



شركة الحوسبة الصحية

Electronic Health Solutions

REQUEST FOR PROPOSAL

Precision Air Handling Units (PAHUs) for the EHS Data Center

RFP Reference Number: RFP-EHS-PROC-17-2024

Page 1 of 33



QF-PRO-01-04

<b>1</b>	<b>Table of Contents</b>	
<b>1</b>	<b>TABLE OF CONTENTS</b>	<b>2</b>
<b>2</b>	<b>TRANSMITTAL LETTER</b>	<b>4</b>
<b>3</b>	<b>CONFIDENTIALITY STATEMENT</b>	<b>5</b>
<b>4</b>	<b>COMPANY PROFILE</b>	<b>6</b>
<b>5</b>	<b>CONTACT INFORMATION</b>	<b>8</b>
<b>6</b>	<b>GENERAL CONDITIONS</b>	<b>9</b>
<b>7</b>	<b>BIDDER QUALIFICATIONS</b>	<b>11</b>
<b>8</b>	<b>RFP GUIDELINES</b>	<b>12</b>
8.1	RFP ISSUANCE & SUBMISSION	12
8.2	QUERIES AND RESPONSES	12
8.3	RFP ACKNOWLEDGEMENT	12
8.4	FINANCIAL PROPOSAL FORMAT REQUIREMENTS	12
<b>9</b>	<b>RFP TERMS &amp; CONDITIONS</b>	<b>14</b>
9.1	EVALUATION CRITERIA	14
9.2	REJECTION OF PROPOSALS	14
9.3	PROPOSAL COSTS AND EXPENSES	14
9.4	BID, PERFORMANCE, ADVANCE PAYMENT, AND WARRANTY BONDS	14
9.5	PENALTIES	15
9.6	PAYMENT TERMS	15
9.7	TERMS OF DELIVERY	16
9.8	OFFER EXPIRY DATE	16
<b>10</b>	<b>FINANCIAL COMPLIANCE SHEET</b>	<b>16</b>
<b>11</b>	<b>RFP OBJECTIVES</b>	<b>17</b>
<b>12</b>	<b>BUSINESS REQUIREMENTS</b>	<b>18</b>
<b>13</b>	<b>TECHNICAL PROPOSAL SUBMITTALS</b>	<b>19</b>
<b>14</b>	<b>SOLUTION HIGH-LEVEL ARCHITECTURE</b>	<b>20</b>
<b>15</b>	<b>SOLUTION TECHNICAL SPECIFICATION</b>	<b>21</b>
15.1	MINIMUM TECHNICAL SPECIFICATION FOR PRECISION AIR HANDLING UNITS (PAHUs)	21
<b>16</b>	<b>SCOPE OF WORK</b>	<b>23</b>
<b>17</b>	<b>BILL OF QUANTITIES</b>	<b>25</b>
<b>18</b>	<b>WARRANTY AND SUPPORT</b>	<b>26</b>

<b>19</b>	<b>LICENSE .....</b>	<b>26</b>
<b>20</b>	<b>END-OF-LIFE AND END-OF-SALE CONDITIONS.....</b>	<b>26</b>
<b>21</b>	<b>PRODUCT ORIGIN .....</b>	<b>27</b>
<b>22</b>	<b>SERVICE LEVEL AGREEMENT.....</b>	<b>28</b>
<b>23</b>	<b>TECHNICAL COMPLIANCE SHEET .....</b>	<b>31</b>
23.1	RFP GENERAL TERMS AND CONDITIONS.....	31
23.2	RFP TECHNICAL SPECIFICATIONS.....	32

For Review Only NOT For Bidding



## 2 Transmittal Letter

Date: 22-DEC-2024

Dear Sir / Madam,

Electronic Health Solutions “EHS” is in the process of tendering “**RFP-EHS-PROC-17-2024**” for Supply, Installation, Configuration, Testing and Implementation of Precision Air Handling Units (PAHUs) for the EHS Data Center.

