



شركة الحوسبة الصحية

Electronic Health Solutions

REQUEST FOR PROPOSAL

**RMS Data Center Switches
RFP Reference
Number: RFP-EHS-PROC-23-2022**

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QF-PRO-01-04

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Transmittal Letter

Date: 24/5/2022

Dear Sir / Madam,

Electronic Health Solutions “EHS” is in the process of tendering “RFP-EHS-PROC-23-2022” for **Supply, Installation, Configuration, Testing and Implementation of Core Switches at the RMS Datacenter.**

Interested companies are encouraged to submit their technical and financial proposals as per the details provided in this RFP. EHS appreciates your timely and accurate response, meanwhile, shall you have any questions please do not hesitate to contact us.

Procurement Department

Tel: +962 6 580 0461 | Ext. 3071, & 3067 &3072

Email: procurement@ehs.com.jo

Yours sincerely,

Electronic Health Solution

Confidentiality Statement

This Request for Proposal (RFP) contains information proprietary to Electronic Health Solutions, hereafter referred to as "EHS". Each recipient is entrusted to maintain its confidentiality. The information contained in this RFP is provided for the sole purpose of permitting the Bidder to respond to the RFP. This information may not be reproduced in whole or in part without the expressed written permission of EHS.

The recipient shall hereby agree to keep all the information in this RFP confidential and shall not, without prior written permission of EHS, disclose this information to any person other than the employees, agents, subcontractors, and advisors who are required in the course of their duties to execute proposal preparation activities. The recipient shall undertake the responsibility that all such persons are informed of the confidential nature of the information.

No recipient of this RFP shall, without the prior consent of EHS, make any public statements to any third parties in relation to this RFP or the subsequent short-listing of any prospective implementer or the subsequent awarding of any order. Unauthorized release of information or public statements will result in immediate disqualification.

Information provided by each Bidder will be held in confidence and will be used for the sole purpose of evaluating a potential business relationship with the respective Bidder's company. There will be no obligation to maintain the confidentiality of any information that was known to EHS, prior to the receipt of a proposal from the Bidder, or due to becoming publicly known through no fault of EHS, or if received without obligation of confidentiality from a third party owing no obligation of confidentiality to the Bidders.

Company Abstract

Company Profile

Electronic Health Solutions (EHS) was founded in 2009 as a non-profit company. EHS is owned by the main stakeholders in health and technology sectors in the Kingdom including Ministry of Health (MoH), Ministry of Information and Communication Technology (MoICT), Royal Medical Services (RMS), King Hussein Cancer Center, King Hussein Institute for Cancer and Biotechnology, Royal Health Awareness Society and Private Hospitals Association.

Hakeem is Jordan's National Electronic Health Records (EHR) initiative by which the healthcare sector will be computerized. The program was inceptioned in October 2009.

The company's mandate is to implement Hakeem in public hospitals, Royal Medical Services sites, Universities Hospitals and King Hussein Cancer Center, in addition to healthcare centers including comprehensive clinics and primary clinics.

Vision, Mission, Goals, and Objectives

Vision

Transform and sustain a continuously improving healthcare system in Jordan by leveraging information technology.

Mission

Provide a secure and accessible platform that enables the storing and sharing of electronic patient health records at all healthcare facilities enrolled in Hakeem.

Objectives

EHS main objectives are the following:

- 1- Improve Healthcare
- 2- Reduce the Cost of healthcare services.
- 3- Provide Data for Research and Decision Making

Benefits

- ⌚ Raising healthcare quality and outcomes by enhancing the accuracy of diagnoses, medication administration, and patient information management;
- ⌚ Boosting health facilities' efficiency and workflow by saving time and reducing errors in information retrieval;
- ⌚ Supporting research, scientific studies and, decision-making by supplying the necessary patient data, history and statistics;
- ⌚ Reducing operating costs by optimizing resource utilization and, preventing lab test repetition.

1. Contact Information

Any questions regarding this RFP shall be directed to the following email address in writing:

Name:	Procurement Department
Company:	Electronic Health Solutions
Address:	King Hussein Business Park, King Abdullah the second street. 4408 Amman 11952
Telephone / Fax:	Telephone +962 (6) 5800461 EXT3050, 3071Fax +962 (6) 5800466
Email:	Procurement@ehs.com.jo

The bidder should receive a response from the procurement department, if not please call the following number +962 79 668 1595 Or Tel: +962 6 5800461 | Ext: 3067.

