify responsible Bidders and responsive offers. Finalists will be selected to move into the negotiation phase of this process. Written notification will be sent to finalists via email.

4 SCOPE OF WORK/GOODS/SERVICES

The selected vendor will be expected to provide services on procurement of Microsoft software licenses and services for deploying of Microsoft HCI considering the following factors.

General requirements

CEC plans to deploy Microsoft HCI on the existing new server and communication equipment. It is envisaged to initiate the migration of all Microsoft services and all virtual Microsoft machines from the existing virtual infrastructure on the base of VMware and physical servers to the virtual infrastructure of Microsoft HCI.

Technological specification of the equipment involved in the hardware platform of the prospective cluster:

- Manufacturer of server equipment: Lenovo;
- Number of servers per cluster: 8 servers;

- Server model: ThinkSystem SR645 V3;
- Number of engaged CPU sockets per 1 server: 2 sockets;
- Model of CPU: AMD EPYC 9354, 32 cores, 3.25 GHz, 256 Mb L3-cash;
- Number of engaged DIMM sockets RAM per 1 server: 16 sockets;
- Model of RAM modules: ThinkSystem RDIMM-A 32 GB ThruDDR5 4800 MHz;
- Number of storage devices for the OS per 1 server: 2;
- Model of storage devices for the OS: ThinkSystem SSD M.2 5400 PRO 480 GB SATA 6 Gbps;
- RAID-controller for the storage devices for the OS: ThinkSystem Raid 5350-8i for M.2 SATA boot Enablement;
- Number of storage devices for S2D per 1 server: 8 board;
- Model of storage devices for S2D: ThinkSystem SSD 2.5" U.2 P5620 3.2 TB NVMe;
- Number of network adapter cards per 1 server: 2 boards;
- Model of board pf network adapters: ThinkSystem MellanoxConnectX-6 Lx 2-port 10/25 GbE SFP28 in OCP and PCIe form-factors;
- Number of network adapters per 1 server: 4 adapters;
- Number of power supplies per 1 server: 2;
- Model of power supplies: ThinkSystem Gen2 Platinum 1800 W 230 V
- Manufacturer of ToR-switches: NVIDIA;
- Number of ToR-switches: 2;
- Model of ToR-switches: SN2410 48 ports 25 GbE 8 ports 100 GbE Managed Switch with Cumulus OS.

Stages of the services delivery

To ensure availability of the HCI, failover of the IT infrastructure, the CEC can use other available server and communication equipment

1. Licenses procurement for deployment Microsoft HCI

Type of	Term of	Item	Number	Type of	
agreement	validity			license	
		To cover with a set of licenses CIS Suite Datacenter			
		(Windows Server Datacenter and System Center			
		Datacenter) of a cluster of 8 hosts Microsoft HCI			
Server and Cloud	36	CIS Suite Datacenter	32	License and	
Enrollment (SCE),	months	Core ALng LSA 16L		Software	
Government				Assurance	
				Pack	
		To cover with a set of licenses CIS Suite Datacenter			
		(Windows Server Datacenter and System Center			
		Datacenter) and remaining servers			
		CIS Suite Datacenter	1	License and	
		Core ALng LSA 16L		Software	
				Assurance	
				Pack	
		CIS Suite Datacenter	1	License and	
		Core ALng LSA 16L		Software	
		w/o SysCtrSvr			

					Assurance	
					Pack	
			To cover with a set of user access licenses			
Microsoft		36	Win Server User	300	Client	
Products	and	months	CALSA		Access,	
Servies					License and	
Agreement					Software	
(MPSA)					Assurance	
Government					Pack	
			To cover with a set of license SQL Server for subsystem			
			System Center Datacenter and other systems, which are			
			used in the CEC			
			SQL Server Standard	4	License and	
			Edition Server License		Software	
					Assurance	
					Pack	
			SQL Server Standard	10	Client	
			Edition User CALSA		Access,	
					License and	
					Software	
					Assurance	
					Pack	

2. Preparatory services

- Analysis of the existing IT infrastructure and documentation of code component configurations (virtual machine, service, etc.), including hardware characteristics, software versions, and network connections required for migration to HCI;
- Analysis of the current state of the HSI server and network infrastructure;
- Assessment of throughput and performance of existing network switches and servers, network connections, software versions, BIOS, etc.
- Verification of compliance of the network settings of the switches with the requirements of assessing the state of network security and the availability of backup channels;
- Checking availability of backup and recovery;
- Assessment of the current state of the backup and recovery system data;
- Determination of the need for additional measure to ensure fault tolerance;
- Preparation of technical documentation.
- Development of the technical architecture;
- Creation of a detailed deployment scheme, including the location of physical and virtual servers, network connections and other components;
- Determination of key stages of the project, including equipment installation, software configuration, testing and commissioning;
- Setting deadlines for each stage and identifying responsible persons;
- Identification of potential risks associated with the deployment of the HCI;
- Development of measures to minimize risks and contingency plans;
- Development of the testing scenarios for verification of productivity, failover and infrastructure security;