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

Page 4 of 33



**QF-PRO-01-04**

### 3 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.

## 4 Company Profile

Under the patronage of His Majesty King Abdullah II bin Al Hussein, Electronic Health Solutions (EHS) was founded in late 2008 to advance the healthcare sector in Jordan. EHS is an innovative technology-driven, private, non-profit company that effectively provides automated solutions to enhance the quality and efficiency of Jordanian public healthcare services.

In collaboration with strategic healthcare and technology partners, EHS is driving the future of electronic health in Jordan. These key stakeholders (owners) include the Ministry of Health (MoH), Ministry of Digital Economy and Entrepreneurship, Royal Medical Services (RMS), King Hussein Cancer Foundation (KHCF), Royal Health Awareness Society, Private Hospitals Association and King Abdulla II Fund for Development.

EHS exclusively oversees four key programs that utilize technology to advance the quality of healthcare services in Jordan's public health sector. The programs operated by EHS comprise:

- Hakeem program
- The Electronic Library of Medicine-Jordan (ELM)
- Hakeem Academy
- Health Data Analytics Program (HDA)

In the coming years, EHS will concentrate on achieving its set strategies and goals to improve the quality of services provided as well as facilitate the patient's experience within healthcare facilities, this includes elevating the level of service in all aspects and enhancing the efficiency of health management in Jordan.

### **Vision**

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

### **Mission**

The overarching mission of EHS is to elevate healthcare delivery through technology in Jordan. EHS aims to provide easy access to complete electronic health records for patients of healthcare facilities enrolled in Hakeem program through a designated broadband network. This efficient access to vital patient information will improve overall healthcare quality as the clinician will be able to better address the patient's current medical conditions with up-to-date information and determine the best course of medical action for the patient.



## 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.

For Review Only NOT For Binding

## 5 Contact Information

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

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

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.

## 6 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. In the event that the "winning bidder" is unable to fulfill their contractual obligations and/or any part of them, and has delayed the supply of specified materials and/or services for a period of 45 days from the date on which the "winning bidder" was obligated to fulfill these commitments; "EHS" shall have the

right to cancel the award decision and terminate the contractual relationship directly, without the need for notice and/or warning and/or a court order. Additionally, "EHS" shall have the right to procure the agreed-upon items from another supplier it deems suitable, with the "winning bidder" bearing all expenses incurred by "EHS" as a result, as well as compensating "EHS" for any damages sustained due to the failure of the "winning bidder" to fulfill their obligations.

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 تتكبدها "شركة الحوسبة الصحية" جراء ذلك إلى جانب تعويض "شركة الحوسبة الصحية" عما لحقه من أضرار إثر تعذره عن تنفيذ التزاماته.

## 7 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. 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.
3. Bidder / Vendor shall have at least three enterprise scale live installations for similar solution. The contacts information for such projects must be provided within the bidder's technical proposal in order to be contacted by EHS as part of the technical evaluation.
4. The bidder must be an authorized Partner of the mother company he represents in this bid; the highest two partnership levels are only accepted. The bidder must submit an up-to-date valid official letter/certificate from the mother company as part of the bidder's qualification documents.
5. 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.
6. 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.
7. The winning bidder is obliged to mention the percentage of maintenance and technical support including spare parts and labor 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.

## 8 RFP Guidelines

### 8.1 RFP Issuance & Submission

Event	Date
1. RFP distribution to vendors	22-DEC-2024
2. Site visit	TBD
3. Send questions to EHS	N/A
4. Proposal due date Closure Date	12-JAN-2025

### 8.2 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.

### 8.3 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.

### 8.4 Financial 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.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. The Financial Proposal must specify clearly the compliance with the (5) five years' warranty duration required in the Technical Specification section. The bidder shall provide the cost of support and warranty service based on the RFP conditions for
  - a. (one year)
  - b. (Three years)
  - c. (Five years)

After the end of the five years support period requested in the RFP. The cost of the support renewal service shall be submitted within the financial proposal and will be part of the financial evaluation.