For Review Only Not For Bidding

2. General Conditions

Upon participation, the bidder agrees to the following:

1. All costs incurred by Bidder in the preparation of this proposal shall be borne by the Bidder.
2. "EHS" will assume that all statements in writing, made by persons submitting Proposals are true, accurate, complete and, not misleading.
3. "EHS" reserves the right to cancel, at any time, this RFP partially or in its entirety. No legal liability on the part of "EHS" for payment of any kind shall arise and in no event will a cause of action lies with any bidder for the recovery of any cost incurred in connection with preparing or submitting a proposal, in response hereto all efforts initiated or undertaken by the bidder shall be done considering and accepting this fact.
4. Bidder's proposals shall be based on full compliance with the terms, conditions and, requirements of this RFP and its future clarifications and/or amendments.
5. "EHS" shall not be under any obligation to return or save either the original or any copies of any Bidder's Proposals (technical and/or financial), and all documents submitted to "EHS", whether originals or copies, shall be kept or disposed of by "EHS".
6. This Request for Proposal doesn't constitute an offer. "EHS" shall not be under obligation to enter into any agreement with any Bidder in connection with this RFP and responses received.
7. The Bidder's proposals (technical and financial) shall comply with the laws and regulations of the Hashemite Kingdome of Jordan.
8. The Bidder's proposals (technical and financial) shall be compatible with international standards and best practices.
9. As a part of the RFP response, the Bidder is requested to fill out the compliance sheet included in this RFP.
10. The bidder must include in his technical proposal a detailed Bill of Quantity "BOQ" for all proposed and priced items and services. Accordingly, this should be reflected and included in the financial offer with itemized quoted prices for all proposed items.
11. The bidder must commit to providing EHS with the same prices and terms for a period of (1) year starting from the Awarding Letter date for the purpose of Variation Orders
12. The quantities requested in this RFP are subject to increase, decrease or, cancellation as per the actual requirements in the awarding date. In case the quantities decrease the vendor is responsible to install the available materials from the EHS warehouse.

3. Bidder Qualifications

1. Bidder should be a Company registered under the Jordanian Ministry of Industry and Trade for more than three years or represented by a company abiding by the aforementioned condition; otherwise, any international or regional bidder must present the formal documents which prove the financial capacity of the company in addition to its commercial registration documents at the country of origin
2. Bidder should have at least three references of similar projects preferably in the health care sector and to be accepted by EHS.
3. The Bidder shall have at least 2 live installations with support as of the date of submission of this bid.
4. The Bidder shall have specialized and certified engineers with relevant technical certification for at least two engineers.
5. The bidder must submit Up-To-Date official documents of registration issued from the Companies Control Department at the Jordanian Ministry of Industry and Trade.
6. The bidder shall be an authorized Top Level Partner of the mother company he represents in this bid. An up-to-date valid official letter/certificate from the mother company shall be submitted by the bidder as part of the bidder's qualification documents, to prove the level of partnership for the bidder.
7. The bidder must have at least (2) two engineers certified by the mother company for the implementation and technical support of the proposed solution.
8. All proposed and supplied equipment\solutions\items\services must be original, brand new (not refurbished) and, licensed by the manufacture (mother company) to be supplied and installed for this project at EHS.
9. All proposed and supplied equipment / solution / items / appliances / hardware must be newly manufactured with manufacture valid warranty and support duration for not less than (7) years from the date of delivery. This implies that supplied products must not be obsolete, phased out of production, out of sales, and support.
10. All proposed and supplied equipment\solutions\items\services must be original, brand new (not refurbished) and, licensed by the manufacture (mother company) to be supplied and installed for this project at EHS.

11. تلتزم الشركة المحال عليها بتحديد نسبة الصيانة و الدعم الفني في العرض المالي للأجهزة المحال عليها للسنوات التي تلي فترة

الصيانة المجانية شاملة قطع الغيار و الأيدي العاملة علماً بأن هذا البند سيكون جزء من التقييم المالي للعرض المقدم

The winning bidder is obliged to determine the percentage of maintenance and technical support including spare parts and manpower for the years following the free maintenance duration. This has to be specified clearly in the financial offer for the supplied devices\solutions as per this RFP and will be part of the financial evaluation of the bid.

