



State of Oklahoma  
Office of Management and Enterprise Services

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**ADDENDUM 1 TO  
STATE OF OKLAHOMA CONTRACT WITH UNITED SYSTEMS, INC.  
RESULTING FROM SOLICITATION NO. 0900000251**

This Addendum 1 (“Addendum”) is an Amendment to the Contract awarded to United Systems, Inc. (“United Systems”) in connection with Solicitation No. 0900000251 (“Solicitation”) and is effective September 25, 2017.

**Recitals**

Whereas, the State issued a Solicitation for proposals to provide Managed Internet Broadband Services, as more particularly described in the Solicitation;

Whereas, United Systems submitted a proposal which did contain exceptions to the Solicitation terms; and

Whereas, the State and United Systems have agreed to the final terms under which United Systems will perform the Services under the Contract.

Now, therefore, in consideration of the foregoing and the mutual promises set forth herein, the receipt and sufficiency of which are hereby acknowledged the parties agree as follows:

1. **Addendum Purpose.**

This Addendum memorializes the agreement of the parties with respect to the terms of the Contract that is being awarded to United Systems simultaneously with execution of this Addendum. The parties agree that Supplier has not yet begun performance of work contemplated by the Solicitation.

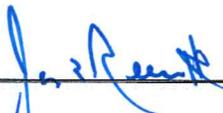
2. **Negotiated Documents of the Contract.**

2.1. The parties have negotiated certain terms of the Contract as follows:

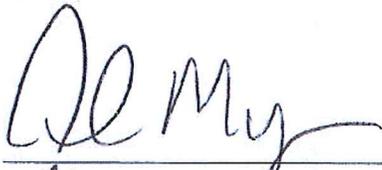
- i. revisions to Statement of Work as contained in Attachment A to this Addendum, which will be used for customers purchasing services under the Contract.

- 2.2. Accordingly, any reference to a Contract Document refers to such Contract Document as it may have been amended. If and to the extent any provision is in multiple documents and addresses the same or substantially the same subject matter but does not create an actual conflict, the more recent provision is deemed to supersede earlier versions.

**State of Oklahoma by and through the Office  
of Management and Enterprise Services**

By:   
Name: James L. Reese, II  
Title: Chief Information Officer  
Date: 11-16-17

**United Systems, Inc.**

By:   
Name: Alvin Myers  
Title: President / COO  
Date: 11/13/17

## STATEMENT OF WORK

### Scope of Services

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This Statement of Work ("SOW") is a Contract Document in connection with the Contract issued as a result of Solicitation No. 0900000251 (the "Solicitation") and entered into between United Systems, Inc. ("USI" or "United Systems") and the State of Oklahoma by and through the Office of Management and Enterprise Services ("State"), the terms of which are incorporated herein.

This SOW describes the E-rate Internal Connections eligible services to be provided by USI to an eligible entity participating in any relevant contract administered by the State ("Customer"). This SOW defines the services to be performed to implement a successful project.

### Site Survey/Assessment

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United Systems is committed to providing a smooth and successful installation experience for our customers. We will do all that we can to ensure the project is successful and exceeds our customer's expectations. We have determined through experience that customer site preparation issues are a frequent cause of installation delays. United Systems may conduct a site survey to verify installation locations and any additional components or mounting hardware that may be required. This assessment will validate the assumptions, requirements, procedures and responsibilities set forth in the SOW. In the event any assumption, requirement, procedure, or responsibility is found to be incorrect, the pricing and/or scope of services will be modified to reflect the actual conditions of implementation. This process additionally facilitates ordering and billing of only the parts required for installation. United Systems will verify that the Customer has correct power outlets and sufficient physical space for installation. Prior to the site survey, United Systems requires floor plans/fire escape plans of buildings to verify location of proposed equipment and cabling.

Successful wireless network implementations require properly designed solutions that account for sources of interference, attenuation of signal, channel overlap, RF characteristics of the access points and client devices, performance expectations, density of client devices, and evaluation of the wired distribution network. United Systems proposes a properly designed and validated solution that includes a predictive RF plan, as well as a post-installation survey for any final tuning and adjustments. An E-Rate eligible charge is included in the proposal to accommodate these objectives. Final deliverables will include documentation of access point locations, channel reuse plan, transmit power, signal-to-noise ratio heat maps, anticipated signal strength heat maps, and client density health.

Due to the limited timeframes associated with the E-Rate application process, United Systems will design the proposed wireless network remotely, using data and information sufficient to accurately determine the number, type, and basic configuration of access points. If United Systems is selected for this project, final RF planning will occur to finalize the remaining elements.

