# APPENDIX II: EQUIPMENT AND SERVICE REQUIREMENTS

Please provide all of the information requested below. If a question does not apply, please mark “N/A.”

1. **GENERAL EXPERIENCE**

In addition to the information provided in Form 5 (Proposer Experience History), describe any additional experience the Proposer has in providing the services being proposed to the scale and scope described in this RFP that the Proposer wants considered by the Department.

1. **IMPLEMENTATION PLAN FOR PROPOSED WIRELESS SOLUTION**

Provide an installation and implementation plan to include required actions and target dates. Activities during the implementation process must not disrupt day-to-day educational or business functions and must be included at no additional cost to the Department. This plan will be approved by the Department in advance of the start of services and must address the following:

1. Operational impact analysis
2. Responsibilities matrix for vendor and the Department
3. Formal project plan, including dependencies and contingencies, and estimated timeframes
4. Documented processes, procedures and standards
5. Escalation matrix with names and valid contact information

1. **PERFORMANCE MEASUREMENT AND REPORTING**

Describe the available electronic formats (Web download, CD, etc.) for providing performance information to the Department for the proposed services.

1. **BILLING DISPUTE RESOLUTION FOR ALL PROPOSED SERVICES**

1. Are tracking numbers assigned in order that billing problems do not “disappear” and if so, describe.
2. Provide written procedures for resolving billing issues and the escalation process.

1. **CONTRACT/SERVICE CHANGES FOR PROPOSED WIFI**

A. Detail approved company provisions that will allow for the Department, during the term of the contract, to modify the contract to reflect changes in the Department’s business environment, specifically addressing the following changes in circumstances:

1. If the Department experiences a significant increase or decrease in service requirements because of new construction, closures or consolidations
2. The Department wishes to modify the type of services utilized by the Department under the contract due to network and technology optimizations or new technology releases
3. **PROJECT PLAN AND DEPLOYMENT SCHEDULE**

Provide a project plan and schedule with dates for the proposed wireless network installation into the schools and to provide technical training to OSIATD technicians.

1. **PROBLEM ESCALATION PROCESS**
   1. Initial problem identification.
   2. Determination of priority and severity of problem.
   3. Steps for resolving problem
   4. Problem escalation for situations when resolution is not forthcoming or an implemented solution is unsatisfactory.
2. **PROPOSAL SPECIFICATION CHARTS**

Please complete and submit the following proposal specification charts:

1. General Requirements
2. Technical Requirements
3. System & Configuration Management
   1. **General RequirementS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **DESCRIPTION/REQUIREMENTS** | **MANDATORY FOR POINTS** | **AVAILALE**  **POINTS** | **PROPOSAL IS COMPLIANT (YES/NO)** | **IF NOT COMPLIANT, EXPLAIN** |
| Indoor access points (AP) should be 3x3 MIMO or better providing 100% wireless coverage for classrooms, offices, sports & recreational areas. | YES | 5 |  |  |
| Outdoor access points should be 2x2 MIMO or better. | YES | 5 |  |  |
| AP enclosures for environmental and security protection (Rugged housing with security mounting solution) | YES | 5 |  |  |
| Integrated Omni-directional antennas | YES | 5 |  |  |
| Access points PoE (Power over Ethernet) with alternate DC input | YES | 5 |  |  |
| Devices Support and Maintenance: |  |  |  |  |
| - 3-years onsite warranty minimum for all devices which include service, installation, configuration, and parts replacement. | YES | 5 |  |  |
| - Manufacturer Device support 5 years minimum | YES | 5 |  |  |
| - 24x7 phone support | YES | 5 |  |  |
| - 3 days RMA (Return Merchandise Authorization) turnaround with shipping included | YES | 5 |  |  |
| UPS systems installation (note: PRDE has UPS inventory at hand, vendor should evaluate use and quote installation on “as needed” basis) | YES | 5 |  |  |
| Cabling drops and cabling to MDF cabinets | YES | 5 |  |  |
| Cable for both indoor and outdoor drops must be outside rated only | YES | 5 |  |  |
| Cabling must be terminated to the corresponding cabinet | YES | 5 |  |  |
| The location of each drop installed must be noted on the school floor plan | YES | 5 |  |  |
| Each school structured cabling design must be updated | YES | 5 |  |  |
| Each floor plan and updated structured cabling design must be uploaded to PRDE’S designated SharePoint folder | YES | 5 |  |  |
| Each cable drop must be certified | YES | 5 |  |  |
| Each cable drop certification must be uploaded to PRDE's designated SharePoint folder | YES | 5 |  |  |
| Perform site surveys and heatmaps in accordance with specifications set forth above | YES | 5 |  |  |
| Assess site switches quantity for AP installation | YES | 5 |  |  |
| **TOTAL AVAILABLE POINTS:** |  | **100** |  |  |