4. RFP Guidelines

a. RFP Issuance & Submission

Event	Date
1. RFP distribution to vendors	2-june-2022
2. Questionnaire Session	N/A
3. Proposal due date Closure Date	16-june-2022

b. Queries and Responses

All inquiries during the questions and answers session (Bidder Conference) if conducted must be documented., Verbal clarifications, inquiries or communication are not permitted, and only written communication is accepted.

c. RFP Acknowledgement

1. Award of the contract resulting from this RFP will be based upon the most responsive vendor whose offer will be the most advantageous to "EHS" in terms of cost, functionality, and other factors as specified elsewhere in this RFP.
2. Vendor has a period of (5) days to acknowledge and accept the awarding letter with its terms and conditions. Delay of acceptance will yield into consideration of rejection.
3. EHS" reserves the right to:
 - a) Accept other than the lowest-priced offer.
 - b) Award a contract on the basis of initial offers received, without discussions or requests for best and final offers.
 - c) Award the RFP contract on a partial basis (i.e. not all requirements requested from a single vendor.)
 - d) Not declare the name of the winning bidder, and awarding details.

d. Proposal Format Requirements

1. The financial and technical proposals must be submitted separately. Each proposal must be sent in a separate (PDF) electronic file (PDF).
2. The proposals must be sent to the Procurement Department email namely; (Procurement@ehs.com.jo). A password divided into (3) portions and not to be less than (9) nine digits must be set on the financial offer.
3. The passwords must be sent through a text message (SMS) to relevant mobile numbers which will be cellular mobile numbers that will be provided to the bidders at a later stage.
4. Pricing must be per site with a breakdown itemized pricing for each item, component, product and services included in the submitted Financial Proposal.
5. 5. Pricing must include the customs, clearance, shipping, and other fees.

6. The Financial Proposal must specify clearly the compliance with the (5) five years' warranty duration required in the Technical Specification section

5. RFP Terms & Conditions

a. Evaluation Criteria

1. "EHS" will evaluate each response. Responses will be evaluated on many criteria deemed to be in EHS's best interest, including but not limited to, technical offering, price, warranty, delivery duration, Bidder certification, accreditation, schedule, bidder's capabilities, compliance with bonding, and any other factors that "EHS" determine. The order of these factors does not denote relative importance.
2. "EHS" reserves the right to consider other relevant factors as it deems appropriate in order to obtain the best value.
3. This RFP does not commit "EHS" to select any firm, enter into any agreement, pay any costs incurred in preparing a response or procure or contract for any services or supplies. "EHS" reserves the right to request additional information from the bidders whose response meets "EHS" needs and business objectives without requesting such information from all respondents.

b. Rejection of Proposals

"EHS" reserves the right to reject any or all offers and discontinue this RFP process without obligation or liability to any potential Vendor.

c. Proposal Costs and Expenses

No legal liability on the part of "EHS" for payment of any kind shall arise and in no event will a cause of action lie with any bidder for the recovery of any cost incurred in connection with preparing or submitting a proposal. In response hereto all efforts initiated or undertaken by the bidder shall be done considering and accepting this fact.

d. Bid, Performance, Advance payment, and Warranty Bonds

1. Unconditional Bid Bond valid for (3) three months with an amount of (JoD 2,250.00) Two Thousand Two Hundred Fifty Jordanian Dinar to be renewed automatically must be submitted by every participating bidder.
2. Advance payment LG, is to be submitted against any required advanced payment.
3. Unconditional Performance Bond for (10%) of the total amount of the awarded value shall be submitted by the winning bidder and within (5) working days from the date of the award. The Performance bond must remain valid for the total duration of the implementation of the project and until the delivered solution is finally received and accepted by EHS. This Performance Bond will be replaced by the Maintenance LG after items delivered installed and finally accepted duly. The Maintenance Bond will remain valid until the

end of the warranty duration. In case the winning bidder fails to submit the performance bond, EHS reserves the right to cancel the contract and liquidate the bid bond without reverting to the bidder.

e. Penalties

In the event, the bidder fails to deliver according to the agreed time (for either the initial agreed delivery date or any of the subsequent delivery dates). The Bidder must pay EHS a delay penalty of (1%) of the total contract amount for each calendar week of delay. The maximum penalty for delays shall not exceed (10%) of the total contract value. The payment or deduction of such penalty shall not relieve the winning bidder from its obligations to complete the services or from any other obligations and liabilities under this bid.

f. Payment Terms

1- Payment terms:

- 20% Advance Payment against "Advance Payment LG"
- 20% upon items delivery
- 20% upon installation or implementation
- 40% on final EHS acceptance.