If the Customer requires a fully-developed RF plan and report prior to the proposal deadline, United Systems can be engaged for the required in-depth site survey and report development work according to the fee schedule below:

Library Campus:	\$750
Elementary School Campus	\$1,000

Middle School Campus	\$1,500
Junior High School Campus	\$1,500
High School Campus	\$2,000

The above fees are due upon completion of service, and may not be eligible for reimbursement under the E-Rate program.

## **Project Management**

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United Systems will assign a project manager as a single point of contact responsible for coordination of all activities. This project manager will coordinate the entire project and attempt to prevent disruptions to the project.

## **Purchasing of Equipment**

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From time to time, manufacturers update their products and solutions to offer new features and performance. United Systems will initiate service substitution requests for equipment with newer or updated components to ensure Customer benefits from the newest technology at the time of purchase. All substitutions for equipment will be coordinated with Customer.

## **Installation of Switches**

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United Systems will provide the following for Customer pursuant to this project. United Systems will configure the switches and place into racks.

1. United Systems will unpack and inspect all hardware prior to installation.
2. United Systems will verify that the Customer has correct power outlets and sufficient physical space for installation.
3. United Systems will configure all switch components and secure equipment into racks.
4. United Systems will update the firmware of each switch to the latest stable release.
5. United Systems will install and configure all switches with the proper IP address, subnet mask, default gateway, and VLAN configuration.
6. United Systems will connect the switch into the network.
7. United Systems will validate network connectivity between the switches and the rest of the network.
8. United Systems will validate the manageability of switches to ensure proper function.
9. United Systems will label all new equipment procured using E-rate funds in a manner that clearly displays E-rate Funding Year, 471 Number, Funding Request Number (FRN) and Service Provider Number (SPIN).

## **Installation of Wireless Access Points**

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United Systems will provide the following for Customer pursuant to this project.

1. United Systems will unpack and inspect all hardware prior to installation.
2. United Systems will install and test appropriate cabling to support deployment of wireless access points, and terminate said cabling in a rack to be provided by the Customer as required.
3. United Systems will utilize appropriate hardware to mount each wireless access point in a location determined by the predictive RF Plan.

4. United Systems will confirm wireless access point locations, available power, and LAN access.
5. United Systems will connect the network cabling to the wireless access point.
6. United Systems will connect an external power source to the wireless access point if applicable.
7. United Systems will upgrade wireless access point firmware to the latest stable release during install.
8. United Systems will configure Radio Resource Management (RRM) settings, including channel and transmit power, according to the RF Plan.
9. United Systems will configure a wireless service set identifier (SSID) and configure appropriate security to allow secured connections to the Customer's network.
10. United Systems will configure wireless access points with appropriate IP settings.
11. United Systems will, at the discretion of the Customer, configure and secure an SSID to be used for non-employee and guest access to networks designated by the Customer.
12. United Systems will test communication using a system with wireless capability.
13. Implementation of wireless VLANs may require network reconfiguration of existing network infrastructure. Existing switches may also require updated firmware.
14. United Systems will label all new equipment procured using E-rate funds in a manner that clearly displays E-rate Funding Year, 471 Number, Funding Request Number (FRN) and Service Provider Number (SPIN).

### **Installation of Wireless Access Point Controller**

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United Systems will provide the following for Customer pursuant to this project. This controller will allow for central management of the access points distributed throughout the district.

1. United Systems will install a wireless LAN controller in the Customer's server room or appropriate MDC/IDC, and ensure that all wireless access points are connected to the same logical network as the controller.
2. United Systems will update the firmware to the latest stable release.
3. United Systems will configure the controller in order for operation on the Customer's network. If the Customer has a specific configuration requests, such as addressing, naming, or password selection, they will be incorporated whenever possible.
4. United Systems will ensure all wireless access points have registered with the controller after it has been configured.
5. United Systems will configure Radio Resource Management (RRM) settings, including channel and transmit power, according to the RF Plan.
6. United Systems will configure a wireless service set identifier (SSID) and configure appropriate security to allow secured connections to the Customer's network
7. United Systems will, at the discretion of the Customer, configure and secure an SSID to be used for non-employee and guest access to networks designated by the Customer.
8. Implementation of wireless VLANs may require network reconfiguration of existing network infrastructure. Existing switches may also require updated firmware.
9. United Systems will label all new equipment procured using E-rate funds in a manner that clearly displays E-rate Funding Year, 471 Number, Funding Request Number (FRN) and Service Provider Number (SPIN).