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:
  1. The RFP reference number.
  2. The name of the bidder.
  3. The contact information for the bidder.
  4. A list of the product(s) and/or solution(s) names that are being proposed, along with the corresponding product and/or solution code.
  5. 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", 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.

Proposal Table Template (Proposed Product\Solution\Services)

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	

## 9 RFP Terms & Conditions

### 9.1 Evaluation Criteria

1. "EHS" will evaluate each response 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.

### 9.2 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.

### 9.3 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.

### 9.4 Bid, Performance, Advance payment, and Warranty Bonds

1. Every participating bidder must submit unconditional Bid Bond valid for (3) three months with an amount of (JoD 3,000.00) Three Thousand Jordanian Dinar to be renewed automatically.
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.

## 9.5 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.

## 9.6 Payment Terms

1. Payment terms:
  - a. 20% Advance Payment against "Advance Payment LG"
  - b. 20% upon items delivery
  - c. 20% upon installation or implementation
  - d. 40% upon final EHS acceptance.
2. 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 توريد" set forth in this RFP.
3. 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).

## 9.7 Terms of Delivery

Delivery, Installation and, Implementation within (8-16) 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.

## 9.8 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.

## 10 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		

# 11 RFP Objectives

This RFP aims to procure, install, test, and commission two Precision Air Handling Units (PAHUs) for the EHS Data Center. These units will ensure reliable and efficient HVAC operation, meeting the data center's critical cooling needs with an N+1 redundancy configuration. The bidder must adhere to the specifications provided while utilizing existing components where possible to optimize costs.

- 1. Ensure Reliable HVAC Operation**  
Provide two PAHUs with a minimum 40 kW cooling capacity each to meet data center requirements.
- 2. Implement N+1 Redundancy**  
Ensure continuous operation by adding redundancy for high availability.
- 3. Optimize Existing Infrastructure**  
Use existing components where feasible to reduce costs and improve efficiency.
- 4. Comply with Specifications**  
Meet all technical and operational requirements as outlined in the RFP.
- 5. Include All Necessary Accessories**  
Provide all components required for a fully operational HVAC system.
- 6. Ensure Quality Installation**  
Deliver high-quality installation, testing, and commissioning to ensure optimal performance.
- 7. Offer Competitive Solution**  
Present the best technical and financial proposals within project constraints.
- 8. Support Scalability**  
Ensure the HVAC system is scalable for future growth or changes in demand.
- 9. Promote Energy Efficiency**  
Provide energy-efficient units to reduce operational costs and support sustainability goals.

## 12 Business Requirements

From a business perspective, the data center Precision Air Handling Units (PAHUs) solution must be delivered as a robust, enterprise-grade turnkey solution meticulously tailored to align with EHS requirements and uphold industry standards. This imperative encompasses a comprehensive approach addressing the following key points:

- 1. Deliver a Turnkey Solution**  
Provide a complete, ready-to-operate HVAC system, including PAHUs.
- 2. Ensure Enterprise-Grade Quality**  
Use robust, high-quality components designed for enterprise-level reliability and performance.
- 3. Align with EHS Requirements**  
Tailor the solution to meet the specific operational and environmental needs of the EHS data center.
- 4. Adhere to Industry Standards**  
Ensure compliance with applicable industry norms for safety, efficiency, and sustainability.
- 5. Optimize Cost-Effectiveness**  
Leverage existing infrastructure where feasible to minimize project costs without compromising quality.
- 6. Minimize Downtime**  
Plan and execute the project to ensure seamless integration with minimal disruption to operations.
- 7. Support Long-Term Efficiency**  
Provide a scalable, energy-efficient solution to reduce operational costs and meet future demands.
- 8. Ensure Comprehensive Support**  
Include post-installation maintenance, documentation, and training for the EHS team.