In case the winning bidder fails to comply with the "Advance Payment LG" term set for the first payment, hence, the winning bidders will be entitled to receive (40%) of the total contract value after the fulfillment of the delivery and initial receiving conditions "إستلام توريدي" set forth in this RFP.

- ### 2- Payment currency shall be in Jordanian Dinar (USD and Euro exchange rate will be calculated at the currencies exchange rate issued by Central Bank of Jordan at the payment date).

g. Terms of Delivery

- ⌚ Delivery, Installation and, Implementation within (8-12) Weeks from the date of the purchase order at the EHS HQ offices or any of "Hakeem" Project sites. Final acceptance is required by EHS, and penalties for delays will be imposed as per the condition specified in clause (5.e) of this RFP.

h. Offer Expiry Date

The validity of the Proposal shall be no less than (90) days unless clearly mentioned differently.

The prices must remain fixed and valid for (90) days from the date of the invitation for bid closing date and shall be clearly stated in the technical and commercial bids.

6. Financial Compliance Sheet

#	Description	Comply (Yes/No)	Reference in the proposal
1	The bidder shall comply with all points included in the general conditions section		
2	The bidder shall comply with all points included in the bidder qualifications section		
3	The bidder shall comply with all points included in the RFP guideline section		
4	The bidder shall comply with all points included in the RFP terms and conditions section		

7. Objectives

EHS invites technically complete and commercially competitive bids from reputed bidders for Supply, Installation, Configuration, Testing and Implementation of the Data Center Equipment and all the related services in the following Sites:

#	Site	City
1	Main Data Center – RMS-King Hussein medical Center (KHMC data center)	Amman
2	DR Data Center – King Talal Military Hospital. KTMH DR	Amman

8. Business Requirements

The provided solution must handle the expected growth while delivering new levels of capacity, management efficiency, application availability (99.999% availability), data security and integrity.

This solution must address the following business requirements:

1. Provide required equipment for the mentioned locations
2. Provide continuous support for Hakeem datacenter infrastructure
3. Training and Knowledge Transfer for EHS team.

9. Submittals

For each lot, the bidders' proposal shall include the following submittals. Each of the submittals must be on a separate section and must follow the below sequence:

1. Company Profile and References for similar projects
2. Project team details including engineer's certifications on the proposed solution
3. Proposed Solution Description, High-level design, and Detailed design
4. Compliance sheets (technical and financial).
5. Detailed BOQ (Item, Quantity, support duration)
6. Data sheets for all items.
7. Installation method statement. (Installation approach)
8. Migration and Upgrade Plan (Where applicable)
9. Project Management Methodology

10. Project Implementation plan.
11. Testing Plan

For Review Only Not For Bidding

10. Solution Technical Specifications

a. Overview

The proposed solution includes a converged infrastructure with all the required components to provide EHS with a secure and scalable network infrastructure.

b. Existing Environment

EHS have the below Datacenter components that shall be integrated with the proposed solution.

1. Cisco WS-C6513. core switches. (QTY 2 in KTMH data center) – Campus core switch.
2. Juniper srx240h2 firewall. (QTY 2 in KTMH data center).
3. Juniper srx650 Firewall. (QTY 2 in KHMC data center).
4. cisco WS-C6509-E core switches. (QTY 1 in KHMC data center) – Campus core switch.

c. Network switches:

i. Network Switches for RMS Datacenters (QTY:4, 2 per data center)

The Datacenter Switches will connect the Datacenter infrastructure and devices to the network, the switches will be the core switches for the datacenters. They shall extend layer 2 connectivity as a network overlay over an existing physical network

The switches must comply with the below minimum requirements:

General Requirements:

- ① The proposed model should not be end-of-sale or end-of-support, and must have at least 5 years' life after end-of-sale date.
- ① The proposed vendor shall be a leader or challenger in the latest Gartner Magic Quadrant for the Data Center & Cloud Networking and/or Enterprise wired & wireless LAN Infrastructure.
- ① Layer 3 routing support (including RIPv2, OSPF) available from day one
- ① EVPN-VXLAN L2 and L3 gateway support.
- ① Proposed products must not be grey-market and should be sourced directly from vendor or its authorized distributors
- ① The solution must include advanced monitoring and error detection with proactive remediation based on AI technology engine; all required licenses and solution components to achieve this function must be provided within the proposed solution for five years on a cloud-based solution.
If the vendor doesn't have a cloud-based solution, then the bidder shall provide the function based on an on premise solution, this shall include all the required software and hardware items.

