غرفة صناعة عمّان
AMMAN CHAMBER OF INDUSTRY

Request for Proposal

For

WiFi Solution

For

Amman Chamber of Industry (ACI)

RFP No. 2/2021

Date: 04/07/2021

Table of Contents

شروط عامة

- يجب على الشركات المشاركة بالعطاء تقديم كفالة دخول عطاء على شكل كفالة بنكية أو شيك مصدق بقيمة لا تقل عن 5% من قيمة العطاء صالحة لمدة 90 يوما من تاريخ تقديم العروض.
- يجب على الشركة المحال عليها العطاء تقديم ضمان حسن تنفيذ على شكل كفالة بنكية أو شيك مصدق بقيمة لا تقل عن 10% من قيمة العطاء سارية المفعول لحين استلام اللوازم أو الانتهاء من تنفيذ الخدمات وصدور شهادة المخالصة من الغرفة بذلك.
- يجب على الشركة المحال عليها المشروع تقديم تعهد بتقديم خدمات ما بعد البيع مثل الصيانة وقطع الغيار للأجهزة و/أو الأنظمة المشتراة مع بيان القيمة السنوية لتكلفة الصيانة بعد الصيانة المجانية.
- يجب على الشركة تقديم كفالة صيانة على شكل كفالة بنكية أو شيك مصدق بقيمة لا تقل عن 5% من قيمة العطاء لمدة عام بعد استلام اللوازم استلاما نهائيا.
- تقدم الأسعار بالدينار الأردني متضمنة التوريد والتشغيل للنظام وأية لوازم تتطلب ذلك في الموقع / المواقع التي تحددها غرفة صناعة عمان، وبحيث تكون الأسعار شاملة للضريبة العامة على المبيعات وأية ضرائب أخرى.
- يعتبر قرار الإحالة نافذ المفعول اعتباراً من تاريخ تبلغ المتعهد القرار بتوقيعه على قرار الإحالة، كما يعتبر هذا التاريخ بدء سريان مدة التوريد إلا إذا ورد خلاف ذلك في القرار.
- يجب ان يتم تقديم العرض الفني والمالي كل في مغلف منفصل ومغلق.
- يلتزم المناقص أن يبقى العرض المقدم منه نافذ المفعول وغير جائز الرجوع عنه لمدة لا تقل عن (90) يوماً من التاريخ المحدد كآخر موعد لتقديم العروض، وعلى المناقص أن يبلغ غرفة صناعة عمان خطياً بعدم رغبته في تمديد عرضه قبل انتهاء المدة المحددة أعلاه بعشرة أيام على الأقل وإلا يعتبر عرضه ساري المفعول لحين تصديق قرار الإحالة من المرجع المختص.
- يجب ذكر الرقم الوطني والرقم الضريبي والاسم بشكل واضح ورقم صندوق البريد ورقم الفاكس والهاتف وتحديد المنطقة والرمز البريدي.
- يحق لغرفة صناعة عمان إلغاء العطاء دون إبداء الأسباب.
- يجب أن يشمل العرض الفني على إجابة واضحة وصريحة على كل المواصفات الفنية المطلوبة للنظام وتفصيل الطريقة التي سيتم فيها تطبيق المواصفة وبيان المخالفات الفنية بشكل واضح وصريح ولكل بند في مواصفة النظام حسب الملحق رقم 1.
- يلتزم المتعهد بإصلاح النظام وإعادته للخدمة خلال فترة ثلاثة أيام من تاريخ الإبلاغ عن العطل للنظام، وبخلاف ذلك، يحق لغرفة صناعة عمان اتخاذ الإجراءات المناسبة.
- يجب على المناقص المحال عليه العطاء أن يقوم بقياس قوة الإشارة في المنطقة المستهدفة والتأكد من مطابقتها للمواصفات وعمل محاكاة متكاملة للنظام المطبق قبل حصوله على موافقة الاستلام الرسمية، وذلك بتشغيل النظام وقياس قوة الإشارة والانتقال بين نقاط الوصول (Access Points) وزيادة عدد المستخدمين المرتبطين بنقطة وصول (Access Point) وغيرها للتأكد من أن النظام يعمل بشكل سليم وحسب المواصفات المعروضة.

1. Section I: Introduction and Background

1.1 Background

Amman Chamber of Industry (hereinafter referred to as ACI); established in 1962 as a non-profit and non-governmental organization, which represents the industrial sector in Jordan. ACI members are around 8000 varying in size from large, medium and small enterprises.