### **Installation of Firewall Appliance**

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United Systems will provide the following Customer pursuant to this project:

1. United Systems will unpack and inspect all hardware prior to installation.
2. United Systems will install the firewall appliance into server rack.
3. United Systems will update the firmware to the latest stable release.
4. United Systems will address the firewall with the provided IP addressing scheme.
5. United Systems will configure interface IP addressing
6. United Systems will configure basic routing.
7. United Systems will configure basic rules to allow connectivity to Internet.
8. United Systems will transfer rules and translations from previous firewall onto the new firewall, if applicable.
9. United Systems will configure address translations as necessary to support internal network services as identified by the Customer.
10. United Systems will test the firewall and verify installed correctly.
11. United Systems will configure and test remote access VPN for USI support.
12. United Systems will help Oklahoma Office of Management and Enterprise Services staff with instruction of basic firewall operation.
13. United Systems will assist Oklahoma Office of Management and Enterprise Services staff with the original firewall definitions and policies. Detailed or additional definitions will be the responsibility of Oklahoma Office of Management and Enterprise Services.
14. United Systems will label all new equipment procured using E-rate funds in a manner that clearly displays E-rate Funding Year, 471 Number, Funding Request Number (FRN) and Service Provider Number (SPIN).

### **Installation of UPS**

United Systems will provide the following for Customer pursuant to this project:

1. United Systems will deliver, unpack and install the UPS equipment in a predetermined location.
2. United Systems will follow the manufacturer installation specifications.
3. United Systems will check that each battery module is in the connected position.
4. United Systems will test and insure that the UPS unit is operating condition.
5. In cases where multiple UPS's are being installed United Systems will ensure that the electrical load is distributed across all of the UPS's.
6. United Systems will leave all system documentation with client.
7. United Systems will label all new equipment procured using E-rate funds in a manner that clearly displays E-rate Funding Year, 471 Number, Funding Request Number (FRN) and Service Provider Number (SPIN).

**The Customer will be responsible to provide correct power and outlets for UPS.**

### **Installation of Category 6/Fiber Cable**

United Systems has invested in trained personnel to implement certified cable plant installations. United Systems will provide the following for the Customer pursuant to this project:

United Systems will adhere to all BICSI and NEC standards during the installation of the proposed cabling. Occasionally, because of building structural limitations, these standards might be compromised. If standards are compromised in any way, United Systems will consult with the client to determine course of action. Client signoff will be required.

1. High quality plenum cable will be used in the Category 6 structured network cable drops. Plenum will not emit toxic fumes when exposed to extreme heat. It also has a higher ignition point and will not burn as easily, which enhances the safety of Customer students/patrons and faculty/staff.
2. Pursuant to structured cabling specifications, United Systems will provide and/or adhere to a cable pathway. Data cable and fiber optic cable must be supported every 4 feet by J hooks or other hanging support hardware, or travel within cable trays or conduit. All cable runs will have a service loop at both ends.
3. Physical location of proposed drops will be finalized during a pre-project meeting. The drops will be installed in the MDC or IDC communications rack provided by the client using patch panels and Category 6 jacks. The endpoint terminus of the cable will be terminated in wall jacks, floor jacks, or above ceiling according to the floor plan. The endpoint point terminus of the cable will be installed above ceiling according to the floor plan. If necessary, surface mount cable tracking will be utilized so there are no exposed cables except in the MDC or IDC. United Systems will provide 7 foot plenum-rated, stranded patch cables for the endpoint terminus of the cable drop and up to 3 foot patch cables for the MDC.
4. United Systems will install vertical and or horizontal wire management within the MDC and IDC locations where new cable drops are added, if applicable.
5. United Systems will affix labels to new cable drops at the MDC/IDC and the wall plate. All labels will be printed by machine and not hand-written.
6. United Systems will install multi-mode/single-mode fiber between racks/cabinets for network connectivity.
7. United Systems will terminate all fiber ends. A minimum of 25 feet of service loop will be provided at both ends of the fiber run.
8. United Systems will work with district personnel when penetrating any firewalls or safe room walls. All penetrations will be filled with firestop and will comply with all standards.

