



شركة الحوسبة الصحية

Electronic Health Solutions

REQUEST FOR PROPOSAL

**Infrastructure Systems for MOH Billing system
Oracle Database Appliance**

RFP Reference Number: RFP-EHS-PROC-03-2024

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Transmittal Letter

Date: 3-MAR-2024

Dear Sir / Madam,

Electronic Health Solutions “EHS” is in the process of tendering “**RFP-EHS-PROC-03-2024**” for Supply, Installation, Configuration, Testing and Implementation of the **Infrastructure Systems for MOH Billing system Oracle Database Appliance**.

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. 3050, 3071, 3074 & 3067

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: 3050, 3071.

For Review Only NOT For Bid

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 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.
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 Kingdom 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.
13. في حال أن تعذر على "المناقص الفائز بالعطاء" تنفيذ التزاماته التعاقدية و/أو أي جزء منها، بحيث يكون قد تأخر في توريد المواد و/أو الخدمات المحددة لمدة (45) يوم من التاريخ الواجب على "المناقص الفائز بالعطاء" خلاله تنفيذ التزاماته، فسيكون في هذه الحالة من حق "شركة الحوسبة الصحية" إلغاء قرار الإحالة والعلاقة التعاقدية التي تجمعهم مباشرة دون الحاجة إلى إشعار و/أو إنذار و/أو استصدار حكم قضائي. كما يكون من حق "شركة الحوسبة الصحية" في هذه الحالة شراء ما كان متفق عليه من مورد آخر يراه مناسباً، على أن يتحمل "المناقص الفائز بالعطاء" كافة النفقات التي قد تكبتهما "شركة الحوسبة الصحية" جراء ذلك إلى جانب تعويض "شركة الحوسبة الصحية" عما لحقه من أضرار إثر تعذر "المناقص الفائز بالعطاء" عن تنفيذ التزاماته.

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.

12. The bidder shall classify as a tier one partner; the bidder shall provide the required manufacturer's certificates or letters for his qualifications.
13. All HW components should be new, Original from the Vendor (all components should have original part number from the vendor), and vendor factory integrated.
14. The bidder shall provide the yearly cost of the vendor's support service for additional two years.
15. The bidder shall provide a local stock for spare parts to meet the SLA requirements.
16. The Bidders must be Oracle partners with the right to sell Oracle Hardware.

17. Project Implementation Responsibilities: Bidders are responsible for the following activities:
- Delivery, installation, configuration, testing, and handover of all servers, software and systems listed in the Bill of Quantity.
 - Defining administrator and high-privileged user roles and configuring audit policies.
 - Providing all necessary guides and manuals for administering and operating the new environment.
 - Conducting knowledge transfer sessions for EHS staff on the proposed solution.

4. RFP Guidelines

a. RFP Issuance & Submission

Event	Date
1. RFP distribution to vendors	3-MAR-2024
2. Questionnaire Session	N/A
3. Proposal due date Closure Date	14-MAR-2024

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). **(If the proposal file document size is bigger than 9 Megabyte (MB), you may send the document**

through a secured file hosting service and an internet-based computer file transfer service company such as Dropbox, WeTransfer, etc.)

2. The proposals must be sent to the Procurement Department email namely; (Procurement@ehs.com.io). 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. The Financial Proposal must specify clearly the compliance with the (5) five years' warranty duration required in the Technical Specification section.
6. The bidder shall submit only one financial proposal file. The financial proposal must include all of the products or solution options proposed in the Technical Proposal. The financial proposal must be in a format that is easy to read and understand and in compliance and consistent with the pricing and terms and conditions mentioned in this RFP document. The financial proposal must be in English.

The financial proposal must be signed by an authorized representative of the bidder.

If the bidder submits more than one financial proposal file, or if the financial proposal does not include all of the products or solution options proposed in the Technical Proposal, the bidder's proposal may not be considered.

7. The bidder must submit a cover letter in a PDF format as a separate document from the Technical and the Financial Proposal. The cover letter must include the following information:
- The tender reference number.
 - The name of the bidder.
 - The contact information for the bidder.
 - A list of the product(s) and/or solution(s) names that are being proposed, along with the corresponding product and/or solution code.
 - A listing of the proposed product(s)\ solution(s)\service(s) along with their relevant brief description.