- Determination of criteria for successful completion of testing and documentation of results;
- Preparation of instructions for installation and configuration of physical and virtual servers, network equipment and OS;
- Development of guides for configuring Storage Spaces Direct, components Microsoft System Center and other components, clustering, fault tolerance, and productivity;
- Determination of training needs for administrators and technical staff;
 Technical documentation shall be approved with the CEC in the established order.

The services are performed in accordance with the specified technical documentation.

Below are the main requirements and a list of services performed within the framework of this project. The list of services and the procedure for providing services may be changes in accordance with the technical documentation.

3. Deployment and configuration of HCI on CEC equipment (servers and switching equipment)

- 3.1 Preparation of servers and network equipment;
 - Updating BIOS and other software of servers and network equipment (if necessary);
 - Connecting each server to two switches to ensure network failover
 - Configuring switches to ensure high availability and failover.
- 3.2 Installation of the software.
 - Installation of Microsoft Windows Server Datacenter on each physical server;
 - Installation of Hyper-V on each server for creation of virtual machines.
- 3.3 Installation of the HCI cluster.
 - Installation of Storage Spaces Direct (S2D) for providing highly available shared storage for various components of the IT infrastructure of the CEC data center;
 - Configuring the necessary network connections for each server, including VLANs for cluster and management networks.
- 3.4 Verification of settings:

Testing cluster settings;

Checking the operation of S2D and network connections;

Testing for failover and availability.

4. Deployment and configuration of virtual servers of System Center and WAC components for managing the IT infrastructure of the CEC, verification of settings;

- Deployment and configuration of SCVMM for management of virtual machines and physical servers;
- Deployment and configuration of SCOM for infrastructure monitoring;
- Deployment and configuration of SCCM/MECM for centralized deployment, management of configuration, software sets, updates on workstations, computers, and servers;
- Deployment and configuration of WAC for centralized management of local and remote servers without the need to install agents;
- RBAC settings in System Center and WAC components;
- Configuration of clustering of System Center components to ensure fault tolerance and availability.
- 4.1. Verification of settings:

Testing System Center and WAC component settings.

Checking the features of fault tolerance, availability, and delineation of access rights.

5. Deployment (migration) and configuration of authorization systems, demarcation of access rights and other services necessary for the functioning of the CEC IT infrastructure;

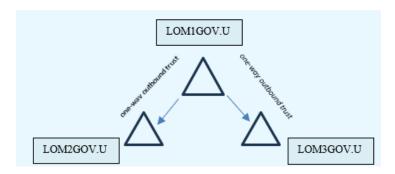
The CEC data center infrastructure uses 3 separate ADDS domains based on Windows server 2016 and 2019;

- for the LOM 1 environment LOM1.GOV.UA;
- for the LOM 2 environment LOM2.GOV.UA;
- for the LOM 3 environment LOM3.GOV.UA.

The highest in the hierarchy is the ADDS domain of the LOM1 environment. One-sided non-transit ties of trust are built from it:

- LOM1.GOV.UA → LOM2.GOV.UA;
- LOM1.GOV.UA → LOM3.GOV.UA;

Below is a domain trust diagram borrowed from the review paper:



Pic. Domain trust scheme of ADDS CEC

As part of the services, it is required from the selected vendor:

- Ensure the necessary network settings of server and switching equipment, deployment and configuration of HCI, integration with cyber protection systems (if necessary);
- Deploy the Microsoft Hyper-v virtual environment on a dedicated physical server;
- Deploy a failover and highly available AD DS infrastructure and CA using a separate physical server and cluster of HCI;
- Ensure the migration of virtual servers (AD DS, CA, Exchange, dhcp, IIS, MySql, Oracle, PostgreSQL, terminal farms and application software) based on Windows Server (2012, 2016, 2019) from the existing virtual infrastructure managed by VMware Vsphere 7 on HCI;
- Ensure the migration of AD DS and CA virtual servers in order to ensure a higher level of availability from the existing virtual infrastructure manager by VMware Vshpere 7 to a dedicated physical server;
- ensure the update of existing versions of Windows server to Windows Server 2022.