# 13 Technical Proposal Submittals

## The Submittals within technical proposal:

1. **Technical Compliance Sheets:** Provide detailed compliance matrices for all requirements listed in the RFP, showing the proposed solution's adherence to specifications.
2. **Data Sheets for All Items:** Include manufacturer data sheets for each component in the solution, detailing technical specifications, capabilities, and certifications.
3. **Project Implementation Plan:** High-level timeline and methodology for project phases, including milestones, resource allocation, and estimated timelines for deployment and testing.
4. **Acceptance Test Procedure (ATP) Document:** Outline the criteria and procedures for system acceptance testing, detailing performance, security, and reliability metrics to be met.
5. **Service Level Agreement (SLA):** Detailed SLA specifying response times, resolution times, support tiers, and escalation processes for ongoing support.
6. **Project Team Details:** Information on project personnel, including roles, relevant certifications, and experience with similar implementations.
7. **Detailed Bill of Quantities (BOQ):** List of all items with specifications, quantities, durations, and any necessary installation materials or licenses.
8. **End-of-Sale/End-of-Life Information:** Documentation on the support lifecycle, end-of-sale, and end-of-life timelines for each proposed solution component, including replacement strategies.
9. **Warranty and Support Coverage:** Clearly defined warranty terms for all hardware and software components, including post-deployment maintenance options.

## 14 Solution High-level Architecture

The high-level architecture for the Precision Air Handling Units (PAHUs) solution for the EHS Data Center is as follows:

1. Precision Air Handling Units (PAHUs)
  - Capacity and Redundancy:
    - Two PAHUs, each with a minimum 40 kW net sensible cooling capacity.
    - Configured in an N+1 redundancy setup for high availability.
  - Integration with Existing Infrastructure:
    - Reuse of existing ductwork, piping, and electrical connections where feasible.
  - Environmental Monitoring:
    - Sensors integrated into the PAHUs to monitor temperature, humidity, airflow, etc.

This architecture ensures a robust, efficient, and scalable HVAC solution tailored to meet the operational needs of the EHS Data Center.

## 15 Solution Technical Specification

### 15.1 Minimum Technical Specification for Precision Air Handling Units (PAHUs)

This specification outlines the requirements for the supply, installation, testing, and commissioning of precision cooling and humidification units for the EHS Data Center. The units are expected to provide reliable cooling and humidity control to maintain optimal environmental conditions. These units will manage air temperature and relative humidity set points while ensuring energy efficiency, redundancy, and seamless integration into the data center's infrastructure.

#	Description	Comply Y/N	Notes
1.	Cooling Capacity: Minimum net sensible cooling of <b>40 kW</b> per unit		
2.	Cooling Type: Direct Expansion (DX) system		
3.	Operational Modes: <ul style="list-style-type: none"> <li>Active-passive mode for redundancy and active-active mode for parallel load sharing.</li> <li>Sequencing capability.</li> <li>Shutdown by fire alarm.</li> </ul>		
4.	Refrigerant Type: Environmentally friendly refrigerant (e.g., R410A or similar)		
5.	Airflow: <b>9000 m<sup>3</sup>/h</b>		
6.	Airflow Configuration: Downflow air distribution		
7.	Energy Efficiency: Use of EC (Electronically Commutated) technology for maximum efficiency		
8.	Compressors: Single refrigerant circuit with precision EC compressors for tight control, Inverter type		
9.	Controls: Microprocessor-based control panel for precise temperature and humidity settings		
10.	Management and Monitoring: <ul style="list-style-type: none"> <li>Large LCD / Touch display screen</li> <li>SNMP Communication card with all features enabled</li> </ul>		
11.	Humidification: Ultrasonic humidifiers for efficient and precise humidity control		
12.	Cooling and Humidification: Units operate by controlling air temperature and relative humidity set points		
13.	Filtration: High-efficiency air filters with easy replacement		
14.	Casing: Fire-resistant and corrosion-proof steel casing		