The aforementioned information must be filled in the following "Table Template" and must be consistent and in a total match with the relative names and descriptions included in the financial and technical proposals.

The list of product and/or solution names must match those included in the Technical and Financial Proposal. If the bidder does not submit a cover letter, or if the list of product and/or solution names do not match those included in the Technical and Financial Proposal, the bidder's proposal may not be considered.

Table Template (ملخص للمنتجات والخدمات والحلول المعروضة)

The following table template can be used to list the product and/or solution names that are being proposed:

Option	Product\Solution\Services Name	Product\Solution\Services Description
Option (1)	Product 1	
Option (2)	Solution 1	
Option (3)	Solution 2 & Product 2	

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 3,000.00) Three Thousand 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 infrastructure systems in the EHS Datacenters Main for MOH billing project.

8. Business Requirements

To effectively meet the outlined business requirements, prospective vendors are expected to:

1. Install Servers systems (Oracle Database Appliance ODA-X10) and related software and configuration as per EHS needs
2. Provide continues support for Hakeem systems.
3. Provide required equipment and professional services in the mentioned locations
4. Training and Knowledge Transfer for EHS team.

9. Submittals

The bidders' proposal shall include the following:

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:

Below is the minimum technical specification for Oracle Database Appliance X10-HA where it is required one ODA X10-HA for Main

ARCHITECTURE	
System	<ul style="list-style-type: none"> Two 2U servers and one 4U DE3-24C storage shelf per system
Processor	<ul style="list-style-type: none"> Two AMD EPYC™ 9334 processors per server
	<ul style="list-style-type: none"> AMD EPYC™ 9334, 2.7GHz (up to 3.9 GHz), 210 watts, 128 MB L3 cache
Main Memory	<ul style="list-style-type: none"> 512 GB (8 x 64 GB) per server
Server Storage	<ul style="list-style-type: none"> Two internal 480 GB M.2 NVMe SSDs (mirrored) per server for Operating System and Oracle Grid Infrastructure (GI) Software
STORAGE (STORAGE SHELF DE3-24C)	
HIGH PERFORMANCE	
Data Storage	Quantity
Base System	<ul style="list-style-type: none"> 12 x 7.68 TB SSD
INTERFACES	
Standard I/O	<ul style="list-style-type: none"> One 100Mb/1Gb ethernet port and one serial RJ45 port per server One USB 3.0 ports (one rear)
Standard I/O SYSTEMS MANAGEMENT	<ul style="list-style-type: none"> Dual-port 25 GbE (SFP28) card (Interconnect)
	<ul style="list-style-type: none"> Dual-port external SAS HBA
	<ul style="list-style-type: none"> 2 X NICs, dual-port 10/25 GbE including 2 X (SFP28) per card per compute node
Interfaces	<ul style="list-style-type: none"> Dedicated 10/100/1000 M Base-T network management port
Interfaces Service Processor	<ul style="list-style-type: none"> In-band, out-of-band, and side-band network management access RJ45 serial management port
	<ul style="list-style-type: none"> Oracle Integrated Lights Out Manager (Oracle ILOM) provides:
Service Processor Monitoring	<ul style="list-style-type: none"> Remote keyboard, video, and mouse redirection
	<ul style="list-style-type: none"> Full remote management through command-line, IPMI, and browser interfaces
	<ul style="list-style-type: none"> Remote media capability (USB, DVD, CD, and ISO image)
	<ul style="list-style-type: none"> Advanced power management and monitoring
	<ul style="list-style-type: none"> Active Directory, LDAP, and RADIUS support
	<ul style="list-style-type: none"> Dual Oracle ILOM flash
	<ul style="list-style-type: none"> Direct virtual media redirection
	<ul style="list-style-type: none"> Comprehensive fault detection and notification
Monitoring SOFTWARE	<ul style="list-style-type: none"> In-band, out-of-band, and side-band SNMP monitoring v3 Syslog and SMTP alerts
	<ul style="list-style-type: none"> Automatic creation of a service request for key hardware faults with Oracle auto service request (ASR)
Oracle Software	<ul style="list-style-type: none"> Oracle Linux
Oracle Software Oracle Database Software	<ul style="list-style-type: none"> Oracle Linux KVM
	<ul style="list-style-type: none"> Appliance Manager
	<ul style="list-style-type: none"> Oracle Database 19c Enterprise Edition (or higher based on EHS requirement)
	<ul style="list-style-type: none"> Oracle Real Application Clusters
Support	Support 5 Years form mother company and local support