The migration and configuration of the specified systems should take place without stopping the operation or with minimal stoppage of the existing IT infrastructure of the CEC data center.

Specifications of the physical server: Dell DL360 Gen10 – RAM 96 Gb, 1 CPU Intel 16 core, Storage 1 – ssd 240 Gb, 2 – hdd – 600Gb.

6. Verification of settings:

Testing of AD DS and CA functionality settings;

Testing AD DS and CA services for fault tolerance and availability.

7. Integration with existing systems and data migration;

- In the existing virtual infrastructure managed by VMware Vsphere 7, 50 Microsoft Server 2016 and 2019 virtual machines with various applied information systems are operating.
- The VMware virtual environment is deployed on an HPE Synergy 12000 blade system with HPE SY 480 Gen 10 servers.
- As part of this project, it is necessary to ensure the migration of Windows Server virtual infrastructure to the Microsoft HCI virtual infrastructure.
- Provide, if possible, updating of versions of virtual machines Windows Server
 2016 and 2019 to Windows Server 2022.
- Ensure failover and availability of the specified virtual machines.
- To ensure the integration of the virtual environment of the HCI with the existing IT infrastructure of the CEC Data Center and cyber protection systems.
- The migration and configuration of the specified systems should take place without stopping the operation or with minimal stoppage of the existing IT infrastructure of the CEC Data Center.

8. Testing of installed subsystems based on the results of providing services for the deployment of Microsoft HCI hyperconverged infrastructure;

Testing of installed systems based on the results of providing the Service from the services of the deployment of the hyperconverged infrastructure of Microsoft HCI is conducted jointly with the CEC's specialists. Based on the results of the testing, a report is drawn up and approved by the parties. The program and testing methodology is developed by the Vendor and approved by the CEC. The testing program and methodology must contain:

- Testing the functioning of all systems and subsystems that are deployed on HCI;
- Testing the failover and availability of services in the event of failure of part of the server or communication equipment of the HCI;
- Testing the speed and efficiency of general storage s2d and virtual machines;
- Testing existing infrastructure systems;
- Checking the allocation of access rights and settings of security rules.

The test program and methodology may also contain other tests proposed by the performer.

9. Technical documentation on the results of the provision of services for the deployment of Microsoft HCI hyperconvergent infrastructure.

Based on the results of the Services provided, the Vendor must prepare technical documentation for the CEC's data center subsystem:

- Subsystem passport;
- A description of the architecture of the subsystem;

The technical documentation of acceptance tests is provided for approval in electronic (PDF) and paper form in Ukrainian.

To prepare and hand over acceptance test documents to the CEC:

- Program of acceptance and passing tests;
- Testing methodology of the acceptance and passing tests;
- Protocol of acceptance tests.

The technical documentation of acceptance tests is provided for approval in electronic (PDF) and paper form in Ukrainian.

5 FUNCTIONAL REQUIREMENTS

5.1 Timeline

Project implementation schedule should not exceed 60 calendar days starting from the contract signing. Bidders must submit a timeline in the Response showing the time required to produce and consolidate the products and/or deliver services.

5.2 Geographic Code (applicable to USAID funding only)

IFES' project in Ukraine is funded by United States Agency for International Development (USAID) under Source and Nationality (S/N) Geographic Code 937 (please refer to 22 CFR 228.03 for more information). A waiver request may apply to certain offers. If IFES determines a waiver would be necessary, the estimated time required to obtain the waiver will be considered within the "Timeline" in the Evaluation Criteria. IFES encourages all Bidders to consider products that fall under S/N Geographic Code 937 whenever possible.

5.3 License, Clearance and Approvals

The Bidders will include in the timeline any time needed to obtain any licenses, clearances, and/or approvals required under local legal requirements to produce or deliver the products and/or services described in the Scope of Work.

5.4 Packing

The Response must contain details of packing for each product that requires shipping with full dimensions (length, width, and height) and weight.

5.5 Shipping

Bidders must provide shipping and delivery information in detail in the Response. Final delivery will be to Kyiv, Ukraine. The delivery address will be provided with the award.

5.6 Samples

N/A

The deadline for submitting samples by all Bidders is N/A.