Hardware & Performance

- ① 48 ports: 10GbE small form-factor pluggable and pluggable plus transceiver (SFP/SFP+)
- ① 6 ports: 40/100 GE quad SFP+ transceiver (QSFP+/QSP28)
- ① Minimum switching capacity of 2 Terabits per second (Tbps) with latency of less than 1 microsecond.
- ① Minimum throughput of 1400 Mpps.
- ① Minimum 4GB DRAM
- ① Minimum 200k MAC addresses
- ① Device-level fault tolerance, to include the following options:
 - Redundant and hot-pluggable AC power supplies
 - Redundant and hot-pluggable fan modules with front-to-back airflow
- ① The Switches shall support virtual switching technology so that the two switches appear as one virtual / logical switch with redundancy and high availability and single management IP address (Minimum 2x100G stacking modules, transceivers, and cables shall be included, stacking cables shall be 7 meters)
- ① Must have Layer 3 capabilities
- ① Must support VXLAN Overlays
- ① Must support IPv6
- ① Must support the following Spanning Tree Protocol enhancements:
 - IEEE 802.1w (Rapid Spanning Tree), and IEEE 802.1s (Multiple Spanning Tree).
- ① Must have a minimum of four active SPAN sessions
- ① Must supports VLAN Tagging and Private VLANs for enhanced security
- ① Supports link aggregation (LACP/LAG) feature to aggregate one or more Ethernet interfaces from different switch chassis to form a logical point-to-point link
- ① Must support Jumbo frames
- ① Must support SNMP v2/v3
- ① Must support multicast, IGMPv3, IGMPv3 snooping, PIM dense & sparse modes.
- ① Separate control and forwarding plans.
- ① Rack Mountable
- ① AC Power Supplies, Fused UK power cord
- ① Required SFP's transceivers and cables must be included as part of the solution.

Quality of Service

Shall support QoS with the following specifications:

- ① Per-port QoS configuration
- ① Must support QOS marking and Classification 802.1p
- ① IP differentiated service code point (DSCP) and IP Precedence
- ① Classification and marking based on Layer 3 and Layer 4 headers
- ① Input and output policing based on Layer 3 and Layer 4 headers

Security

The following security features must be supported:

- ① TACACS and RADIUS.
- ① Supports L3/L4 ACLs on all ports.
- ① DHCP snooping and Option 82 insertion
- ① Port security
- ① SSHv1 and SSHv2
- ① Unicast MAC filtering
- ① Unicast port flood blocking
- ① IP source guard

11. Bill of Quantities

Item	Qty
Datacenter Core Switches	4
10G-SR Transceivers (for the proposed core switches)	120
RJ-45 copper SFP (for the proposed core switches)	40
LC-LC Multimode patch cords – 5 meter	20
LC-LC Multimode patch cords – 10 meter	20
LC-LC Multimode patch cords – 15 meter	20
SC-LC Multimode patch cords – 5 meter	10
SC-LC Multimode patch cords – 10 meter	10
SC-LC Multimode patch cords – 15 meter	10
Stacking cables (7 meters), stacking modules, and Transceivers if required.	4

12. Scope of Work

The supplier shall be responsible for supply, installation, commissioning, implementation and testing of all acquired devices.

Suppliers are expected to deliver the following tasks as part of the required scope:

a- Planning and Design

- 1- The bidder shall assign a qualified technical project manager for managing and controlling the project. The assigned project manager shall develop the project plan; the plan must be approved by EHS before starting the project.
- 2- The bidder shall provide a detailed logistics management plan for the supply and delivery of the equipment.
- 3- The bidder shall conduct a series of design workshop sessions with EHS team to agree on the design details.
- 4- Before the onsite implementation activities, the supplier shall present a detailed migration and implementation plan of the final solution:
 - ⌚ The bidder shall submit a HLD (High Level Design) document to be reviewed and approved by EHS.
 - ⌚ The bidder shall present the methodology and procedures to be followed to migrate the existing applications to the new Datacenter.
 - ⌚ Bidder must take into consideration integration with the existing Network and security appliances during the implementation
 - ⌚ Perform initial testing, software and firmware updates in order to keep the system up-to-date before installation.