* 1. **Technical Requirements**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **GENERAL DESCRIPTION** | **MANDATORY FOR POINTS** | **AVAILALE**  **POINTS** | **PROPOSAL IS COMPLIANT (YES/NO)** | **IF NOT COMPLIANT, EXPLAIN** |
| VLAN capabilities (802.1q) | YES | 5 |  |  |
| Able to forward the TCP/IP and UDP traffic. | YES | 5 |  |  |
| Access Points radios compatibility with 802.11a/n/ac and 802.11b/g/n operating concurrently on frequencies band of 2.4GHz & 5GHz | YES | 5 |  |  |
| ZPT (Zero Touch Provisioning) | YES | 5 |  |  |
| **TOTAL AVAILABLE POINTS:** |  | **20** |  |  |

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* 1. **System & Configuration Management**

| **GENERAL DESCRIPTION** | **MANDATORY FOR POINTS** | **AVAILALE**  **POINTS** | **PROPOSAL IS COMPLIANT (YES/NO)** | **IF NOT COMPLIANT, EXPLAIN** |
| --- | --- | --- | --- | --- |
| Cloud based dashboard and management system: |  |  |  |  |
| - Monitoring | YES | 5 |  |  |
| - Support with different languages (English, Spanish) minimum | YES | 5 |  |  |
| - Required DOE reports (specified in Section 5.4) | YES | 5 |  |  |
| - Auto schedule and email | YES | 5 |  |  |
| - Centralized web-based access point management | YES | 5 |  |  |
| - Cloud management console must support log retention for more than one year | YES | 5 |  |  |
| - Scheduling firmware updates and patches | YES | 5 |  |  |
| - Capacity to allow template-based mass configuration of APs | YES | 5 |  |  |
| - Mobile management and monitoring application | YES | 5 |  |  |
| - Full system licensing | YES | 5 |  |  |
| Access point security protocols for user’s access: |  |  |  |  |
| - Configurable captive portal for user’s access | YES | 5 |  |  |
| - Set alert and Auto notification by email (mandatory) and/or SMS (optional) | YES | 5 |  |  |
| - WEP, WPA, WPA2-PSK, WPA2-Enterprise with 802.1x protocols | YES | 5 |  |  |
| Site Cloud Dashboard SSID configurable: |  |  |  |  |
| - One for Students SSID | YES | 5 |  |  |
| - One for Staff SSID | YES | 5 |  |  |
| - One for Guests SSID | YES | 5 |  |  |
| Network Access Control management for each facility which at minimum includes: |  |  |  |  |
| - Mitigation of non-zero-day attacks | YES | 5 |  |  |
| - Authorization, Authentication and Accounting of network connections. | YES | 5 |  |  |
| - Traffic encryption using protocols for 802.1X (ex: EAP-TLS, EAP-PEAP or EAP-MSCHAP) | YES | 5 |  |  |
| - User role-based controls by device, application, or security posture post authentication | YES | 5 |  |  |
| - Integration with third party management applications capable | YES | 5 |  |  |
| - Policy enforcement | YES | 5 |  |  |
| - Support for 1,000 or more concurrent sessions | YES | 5 |  |  |
| Configuration integration with Azure AD | YES | 5 |  |  |
| **TOTAL AVAILABLE POINTS:** |  | **120** |  |  |