6 QUALIFICATIONS & REFERENCES

Bidders must provide the following information for their Response to be considered:

- 1. A brief outline of the company and services offered, including:
 - Full legal name and address of the company
 - Corporate and tax registration documents
 - Year business was started or established
 - Full name of the legal representative (president or managing director) of the company
 - Name of any individuals or entities that own 50% of more of the company
- 2. Evidence of successful completion of a project of a similar size and complexity.
- 3. References: Contact information for no less than three references from projects similar in size, application, and scope and a brief description of their implementation (including location and year). IFES reserves the right to request and check additional references.
- 4. Bidders must be legally registered under the laws of the country in which they are organized and possess all licenses, permits and government approvals necessary for performance of the work. Scope of Work.
- 5. A certification signed by an officer or authorized representative that the Bidder has sufficient financial, technical and managerial resources and facilities to complete the Scope of Work.

7 PRICING

Bidders must complete the following cost breakdown for the implementation of their solution for IFES' project as described in this solicitation. Bidders must agree to keep these prices valid for a minimum of 90 calendar days.

Pricing must be in US Dollars (USD). Unit prices are required and in the case of discrepancies between unit prices and the total price, the unit price will be taken as reference basis in the evaluation. Technical specifications must be shown for each item.

No.	Item Description	Technical Specifications	QTY	Unit	Unit Price USD	Total Price USD	
					035	032	
Group	Group 1						
1.	Licenses						
	procurement for						
	deployment						
	Microsoft HCI						
2.	Preparatory						
	services						
3.	Deployment and						
	configuration of						
	the HCI on the						
	CEC equipment						
	(servers and						

	aitabina				
	switching				
	equipment).				
	3.1.				
	Preparation of				
	servers and				
	network				
	equipment;				
	3.2.				
	Installation of the				
	software;				
	3.3.				
	Installation of the				
	HCI cluster;				
	3.4.				
	Verification of				
	settings				
4.	Deployment and				
	configuration of				
	virtual servers of				
	System Center				
	and WAC				
	components for				
	managing the IT				
	infrastructure of				
	the CEC,				
	verification of				
	settings;				
	4.1.				
	Verification of				
	setting				
5.	Deployment				
	(migration) and				
	configuration of				
	authorization				
	systems,				
	demarcation of	1			
	access rights and				
	other services	1			
	necessary for the	1			
	functioning of				
			l		

	IL CECIT					
	the CEC IT					
	infrastructure;					
6.	Verification of					
	settings					
7.	Integration with					
	existing systems					
	and data					
_	migration					
8.	Testing of					
	installed					
	subsystems					
	based on the					
	results of					
	providing					
	services for the					
	deployment of					
	Microsoft HCI					
	hyperconverged					
	infrastructure					
9.	Providing					
	technical					
	documentation					
	on the results of					
	the provision of					
	services for the					
	deployment of					
	Microsoft HCI					
	hyperconvergent					
	infrastructure					
	Subtotal Group 1					
Total						
Taxes (if applicable)			USD			
Shipping/Freight/Delivery Costs						
Grand 1	- Total	USD				

8 ADDITIONAL TERMS & CONDITIONS

8.1 Non-Disclosure Agreement

IFES reserves the right to require the Bidder to enter into a non-disclosure agreement.

8.2 No Collusion

Collusion is strictly prohibited. Collusion is defined as an agreement or compact, written or oral, between two or more parties with the goal of limiting fair and open competition by deceiving, misleading, or defrauding a third party.

8.3 Companies Owned or Controlled by Government

The Bidder must disclose in writing with its Response if a government, its agents, or agencies, have an ownership or managerial interest in the company. Failure to disclose a government ownership of managerial interest in the company will result in the Bidder's offer being removed from consideration.

8.4 Subcontracting

No subcontracting is allowed under this solicitation.

8.5 Costs

The solicitation does not obligate IFES to pay for any costs, of any kind whatsoever, which may be incurred by a Bidder or third parties, in connection with the Response.

8.6 Intellectual Property

Bidders may not use any intellectual property of IFES including, but not limited to, all logos, trademarks, or trade names of IFES, at any time without the prior written approval of IFES.

8.7 Bidders' Responses

All accepted Responses and supporting documentation shall become the property of IFES, subject to claims of confidentiality in respect of the Response and supporting documentation.

8.8 Partial Awarding

IFES reserves the right to accept all or part of the Response when awarding a contract.

8.9 No Liability

IFES reserve the right to accept or reject any Response or to stop the procurement process at any time, without assigning any reason or liability. IFES shall not be liable to any Bidder, person, or entity for any losses, expenses, costs, claims, or damages of any kind.

8.10 Entire Solicitation

This solicitation, any addenda to it, and any attached schedules, constitute the entire solicitation.

[End of Solicitation]