15.	Noise Levels: Low noise operation, maximum 65 dB(A)		
16.	Electrical Requirements: Three-phase power input, 400V/50Hz		
17.	Power Redundancy: Dual power feed with automatic switchover		
18.	Connectivity: Remote monitoring via SNMP protocols		
19.	Maintenance Access: Front and rear service access for easy maintenance		
20.	Dimensions: Compact design for efficient data center space utilization		
21.	Monitoring Sensors: <ul style="list-style-type: none"> <li>• WATER leakage detection.</li> <li>• Smoke detection.</li> </ul>		
22.	Cold Aisle Containment Compatibility: Supports integration with containment		
23.	Safety Features: Overcurrent protection, phase monitoring, and leak detection		
24.	Operating Range: Supports continuous operation in temperatures up to 45°C		
25.	Compliance: Meets ASHRAE and ISO data center standards		

## 16 Scope of Work

The scope for delivering the data center security Solution shall include the following:

1. Project Kickoff:
  - (1) Hold an initial meeting to align project objectives and timelines.
  - (2) Define roles and responsibilities.
  - (3) Develop a Project implementation plan and project schedule. The supplier shall assign a qualified technical project manager to manage the project and to ensure the controls and successful delivery.
2. Solution Components Delivery
  - (1) The delivery of all the solution components to EHS Warehouse and the sites based on EHS requirements and policies, including moving the materials to and within the sites.
3. Pre-Implementation Assessment:
  - (1) Perform preparatory site visits and related activities to ensure the best deployment.
  - (2) Conduct an assessment of the existing IT infrastructure and security polices applied on the current security systems at the data center.
  - (3) Identify specific requirements and constraints.
4. Solution Design:
  - (1) Develop a detailed design plan for removing existing units and installing new PAHUs.
  - (2) Define placement, airflow configuration, and connection to power and control systems.
5. Solution Setup and Installation:
  - (1) Remove the existing PAHUs from the data center and safely transport them to the EHS warehouse.
  - (2) Install the new PAHUs in the specified locations, ensuring compatibility with existing infrastructure.
  - (3) Ensure N+1 redundancy and configure the units for active-passive and active-active load-sharing modes.
  - (4) Supply, install, test, and commission of all civil, mechanical, and electrical works required for the new PAHU, this includes supplying any electrical or mechanical components as part of the provided solution by the bidder. This includes but is not limited to electric distribution boards, circuit breakers, cabling, and any other materials essential to implement the submitted design effectively.

6. Integration and Compatibility:
  - (1) Ensure compatibility with existing racks, containment systems, and power distribution.
7. Configuration and Optimization:
  - (1) Configure the PAHUs for optimal temperature and humidity settings.
  - (2) Calibrate sensors and ensure efficient airflow management.
8. Testing and Validation:
  - (1) Perform operational tests, including cooling capacity and redundancy validation.
  - (2) Ensure proper switching between active-passive and active-active modes.
9. User Training:
  - (1) Develop training materials for IT administration staff.
  - (2) Provide training sessions to ensure proper utilization of the provided solution.
10. Documentation:
  - (1) Document the implemented solution comprehensively.
  - (2) Include configuration guides, operational manuals, and troubleshooting procedures.
11. Monitoring and Alerting:
  - (1) Set up monitoring tools to track the health and performance of the data protection system.
  - (2) Configure alerting mechanisms for immediate issue detection.
12. Knowledge Transfer:
  - (1) Transfer knowledge to the IT team for ongoing system management.
  - (2) Provide guidance on routine maintenance tasks.
13. Post-Implementation Support:
  - (1) Offer post-implementation support to address any issues or concerns.
  - (2) Conduct periodic reviews to ensure optimal system performance.