### **LAN Wiring Plan**

Any cabling plant proposed by United Systems intends to address current needs as well as the future expansion requirements of the network infrastructure. Potential objectives for proposed cabling are as follows, but not limited to:

- Add to, modify or replace cabling plants in existing buildings to meet structured cabling standards, and current connectivity needs.
- Ensure that the network can support gigabit or ten gigabit speed between racks/closets and buildings.
- Add drops to existing buildings to support new wireless access points as required.

The cabling plant proposed by United Systems addresses the current needs as well as the future expansion requirements of the network infrastructure, up to Gigabit speed.

### **Installation of Racks/Cabinets**

United Systems will provide the following for Customer pursuant to this project:

1. United Systems will mount wall racks in appropriate predetermined locations. Inspection of proposed walls will take place to determine if the wall is sturdy enough to support the loaded rack.
2. United Systems will attach wall mount racks to walls via fire retardant treated plywood.

3. United Systems will assemble and position floor racks to ensure proper installation of equipment. A minimum of 36" space must be available in the front and rear of the rack.
4. United Systems will install the heaviest equipment in the lowest possible location in rack.
5. United System will ground each rack as approved by the district. The grounding of the racks will ensure longer performance life for the equipment installed in the racks.
6. United Systems will provide and install grounding bar, cable and lug, attached to rack.

**The Customer will be responsible for providing connectivity and testing of the grounding system by a licensed electrician.**

### **Management of Network Switches, Wireless Devices and Firewall**

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United Systems will provide the following for Customer pursuant to this project:

1. United Systems will monitor E-rate Eligible Managed Internal Broadband devices.
2. Monitoring will include system and service up/down status, system and application error logs and performance of individual systems components to the extent possible. Monitoring capabilities can vary depending on the manufacturer of said devices.
3. See Managed Services Schedule and Master Services Agreement documents for additional details.

### **Customer Responsibilities**

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- Provide single point of contact for project communication with United Systems.
- Provide United Systems staff with access to Customer facilities affected by this SOW. These facilities should be a safe working environment.
- Ensure all necessary Customer resources are available for the duration of the project, including technical contacts.
- Provide Administrative User ID's / Passwords and access to all systems involved in this SOW.
- Communicate with all affected Customer locations advising them of the nature of this project.
- Provide all configuration and system documentation for systems involved in this SOW.
- Provide documentation such as floor plans, room locations of network closets, etc.
- Inform United Systems of any known factors that would affect the installation, i.e., historical facility, asbestos, modular walls, etc.
- Provide adequate power that meets or exceeds the minimum manufacturer's requirements for proper operation. The Customer will be responsible for bringing in adequate power if current environment is not adequate enough to proper operation of equipment.
- Attend pre-project and post-project meetings to ensure agreement of service delivery expectations and project parameters among all parties.

### **United System's Responsibilities**

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- Obtain Customer sign off on SOW.
- Provide Customer with a single point of contact for project communication.
- Coordinate service delivery and mutually agree on the project schedule with Customer.
- Deliver each line item as detailed in this SOW.
- Provide Customer power requirements for each location of equipment.

- Employ regular reporting to identify project tasks, next steps, and potential problems.
- Notify Customer of any necessary configuration changes necessary to complete the scope of this project.
- United Systems will remove trash from un-boxing of equipment.
- Schedule and conduct pre-project and post-project meetings to ensure agreement of service delivery expectations and project parameters among all parties.

### **Key Assumptions**

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- United Systems will not have any work stoppages caused by Customer departments.
- United Systems will not interrupt regularly scheduled Customer activities unless required for critical network problem resolution.
- Rack space and power will be made available.

### **Deliverables/Documentation**

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- Post-installation wireless site survey report
- Certification documentation for installed cable
- IP Addresses and Authentication information for all installed equipment
- Additional configuration information necessary for day-to-day maintenance of installed equipment
- Service contracts and associated support contact information for all proposed equipment
- Installation reports

### **Performance Period**

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For the purposes of this contract the period of performance will be as agreed upon by both parties.

### **Standard Service Prices outside the Scope of Work**

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These are normal education discounts outside an agreed project or this scope of work.

- Engineering rates for services outside the scope of this contract will be billed at \$145.00 per hour.
- Bench technician rates for services outside the scope of this contract will be billed at a rate of \$95.00 per hour.
- Cabling technician rates for services outside the scope of this contract will be billed at a rate of \$85.00 per hour.
- USI acknowledges and agrees that, pursuant to Okla. Stat. tit. 74, § 85.40, the State or Customer shall not pay USI any travel expenses in addition to the total price of the Products and/or Services purchased hereunder.
- Payment timeline
- Payment due 45 days after receipt of invoice