ACI works on developing Jordanian industry in various technical, engineering, administrative and marketing fields. In addition to that, ACI work on the removing of problems and obstacles facing the industrial sector. Thus, ACI is leading the development of the competitiveness of Jordanian products in the domestic market, as well as enhancing exporting capacity in both; regional and global markets.

ACI provides the following services:

- Registration and Membership.
- Signature Validity.
- Issuance of Guarantees.
- Issuing Certificates of Origin.

1.2 RFP Purpose

ACI is requesting proposals for the purchase and implementation of a WiFi Solution (hereafter referred to as the WiFi Solution). The WiFi Solution shall include hardware, software, installation, implementation, maintenance, and training on the proposed solution for the appropriate Information Technology staff.

2. PROPOSAL GUIDELINES AND REQUIREMENTS

1. The proposal must contain the signature of a duly authorized officer or agent of the company submitting the proposal.
2. The price quoted should be inclusive. If the price excludes certain fees or charges, the bidder must provide a detailed list of excluded fees with a complete explanation of the nature of those fees.
3. The execution of the work should be performed by the bidder himself and not by any subcontractor.
4. Provisions of this RFP and the contents of the successful responses are considered part of the final contractual obligations.
5. One hardcopy of the technical proposal should be submitted in a sealed envelope marked "Technical Proposal: Company Name, WiFi Solution, RFP Number [], and submission date". The technical proposal should include all required hardware and software of the proposed solution.
6. One hardcopy of the financial proposal should be submitted in a sealed envelope marked "Financial Proposal: Company Name, WiFi Solution, RFP Number [], and submission date"
7. Financial proposal should include the price of all services, hardware and software proposed by the bidder. In addition, it should contain the annual rate for maintenance services and software updates after the free warranty period. The rate provided should be constant without any increase for at least three years after the free warranty period.
8. Financial proposal should be divided into two parts, one part for the hardware and the other part for the software.
9. The bidder should explicitly conform to the payment terms mentioned in section 6.
10. This solicitation is no way obligates ACI to award a contract, nor does it commit ACI to pay for any costs incurred in the preparation or submission of the proposal in response hereto.
11. ACI reserves the right to conduct negotiations with bidders.
12. Proposals must be valid for at least 90 days from the closing date. ACI reserves the right to request the extension of the validity period of the proposal.
13. The RFP is available in both hardcopy and softcopy, if a softcopy is needed, an email should be sent to tenders@aci.org.jo before the deadline mentioned in section 3 with the subject "WiFi Solution, RFP Number [-], Company name, Request for Softcopy".

3. Deadline for Proposals

Sealed proposals should be submitted to ACI to the address listed below before 1:00 P.M. on Thursday 15/07/2021, any proposal submitted after that will not be considered and will be returned unopened.

ACI Address:

Jabal Amman, 2nd Circle, Scientific Islamic College Street, Building number 33.

4. Bidders Questions

Questions should be sent only via e-mail to tenders@aci.org.jo, and submitted no later than 10/07/2021. Subject of the bidder email should reflect "Questions: WiFi Solution, Company Name".

5. Late fees

Any delay in the project successful delivery and acceptance schedule will be stipulated to three percent per a week as a fine [3% per week].

6. Payment Terms

100% after final acceptance of the project.

7. Product Demo

The shortlisted bidders will be requested to perform a demo for the software and prove all functionalities.

8. Section II: Scope of Work and Requirements

8.1 Scope of Work

The bidder is requested to evaluate the current environment and the system requirements at ACI to implement the new solution. It includes studying the floor layout and provide suggested number and location for the access points according to a heat map for the proposed solution.

The winning bidder is requested to provide all needed devices and software to complete the installation, maintenance and training of the WiFi Solution presented in this RFP, the equipment contains hardware (PoE switch, Access Points, Controller), software and licenses. The solution should initially serve the Third floor of ACI main office. Winning bidder shall ensure secure, effective and high-speed solution for this scenario.

The winning bidder should apply market best practices related to WiFi Solution technologies.

8.2 Current Environment

Entry level routers are currently used to provide wireless connectivity in certain areas. Bidders are encouraged to have onsite visit before submitting their proposals to get required and detailed information.