## 17 Bill of Quantities

The below is the BOQ for the solution included in the below table:

Item	Location	Description	Qty
1.	EHS Hakeem Datacenter	Precision Air Handling Units (PAHUs) Solution	2

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## 18 Warranty and Support

8. 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.
9. 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.
10. The Warranty and support services starting date is the date of the EHS's final acceptations of the completed scope of work.
11. During the warranty period, the supplier shall provide all required spare parts free of charge.
12. The warranty period covers support on site.
13. The bidder shall provide the support approach in the form of a signed and stamped SLA, including the escalation matrix, support contacts, and response time.
14. Perform preventive maintenance for the delivered solution based on four yearly visits during the warranty and support period.
15. The bidder shall provide the cost of support and warranty service based on the above conditions for
  - d. (one year)
  - e. (Three years)
  - f. (Five years)

After the end of the five years support period requested in the RFP. The cost of the support renewal service shall be submitted within the financial proposal and will be part of the financial evaluation.

## 19 License

1. Provide all the software and hardware licenses of any/all features that require purchasing a specific license to enable and use from day one. Further, describe how licenses are to be validated or enforced.
2. The bidder shall provide the required licenses to cover all the required capacity according to section "17 Bill of Quantity" from day one without under sizing.
3. All the licenses required for the solution must be perpetual licenses or for five years.
4. The vendor shall provide how solution licensing is deployed.
5. The supplier shall provide EHS the required licenses in the name of EHS to access and use the Software supplied through this RFP.
6. The bidder shall provide the system behavior after the subscription period expire.

## 20 End-of-Life and End-of-Sale Conditions

1. The equipment quoted by the bidder should not be declared as End of Life (EOL) or End of Sale (EOS) by the manufacturer, at the time of bidding. The bidder shall

- provide the information for End of Life (EOL) and End of Sale (EOS) for all the provided items in the BOQ.
2. The bidder must provide a 5-year lifetime letter of the solution from the vendor.

## 21 Product origin

1. The mother company shall be from the USA, Europe, or Japan.

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## 22 Service Level Agreement

### **SLA Scope**

The scope of this SLA agreement covers the provided solution for data centers Precision Air Handling Units (PAHUs) Solution including all hardware and 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 three months.
- Health check report after every preventive visit.
- Support methodology and escalation matrix including contacts details.
- Manufacturer support for all components.
- Maintaining spare parts to meet the "availability" target 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 the solution's 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 resolution (Severity Level 1 and Severity Level 2) and after closing the incident, the supplier shall provide an incident report. The Report shall include the Root Cause Analysis "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.

**Response time:** is the time it takes a provider to respond to an inquiry or request from a client.

##### 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". The following table shows all the penalties under this SLA contract. In addition, the "response 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.

## 23 Technical Compliance Sheet

### 23.1 RFP General Terms and Conditions

#	Description	Comply (Yes, No)	The reference point in the Proposal
1.	The bidder proposal shall include all the submittals mentioned in the submittal section		
2.	The bidder proposal shall comply all the submittals mentioned in the business requiems section		
3.	The delivered items must match the proposed technical specifications mentioned in the solution technical specifications section.		
4.	The bidder shall propose the quantities based on the BOQ table as mentioned in the Bill of quantities section.		
5.	The bidder shall agree to all points mentioned in the scope of work section.		
6.	The bidder shall be committed to all technical terms and conditions mentioned in the technical term and condition section.		
7.	The bidder must be committed to all warranty and support points mentioned in the warranty and support section.		
8.	During the support and warranty period, the bidder shall be committed and meet all parameters mentioned in the service level agreement section		
9.	The mother company shall be from USA, Europe, or Japan.		
10.	The bidder shall provide a detailed BoQ including part numbers.		
11.	The bidder must be committed to all End-of-Life and End-of-Sale Conditions that mentioned in the proposal.		
12.	The bidder must be committed to all requirements that mentioned in the Licenses section.		

## 23.2 RFP Technical Specifications

The bidders shall submit the compliance sheet for the Precision Air Handling Units (PAHUs) as part of their technical proposals.

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