11. Scope of Work

The scope of work covers installing the solution based on the related standards, the best practices, and the vendor's recommendation. The scope of work shall include the following:

1. Planning and Design:
 - 1.1. The bidder shall assign a qualified technical project manager for managing and controlling the project. The assigned project manager shall develop the project plan.
 - 1.2. The project plan shall include risk assessment and down time estimation, roll back strategy and planning, in case of issues in migrations procedures (if needed), and the detailed project schedule. The project plan must be approved by EHS before starting the project.
 - 1.3. The bidder shall provide a detailed logistics management plan for the supply and delivery of the equipment.
 - 1.4. The bidder shall conduct a series of design workshops sessions with EHS team to agree on the design details.
 - 1.5. Before the onsite implementation activities, the supplier shall present a detailed migration (if required) and implementation plan of the final solution.
 - 1.6. The bidder shall submit a Solution Design document that includes detailed network connectivity diagram and devices configurations to be reviewed and approved by EHS.
 - 1.7. Submit a document detailing the Acceptance Test Procedure (ATP) to be performed in order to test and validate the final setup in the datacenters in both locations, this document shall be reviewed and approved by EHS.
 - 1.8. Bidder must take into consideration integration with the existing Network and security appliances during the implementation
2. Move and deliver the items to sites based on EHS policies.
3. Perform initial testing, software and firmware updates in order to keep the system up-to-date before installation.
4. Perform any preparatory site visits and any related activities to insure the best deployment.
5. Onsite installation for all the requested components based on EHS requirements
 - 5.1. Oracle ODA Deployment:
 - 5.1.1. Install and configure Oracle Database Appliance (ODA) to support the Oracle Database and RAC setup.
 - 5.1.2. Optimize ODA for performance, reliability, and ease of management.
 - 5.1.3. Integrating ODA network configuration and wiring with EHS data center network.
 - 5.2. Oracle Database Installation:
 - 5.2.1. Install Oracle Database version 19c or higher (based on EHS requirement).
 - 5.3. Oracle RAC Implementation:
 - 5.3.1. Design and implement Oracle Real Application Clusters (RAC) for high availability and scalability.
 - 5.3.2. Configure RAC nodes, ensuring proper network and storage configurations.
 - 5.3.3. Configure and optimize RAC for the specific workload requirements.

6. Follow EHS instructions in labelling all equipment and put a description in the network appliances configuration where applicable.
7. Provide the on-site training and knowledge transfer for EHS team; covering all systems functionalities and capabilities, the training shall be provided for at least “Four” Engineers. The supplier shall provide the training materials and tools based on the manufacturer’s recommendation if any.
8. Prior to vacating site, the following practices shall be observed:
 - 8.1. Dispose of all debris including scrap, drawstring, tapes etc.
 - 8.2. Remove all empty boxes
 - 8.3. Remove any surplus materials and return to stores
 - 8.4. Clean the work area including personal waste
 - 8.5. Store tools and equipment properly in an agreed location.
9. The bidder shall provide SLA within the contract to resolve the ODA hardware and ODA software issues that may arise during the contract period.

12. Deliverables

The expected deliverables at the conclusion of the project:

1. Complete ODA’s Scope of Work
2. Installation Documentation:
Provide comprehensive documentation for the Oracle Database, RAC, Active Data Guard setup, and ODA deployment.
3. Training Materials:
Develop training materials for EHS IT staff on managing and maintaining the implemented solution.
4. Testing and Documentation:
The supplier shall have official sign-off by EHS project team that tests performed on all critical processes have functioned to a satisfactory level.

13. Technical Terms and Conditions

1. The bidder shall have at least two certified engineers according to the manufacturer's recommendations on the proposed solution; at least one of them shall be assigned to the project with EHS.
2. The bidder shall have classified as a tier one or tier two partner; the bidder shall provide the required manufacturer's certificates or letters for his qualifications.
3. All HW components should be new, Original from the Vendor (all components should have original part number from the vendor), and vendor factory integrated.