- ⌚ The bidder shall Identify impact of any downtime, communicate these details to all stakeholders and confirm project and timelines are agreeable to all stakeholders. Stakeholders should sign off on this.
- 5- The bidder shall submit further the LLD (Low Level Design) document prior to implementation activities start. The LLD shall include but not limited to:
 - ⌚ Detailed Network Connectivity Diagram
 - ⌚ Devices Configurations documents
 - ⌚ Risk Assessment and Down Time estimation.
 - ⌚ Roll Back Strategy and planning, in case of issues in migrations procedures
- 6- The bidder shall submit a complete detailed project schedule.
- 7- The bidder shall submit a document detailing the Acceptance Test Procedure (ATP) to be performed in order to test and validate the final setup in the datacenter in both locations, this document shall be reviewed and approved by EHS.

b- Implementation phase

- 1- Prior to vacating site, the following practices shall be observed:
 - ⌚ Dispose of all debris including scrap, drawstring, tapes etc.
 - ⌚ Remove all empty boxes
 - ⌚ Remove any surplus materials and return to stores
 - ⌚ Clean the Work Area including personal waste
 - ⌚ Store tools and equipment properly in an agreed location.
- 2- The bidder shall install and configure all requested items according to the agreed HLD and LLD documents.
- 3- Move and deliver the items to sites based on EHS policies.
- 4- Provide the on-site training and knowledge transfer for EHS team; covering all systems functionalities and capabilities, the training shall be providing for at least "Four" Engineers. The contractor shall provide the training materials and tools based on the manufacturer's recommendation if any.
- 5- Must follow EHS instructions in labelling all equipment and put a description in the network appliances configuration.
- 6- Conduct a technical workshop with EHS technical team to develop Hakeem Switching requirements.
- 7- The bidder is responsible for integrating the proposed devices with EHS data center network devices.
- 8- Perform installation and configuration according to EHS requirements. Including any configuration required to meet the requirements.
- 9- Install and configure all offered network switches BOQ covering LAN, WAN solution, according to EHS needs.
- 10- The bidder is responsible for integrating the proposed devices with any existing network devices.
- 11- Patching and labeling the copper, fiber and power patch cords cables inside the cabinets is the bidder responsibility.

c- Testing and Commissioning

- 1- The bidder shall have official sign-off by stakeholders that tests performed on all critical processes have functioned to a satisfactory level.

d- Trainings and Documentation

- 1- Project documentation shall be delivered before project signoff including technical guides, operations instructions guides, project configuration related documents, network diagrams, equipment inventory etc...

- ⌚ The bidder shall train EHS team on how to operate, reconfigure systems, add new systems, and all other core functions of solution according to requirements outlined in this RFP
 - ⌚ Provide documents for all the conducted trainings and operational procedures
- 2- The bidder shall get final sign off with stakeholders that project has been completed according to project outline.

13. Technical Terms and Conditions

1. The bidder shall have at least two top level certified engineers according to the manufacturer's recommendations for the proposed solution. At least one of them shall be assigned to the project with EHS.
2. The bidder shall classify as a gold or silver (or equivalent) partner; the bidder shall provide the required manufacturer's certificates or letters for his qualifications.
3. The bidder must have at least five similar references for the proposed solution.

14. Warranty and Support

1. The bidder shall offer minimum of (5) years (8/5) **manufacturer** warranty and support service. Vendor's support contract number / ID shall be provided to EHS.
2. The bidder shall offer minimum of (5) years (24/7) **local** maintenance and support service; Maintenance and support service shall cover all supplied components and services.
3. During the warranty period, the contractor shall provide all required spare parts free of charge.
4. The warranty period covers support on site.
5. The bidder shall provide the support approach in the form of signed and stamped SLA, including the escalation matrix, support contacts and response time.
6. Perform preventive maintenance for the delivered solution based on 2 yearly visits during the warranty and support period.

15. Training

The Bidder shall propose a hands-on training related to the proposed solution in an **official and authorized training center** for 2x candidates; one candidate at a time; this should include Training materials and exam vouchers.

The bidder shall mention the details of the training program; location, period, training topics, and certificates.

The bidder shall provide the training cost separately inside the financial offer.

16. Service Level Agreement

Bidder must provide maintenance and support for hardware and software for a period of 60 months starting the date of the EHS's final acceptance of the complete works.

On-site labor and parts must also be included.

Vendor response will be measured and monitored using EHS's Service Management tool.