8.3 General Requirements

1. The WiFi Solution should integrate with the current firewall available at ACI (WatchGuard).
2. The WiFi solution should guarantee Received Signal Strength Indicator (RSSI) of at least -60 dBm in both 2.4 GHz and 5 GHz in all office spaces and locations within the targeted floor. Heat map should be provided by the winning bidder to guarantee that strength,
3. The WiFi solution should provide High Availability in case of Access Point failure without any loss of connectivity.
4. The WiFi solution should be secure, easy to manage, reliable, and adoptable to expansion.
5. The WiFi solution should be compatible with ACI infrastructure.
6. The WiFi solution should use latest technologies, and based on the best practice for the market standards.
7. The WiFi solution licensing should be a lifetime license without the need to renew the license yearly (except the case to update the software)
8. Winning bidder should perform all required cabling activities and tasks. All required materials should be provided by the winning bidder.
9. Winning bidder should inform ACI about any required civil work needed.

8.4 Technical Requirements

The WiFi Solution should meet the following specifications as a minimum:

Controller (Suggested Quantity: 1)

1. The Access Point controller should be able to support up 2,000 access points without need of any additional Hardware and Software other than Access points.
2. The Access Point controller should support up to 40,000 concurrent users.
3. At a minimum, the controller should be manageable using SNMP.
4. The controller should allow managing and configuring connected Access Points.
5. The controller should allow assigning devices to groups.
6. The access point controller should be able to automatically adjust the channel and transmit power on each AP automatically to achieve optimal performance.
7. The controller should be manageable via HTTPS.
8. The controller should be able to present a customizable dashboard with information on the status of the WLAN network.
9. The controller should be able to locate rouge Access Points and be able to send a notification to the administrator when a rogue AP has been detected.
10. The controller should support client and traffic isolation.
11. The controller should support VLANs isolation.
12. The controller should provide a visual view of the topology and display supported devices and device relationships across network infrastructure.
13. The controller should provide map views and floor maps.
14. All authentication (management and end-user) must be done against a Microsoft Active Directory infrastructure.
15. The controller should support access control to create block lists and white lists.
16. The controller should allow active monitoring of connected clients and ability to disconnect and block clients.
17. The controller should provide a captive portal in order to authenticate users that are not part of the organization. The solution should be able to provide a web-based application that allows non-technical staff to create user accounts that are valid for a limited duration.
18. The controller should keep detailed event log for system events and diagnostics.
19. The controller should be able to troubleshoot issues with a specific device and show statistics like AP to which station is associated, signal strength of the station, amount of data received/transmitted by the station, etc.
20. The controller should be able to provide statistics for each AP to have good visibility on the utilization of an AP such as:
    a. List of all the SSIDs deployed on each of the radio of the AP
    b. Number of stations associated on each radio
    c. Data sent/received
    d. Air Time utilization (%RX, %TX, %Busy)
    e. Statistics on retransmitted packets
21. The controller should allow continuous connectivity for wireless devices in motion.
22. The controller should keep detailed client log for showing when a client joined or left the network and from which access point.

23. The controller should be able to send notifications and alerts for critical incidents by sending emails.
24. The controller should have the ability to tunnel data from the access points to the controllers
25. The controller should have the ability to distribute data directly from the access points.
26. The controller should support Guest Network to allow restricted and controlled Internet connectivity while keeping internal network safe.
27. All features listed in any attached literature must be included with the access controller pricing in the offer. If some features require the acquisition of some licenses, this must be specified. The vendor should specify which feature requires which type of licensing.

Access Points (AP) (Suggested Quantity: 4)

1. The AP should be a high performance AP.
2. The APs should support the 802.11a, 802.11b, 802.11g standards. It should also support 802.11n standard in the 2.4 and in the 5 GHz bands.
3. The Access Point should support MU-MIMO.
4. The Access Point should support Wi-Fi 5 wave 2.
5. The Access Point must have DC interface to power from external DC Adapter.
6. The Access Point should support Power Over Ethernet (PoE)
7. The AP should be able to function as a stand-alone AP without the requirement of a controller and function in managed mode (managed by controller).
8. The Access Point should provide web interface for management in standalone mode.
9. The Access Point should support CLI management.
10. The access point should be automatically upgraded to the appropriate software by a central management system or controller.
11. Security mechanisms should be in place to protect the communication between the Access Point controller and the Access Points.
12. The vendor should specify what mechanisms such as beam steering/ adaptive antenna technology/ beamforming are available in combination to focus the energy on the destination station and minimize radio interference with the surrounding environment of the AP. The vendor should specify if the activation of such feature is still compatible with 802.11n spatial multiplexing.
13. The access point should be able to detect clients that have dual band capability and steer those clients to use the 5GHz band instead of the 2.4GHz band.
14. The access point should support Ethernet and wireless connection. It should be able to reach the network using a radio link with other access points.
15. It is preferred to have access point antennas in the access point enclosure to minimize damage.
16. The access point should have at least one Gbps Ethernet port.
17. The Access Point must support SNMP and MIB.
18. The access point should support 802.1q VLAN tagging.
19. The solution should support indoor and outdoor AP management from the same controller.
20. The access point should support WPA2 enterprise authentication and AES/CCMP encryption.