14. End-of-Life and End-of-Sale Conditions

1. The manufacturer should not declare the equipment quoted by the bidder as End of Life (EOL) or End of Sale (EOS), at the time of product delivery.
2. The bidder must provide a 5-year lifetime letter of the solution from the vendor.

15. 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. The Warranty and support services starting date is the date of the EHS's final acceptations of the completed scope of work.
4. During the warranty period, the supplier shall provide all required spare parts free of charge.
5. The warranty period covers support on site.
6. Perform preventive maintenance for the delivered solution based on two yearly visits during the warranty and support period.
7. The bidder shall provide the support approach in the form of signed and stamped SLA, including the escalation matrix, support contacts and response time.
8. The bidder shall provide the yearly cost of the vendor's support service for additional one year, two years and five years after the five years of the product support end.
9. The supplier shall provide a local stock for spare parts to meet the SLA requirements.

16. Bill of Quantities

Item	Location	Description	Qty
1	Main Datacenter	Oracle Database Appliance X10-HA	1
2	Main Datacenter	10 m Duplex LC Terminated Multi-mode fiber patch cord for front-end connectivity OM4.	8
3	Main Datacenter	Juniper SFP28 Transceivers "JNP-SFP-25G-SR"	8

For Review Only NOT For Bidding

17. Service Level Agreement

SLA Scope

The scope of this SLA agreement covers ODA hardware and ODA software components. On-site labor and parts must also be included.

SLA Duration

The supplier must provide maintenance and support for hardware and software for a period of five years starting the date of the EHS's final acceptations of the completed scope of work.

SLA Terms and conditions

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

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

- Preventive maintenance program and provide preventive maintenance scheduled visit every six months.
- Health check report after every preventive visit.
- Support methodology and escalation matrix including contact details.
- Manufacturer support for all components.
- Maintaining spare parts to meet the "availability" targets at no additional cost.
- Support, configure and resolve problems whenever needed and/or if requested by EHS.
- Commit to providing quality assurance for any major configuration changes whenever requested by EHS. Any change must be done within the EHS's Change Management process.
- Perform Firmware updates, patches, and new releases according to the manufacturer's recommendation
- Handle all support requests submitted within or outside working hours without extra charges.
- Provide the required assistance to EHS staff for any configuration modification.
- All ODA components should be covered back-to-back by Vendor support without any exception; the supplier shall provide the approach to validate the support contract with the vendor to EHS.

Support Cases Management

EHS will set the support cases Severity level upon opening each individual support case.

Support cases covered by this agreement are to be treated by supplier according to the ITIL V4 framework incident management process and request fulfillment process, inline with the supplier provided support structure.

SLA Severity Levels and Targets

Severity Level 1: Critical

Definition:

This level represents incidents causing a critical impact to the business, resulting in severe disruption or complete unavailability of a critical system or service.

Examples:

- Complete system outage affecting all users.
- Security breach leading to unauthorized access to sensitive data.
- Data corruption or loss with significant business impact.

Response Time:

Immediate response required, typically within 1 hour.

Response Time Schedule:

24/7

Severity Level 2: High

Definition:

Incidents with high impact but not immediately critical, causing significant disruption or degradation in services.

Examples:

1. Major performance degradation affecting a critical business process.
2. Service interruptions affecting a specific department or location.
3. A security vulnerability that requires urgent attention.

Response Time:

Response within 2 hours.

Response Time Schedule:

24/7

Severity Level 3: Medium

Definition:

Incidents causing a moderate impact, resulting in disruption or degradation of non-critical services or affecting a limited number of users.

Examples:

- Performance issues affecting non-essential services.
- Application errors causing inconvenience but not critical to operations.
- Limited data loss with backups available for recovery.

Response Time:

Response within 4 hours.

Response Time Schedule:

Eight business-working hours - 5 Weekdays Excluding Holidays

Severity Level 4: Low

Definition:

Incidents causing minor impact, resulting in minimal disruption or inconvenience to users or business operations.

Examples:

- Minor performance issues with no critical impact.
- Non-urgent software or application bugs.
- Requests for information or non-urgent assistance.

Response Time:

Response within one business day.

Response Time Schedule:

Eight business-working hours - 5 Weekdays Excluding Holidays

During the resolution process of any problem, EHS team shall stay informed about the progress of the resolution process.