During the Maintenance period, the Bidder must provide the following:

- ① Preventive maintenance program and provide preventive maintenance scheduled visit every three months.
- ① Health check report after every preventive visit, Weekly support cases report and Monthly meetings to assess the support cases and support procedures.
- ① Support methodology and escalation matrix including contact details.
- ① Manufacturer support for all components.
- ① The Vendor is responsible for maintaining spare parts to meet the "availability" and "resolution time" targets at no additional cost.
- ① The Vendor will provide workshops and/or on-site training if necessary or if requested by EHS.
- ① The Vendor will support, configure and resolve problems whenever needed and/or if requested by EHS.
- ① The Vendor will commit to providing quality assurance for any major configuration changes whenever requested by EHS. Any change must be done within the EHS change management process.
- ① The Vendor is responsible for the following support service compliance points:
 - o Firmware updates, patches, and new releases
 - o Provide all related support and required preventive maintenance consultation.
- ① Support 24/7 for any critical problem
- ① Assistance to EHS staff for any configuration modification.
- ① Perform minor and major software upgrades upon request by EHS
- ① Handle all support requests submitted within or outside working hours without extra charges.
- ① All Equipment, software and Licenses should be covered back to back by Vendor support without any exception and EHS should have access to these contracts.
- ① Actively monitoring alarms, and security alerts, and take actions according to the severity level of the incident.

Incident Management

Severity level will be determined by EHS upon opening each individual support case.

Incidents and issues covered by this contract are to be treated by the bidder according to the case severity based on the following resolution timeline:

- **Case Severity 1:** Functionality down or there is critical impact to end-user's business operations.

This request should be answered 24/7 with no additional cost for outside working hours. A team should be assigned to work on the issue until it is resolved.

- **Case Severity 2:** A certain functionality is severely degraded or end-user's business operations are negatively impacted by unacceptable network performance.

This request should be answered 24/7. A team should be assigned to work on the issue until it is resolved.

- **Case Severity 3:** Functionality is impaired, although most business operations remain functional. This request will be handled only within working hours.

- **Severity Level 4:** Product Enhancement request or information is required on product capabilities, installation, or configuration. There is little or no impact to End User's business operation

During the resolution of a problem, EHS engineers shall stay informed about the advancement of the resolution process.

Following the completion of any Service, Bidder will provide a report which will be reviewed and confirmed by both parties. The Report shall indicate the exact time at which an intervention began, the equipment that was serviced or replaced, the corrective measures that were taken, and the amount of time needed for the intervention since the manifestation of the problem till functionality is restored.

Insuring and maintaining full, safe and enhanced performance for the Datacenter and any related items, along with all required support and prevention procedures with the following targets:

Severity Level	Response Time	Arrival On Site
Severity 1	30 min	90 minutes
Severity 2	1 hour	2 hours
Severity 3	8 hours	8 hours
Severity 4	12 hours	12 hours

- ⌚ Throughout the execution of the SLA, vendors should not rely on system redundancy as a permanent resolution

- ⌚ **Response time:** the time it takes to send back an acknowledgement of an issue and commence the process of developing a resolution

Terms and Penalties

Additional hours exceeding the allowable downtime will be subject to penalty. The minimum accepted system availability is 99.99% yearly uptime. Under all circumstances, the "resolution time" must not exceed 24 hours for severity level 3 and 48 hours for severity level 4. In addition, the "response time" and the "arrival on site time" must be met with each Severity Level.

The bidder will be subject to penalty if he does not meet the "response time", "arrival on site" and "resolution time". The following table shows all the penalties under this SLA contract.

Penalty condition	Penalty amount per hour JoD			
	Severity 1	Severity 2	Severity 3	Severity 4
Failed to achieve 99.999% availability target	400	300	0	0
Failed to achieve "response time"	400	300	100	50
Failed to achieve "arrival on site time"	400	300	100	50
Failed to achieve "resolution time"	0	0	100	50

17. Technical Compliance Sheet

#	Description	Comply (Yes/No)	Reference in the proposal
1	The bidder proposal must include all the submittals mentioned in the submittal section		
2	The bidder must fill all technical compliance sheets in the technical compliance section.		
3	The bidder shall propose the quantities based on the BoQ table as mentioned in Bill of quantities section		
4	The bidder shall be committed to all scope of work points mentioned in the RFP.		
5	The bidder must be committed for all warranty and support points that are mentioned in the warranty and support section.		
6	During the support and warranty period, the bidder shall be committed and meet all parameters mentioned in service level agreement section		
7	The bidder is responsible to integrate the new devices in the existing network and to do all the required configuration.		
8	The bidder shall classify as a gold or silver (or equivalent) partner; the bidder shall provide the required manufacturer's certificates or letters for his qualifications.		
	Datacenter Switches (QTY:4, 2 per data center)		
	General Requirements:		
9	The proposed model should not be end-of-sale or end-of-support, and must have at least 5 years' life after end-of-sale date.		