Power over Ethernet (PoE) Switch (Suggested Quantity: 1)

1. The switch should have 24 Port 10/100/1000 Mbps Ethernet PoE+ Ports.
2. All ports PoE+ Capable.

3. The switch should have at least two 1/10 GbE uplink/stacking SFP/SFP+ ports.
4. The switch should support 350W PoE Budget.
5. Switching Capacity should be at least 50Gpbs.
6. The switch should support 802.3az Energy Efficient Ethernet.
7. The switch should support 802.3ad Link Aggregation (Dynamic and Static).
8. The switch should support 802.1D MAC Bridging and Spanning Tree Protocol (STP).
9. The switch should support 802.1w Rapid Spanning Tree Protocol (RSTP).
10. The switch should support 256 spanning trees instances.
11. The switch should support 802.1s Multiple Spanning Tree Protocol (MSTP)
12. The switch should support Mirroring, provider should specify the mirroring support (Port-based, ACL-based, MAC Filter-based, VLAN-based, …)
13. The switch should support IGMP and MLD Snooping.
14. Vendor should state Quality of Service (QoS) support, such as 802.1p, ACL Mapping and Marking of ToS/DSCP (CoS), Classifying and Limiting Flows Based on TCP Flags, DiffServ Support, …
15. The switch should support 802.1x Port-based Network Access Control (PNAC).
16. The switch should support 802.1X authentication.
17. The switch should support Port security and port isolation.
18. The switch should support system log and statistics.
19. The switch should support CLI management.
20. The switch should support Web GUI Management interface.
21. The switch should support SNMP Management v1/v2c/v3.
22. The switch should be able to send email Alerts for critical incidents.

8.5 Implementation and Testing

The winning bidder is required to perform the following activities as a minimum:

1. Install and configure the new solution while training ACI IT staff on deploying and installing procedures and processes.
2. Document all configuration processes and data locations.
3. Provide the WiFi Solution network map.
4. Test system functionality on all scenarios.
5. Setup reports and email notifications.

8.6 Required Infrastructure

The bidder is required to perform the following activities as the minimum for ACI main branch:

1. Provide all proposed software and licenses needed to deploy the solution.
2. Provide all proposed hardware needed to deploy the solution (ACI suggested hardware based on high level survey is mentioned within the technical specifications above).
3. Provide the price for the proposed hardware, software, licenses mentioned in previous notes.

8.7 Solution Acceptance

After the successful implementation of the WiFi solution, ACI will request a test period to evaluate the solution. Acceptance of the WiFi solution will be based on the results of the test period.

WiFi Solution test is considered successful only if it was able to meet all specifications in all scenarios.

8.8 Qualifications

1. The bidder should provide current reference information for **five** former or current clients with similar projects. Contact information for these references should be correct, updated and clear. Contact name, phone number and email address for each reference should be clearly mentioned.
2. The bidder should provide company profile for his firm, length of time in business and core competencies.
3. The bidder should explain his Service Level Agreement (SLA) structure.

8.9 Operations Support, Maintenance and Warranty

In order to provide operations support, maintenance and warranty, the winning bidder is required to provide a free 12 months support and maintenance after the project final acceptance.

9. Proposal Format

Bidder must attach to his proposal the following requirements;

- The qualifications of the company/staff involved in such project plus the project scope.
- Five different references used the same solution he is offering.
- Clear financial offer; listing all hardware and software needed; item-by-item.
- Clear licensing approach for future expansion in terms on software and hardware.
- Free first year warranty and support; and SLA options for next year(s) in terms of technical and financial offers.

10.Annex 1: Compliance Matrix

The bidder is requested to reply to each single requirement mentioned in sections 8.3 through 8.9 explicitly, as per the following matrix:

Specification	Comply / Not Comply	Description (how the specification will be implemented)