Following the completion of any service related to incident (Severity Level 1 and Severity Level 2) resolution and after closing the incident, the supplier shall provide an incident report. The Report shall include the RCA and indicate the exact time at which an intervention began, the components 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 until functionality is restored.

SLA Availability Target and Penalties

Additional hours exceeding the allowable downtime will be subject to penalty. The minimum accepted system availability is 99.9% yearly uptime.

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

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. In addition, the “response time” and the “arrival on site time” must be met with each Severity Level.

Penalty condition	Penalty amount per hour JoD			
	Severity Level 1	Severity Level 2	Severity Level 3	Severity Level 4
Failed to achieve 99.9% availability target	400	300	0	0
Failed to achieve "response time"	400	300	100	50

Availability: the ability of an IT system to perform its agreed function as required.

18. Technical Compliance Sheet

The one ODA should be complies with the below compliance sheet

ARCHITECTURE		Comply (Y\N)
System	<ul style="list-style-type: none"> Two 2U servers and one 4U DE3-24C storage shelf per system 	
Processor	<ul style="list-style-type: none"> Two AMD EPYC™ 9334 processors per server 	
	<ul style="list-style-type: none"> AMD EPYC™ 9334, 2.7GHz (up to 3.9 GHz), 210 watts, 128 MB L3 cache 	
Main Memory	<ul style="list-style-type: none"> 512 GB (8 x 64 GB) per server 	
Server Storage	<ul style="list-style-type: none"> Two internal 480 GB M.2 NVMe SSDs (mirrored) per server for Operating System and Oracle Grid Infrastructure (GI) Software 	
STORAGE (STORAGE SHELF DE3-24C)		
HIGH PERFORMANCE		
Data Storage	Quantity	
Base System	<ul style="list-style-type: none"> 12 x 7.68 TB SSD 	
INTERFACES		
Standard I/O	<ul style="list-style-type: none"> One 100Mb/1Gb ethernet port and one serial RJ45 port per server One USB 3.0 ports (one rear) 	
Standard I/O SYSTEMS MANAGEMENT	<ul style="list-style-type: none"> Dual-port 25 GbE (SFP28) card (Interconnect) 	
	<ul style="list-style-type: none"> Dual-port external SAS HBA 	
	<ul style="list-style-type: none"> 2 X NICs, dual-port 10/25 GbE including 2 X (SFP28) per card per compute node 	
Interfaces	<ul style="list-style-type: none"> Dedicated 10/100/1000 M Base-T network management port 	
Interfaces Service Processor	<ul style="list-style-type: none"> In-band, out-of-band, and side-band network management access RJ45 serial management port 	
	<ul style="list-style-type: none"> Oracle Integrated Lights Out Manager (Oracle ILOM) provides: 	
Service Processor Monitoring	<ul style="list-style-type: none"> Remote keyboard, video, and mouse redirection 	
	<ul style="list-style-type: none"> Full remote management through command-line, IPMI, and browser interfaces 	
	<ul style="list-style-type: none"> Remote media capability (USB, DVD, CD, and ISO image) 	
	<ul style="list-style-type: none"> Advanced power management and monitoring 	
	<ul style="list-style-type: none"> Active Directory, LDAP, and RADIUS support 	
	<ul style="list-style-type: none"> Dual Oracle ILOM flash 	
	<ul style="list-style-type: none"> Direct virtual media redirection 	
Monitoring SOFTWARE	<ul style="list-style-type: none"> Comprehensive fault detection and notification 	
	<ul style="list-style-type: none"> In-band, out-of-band, and side-band SNMP monitoring v3 Syslog and SMTP alerts 	
	<ul style="list-style-type: none"> Automatic creation of a service request for key hardware faults with Oracle auto service request (ASR) 	
Oracle Software	<ul style="list-style-type: none"> Oracle Linux 	
Oracle Software Oracle Database Software	<ul style="list-style-type: none"> Oracle Linux KVM 	
	<ul style="list-style-type: none"> Appliance Manager 	
	<ul style="list-style-type: none"> Oracle Database 19c Enterprise Edition (or higher based on EHS requirement) 	
	<ul style="list-style-type: none"> Oracle Real Application Clusters 	
Support	Support 5 Years form mother company and local support	



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