1 0	The proposed vendor shall be a leader or challenger in the latest Gartner Magic Quadrant for the Data Center & Cloud Networking and/or Enterprise wired & wireless LAN Infrastructure.		
1 1	Layer 3 routing support (including RIPv2, OSPF) available from day one		
1 2	EVPN-VXLAN L2 and L3 gateway support.		
1 3	Proposed products must not be grey-market and should be sourced directly from vendor or its authorized distributors		
1 4	<p>The solution must include advanced monitoring and error detection with proactive remediation based on AI technology engine; all required licenses and solution components to achieve this function must be provided within the proposed solution for five years on a cloud-based solution.</p> <p>If the vendor doesn't have a cloud-based solution, then the bidder shall provide the function based on an on premise solution, this shall include all the required software and hardware items.</p>		
Hardware & Performance			
1 5	48 ports: 10GbE small form-factor pluggable and pluggable plus transceiver (SFP/SFP+)		
1 6	6 ports: 40/100 GE quad SFP+ transceiver (QSFP+/QSP28)		
1 7	Minimum switching capacity of 2 Terabits per second (Tbps) with latency of less than 1 microsecond.		
1 8	Minimum throughput of 1400 Mpps.		
1 9	Minimum 4GB DRAM		
2 0	Minimum 200k MAC addresses		
2 1	Device-level fault tolerance, to include the following options:		
2 2	Redundant and hot-pluggable AC power supplies		
2 3	Redundant and hot-pluggable fan modules with front-to-back airflow		

2 4	The Switches shall support virtual switching technology so that the two switches appear as one virtual / logical switch with redundancy and high availability and single management IP address (Minimum 2x100G stacking modules, transceivers and cables shall be included, stacking cables shall be 7 meters)		
2 5	Must have Layer 3 capabilities		
2 6	Must support VXLAN Overlays		
2 7	Must support IPv6		
2 8	Must support the following Spanning Tree Protocol enhancements:		
2 9	IEEE 802.1w (Rapid Spanning Tree), and IEEE 802.1s (Multiple Spanning Tree).		
3 0	Must have a minimum of four active SPAN sessions		
3 1	Must supports VLAN Tagging and Private VLANs for enhanced security		
3 2	Supports link aggregation (LACP/LAG) feature to aggregate one or more Ethernet interfaces from different switch chassis to form a logical point-to-point link		
3 3	Must support Jumbo frames		
3 4	Must support SNMP v2/v3		
3 5	Must support multicast, IGMPv3, IGMPv3 snooping, PIM dense & sparse modes.		
3 6	Separate control and forwarding plans.		
3 7	Rack Mountable		
3 8	AC Power Supplies, Fused UK power cord		
3 9	Required SFP's transceivers and cables must be included as part of the solution.		
	Quality of Service		
	Shall support QoS with the following specifications:		
4 0	Per-port QoS configuration		

4 1	Must support QOS marking and Classification 802.1p		
4 2	IP differentiated service code point (DSCP) and IP Precedence		
4 3	Classification and marking based on Layer 3 and Layer 4 headers		
4 4	Input and output policing based on Layer 3 and Layer 4 headers		
Security			
	The following security features must be supported:		
4 5	TACACS and RADIUS.		
4 6	Supports L3/L4 ACLs on all ports.		
4 7	DHCP snooping and Option 82 insertion		
4 8	Port security		
4 9	SSHv1 and SSHv2		
5 0	Unicast MAC filtering		
5 1	Unicast port flood blocking		
5 2	IP source guard		
Training			
5 3	<p>The Bidder shall propose a hands-on training related to the proposed solution in an official and authorized training center for 2x candidates; one candidate at a time; this should include Training materials and exam vouchers.</p> <p>The bidder shall mention the details of the training program; location, period, training topics, and certificates.</p> <p>The bidder shall provide the training cost separately inside the financial offer.</p>		



شركة الحوسبة الصحية

Electronic Health Solutions

For Review Only Not For Bidding