

Coffeeville School District
Erate Year 15, 2012-2013 Internal Connections Project

The Coffeeville School District is seeking sealed bids under the Universal Service Fund Erate funding program for Internal Connections until Friday, March 16, 2012 at 1:00pm (CST) for the following projects:

**Wireless Access Points, Controllers, Switches, VoIP Phone System, & Cabling
Turnkey Solution Installation**

Vendors are encouraged to respond to all items in full with a turnkey solution following the specifications of the projects. The projects will be scored and evaluated using the criteria specified within the specifications of the projects with favorable points for a complete turnkey solution for all products and services requested. All equipment and accessories purchased under this bid must be new and in its original packaging upon delivery. All proposed pricing must include all delivery, freight and duties.

Bid Assessment and Scoring Criteria (in order of weight):

Price (weighted heaviest per E-Rate and State regulations)- 50%
Suitability to Task/Certifications- 10%
Configuration Adherence to Network Standards- 10%
Past Performance with District E-rate Projects- 10%
Distance from District Office- 10%
Vendor References- 10%

Special Vendor Qualifications:

- While any and all vendors are welcome to submit bids on this project, vendors who choose to conduct an onsite walk through of the school location sites will receive additional points in the scoring criteria matrix.
- Please note that Coffeeville School District has recently developed a manufacturer standard for our district, although all bids will be accepted. When completing the attached required Bid Form, please include documentation with specifications of brand, configuration, and warranty when proposing equivalent optional solutions other than what is detailed in the following specifications. Failure to note and provide documentation of any deviation of required specifications when submitting proposal will be at the discretion of the district to reject the vendor's entire proposal.
- Coffeeville School District is seeking a complete turnkey solution from one vendor to provide all products and services requested in this RFP. In order for a vendor to receive the maximum allowable points on the scoring matrix for vendor qualifications, the vendor should possess the following:
 - A Registered Communications Distribution Designer (RCDD) on staff. Vendor must attach documentation of a current certificate showing certification and name of individual.
 - A BICSI ITS Installer 2, Copper on staff. Vendor must attach documentation of a current certificate showing certification and name of individual.

- A BICSI ITS Installer 2, Optical Fiber on staff. Vendor must attach documentation of a current certification showing certification and name of individual.
- A MCITP: Enterprise Administrator on Windows Server 2008 on staff. Vendor must attach documentation of a current certification showing certification and name of individual.
- A MCITP: Server Administrator on Windows Server 2008 on staff. Vendor must attach documentation of a current certification showing certification and name of individual.
- A Cisco Certified Design Associate on staff. Vendor must attach documentation of a current certification showing certification and name of individual.
- A Cisco Certified Network Associate Wireless on staff. Vendor must attach documentation of a current certification showing certification and name of individual.
- A Cisco Advanced Wireless LAN Design Specialist on staff. Vendor must attach documentation of a current certification showing certification and name of individual.
- ShoreTel Silver Partner. Vendor must attach documentation of a current certification
- A ShoreTel Certified Installer. Vendor must attach documentation of a current certification showing certification and name of individual.
- ShoreTel Advanced System and Troubleshooting Certification. Vendor must attach documentation of a current certification showing certification and name of individual.

General District and Response Requirements:

- This project is contingent upon funding awarded by the Universal Service Fund E-rate program and local matching funds.
- The district reserves the right to reject any and all proposals.
- While the district intends to complete the entire project, the district may, at its sole discretion, opt to complete all or part of this project. The vendor must honor their submitting pricing for all or part of their response.
- A minimum of 3 references are required for all responders related to similar projects of scope and size. Preference will be given to actual letters of support from existing customers. Negative references can result in a vendor response losing points in the project scoring matrix.
- Provide history of past performance/experience with participation in E-rate projects.
- Responding vendors are preferred to have an office or other physical place of business within 110 miles of the district office to expedite repairs and support. Any vendor may respond to this RFP, however in order to receive points in the distance category in the scoring matrix for this project, vendor should abide by the above stated preference. Vendor must state in their response the physical office location address and phone number that will be providing staff for any repairs or support related to this project.
- All vendor invoices must include the district's e-rate discount and the service provider must seek reimbursement from USAC. Non e-rate eligible products or services must be noted in the submitted proposal and must be invoiced separately if applicable.
- All responses must be received by the date and time stated above. Late responses will not be considered. It is the responsibility of the participating vendor to confirm receipt of the proposal by the date and time stated above. Responses will be accepted in the following formats:

- Responses must be either delivered in a sealed package addressed to:

Coffeeville School District
Attn: Kyley Holloway
Reference: Erate Year 15, 2012-2013 Internal Connections Project
16849 Okahoma Street
Coffeeville, MS 38922
662-675-8941

- Or responses can be emailed with either Microsoft Word or PDF attachments to:

Kyley Holloway, kholloway@coffeevilleschools.org
Subject: Erate Year 15, 2012-2013 Internal Connections Project

To schedule a walkthrough, vendors should contact:

Kyley Holloway
Coffeeville School District
kholloway@coffeevilleschools.org
662-675-8941

Equipment and Services Requested for Coffeeville School District:

Item 1: Switches, Modules, UPSs, and Installation (Quote Specified Brand or Equivalent)

Installation of equipment will include configuration of switches with existing network, configuration of V-Lans for Wireless and Phone System, along with basic network training to administrative technical staff.

Dell PowerConnect 7048P - 48 Port Layer 3 Switches with MPS1000 Power Supply (or equivalent)

Specifications include but not limited to:

48 10/100/1000BASE-T auto-sensing Gigabit Ethernet switching ports

4 Combo (SFP or 10/100/1000) Gigabit Ethernet ports

Two 10Gb/Stacking Module Bays

*Optional 10Gb Modules: Dual-Port 10 Gigabit Ethernet uplink modules with SFP+ or 10GBASE-T

*Optional 64Gbps Stacking module

USB Port – Allows for file import/export locally

Auto-negotiation for speed, duplex mode and flow control

Auto MDI/MDIX

Port mirroring

Broadcast storm control

EEE (IEEE802.3az) per port settings

Port Profile support

iSCSI Auto Config

Switch Fabric Capacity 224.0 Gbps

Forwarding Rate 160 Mpps

Up to 32,000 MAC Addresses

Spanning Tree (IEEE 802.1D), Multiple Spanning Tree (MSTP) and Rapid Spanning Tree (IEEE 802.1w) with Fast Link Support

Spanning Tree optional features – STP root guard, BPDU guard, BPDU filtering

Supports Virtual Redundant Routing Protocol (VRRP)

Dual Image Support

Configuration file upload and download (USB supported)

Switch Auditing support

sFlow support

Cable diagnostics via Virtual Cable Tester

SFP/SFP+ transceiver diagnostics

Layer 3 Routing Protocols

Static routes

Routing Information Protocol (RIP) v1/v2

Open Shortest Path First (OSPF) v1/v2/v3

Classless Inter-Domain Routing (CIDR)

Internet Control Message Protocol (ICMP)

ICMP Router Discover Protocol (IRDP)

Virtual Redundant Routing Protocol (VRRP)

Address Resolution Protocol (ARP)

Internet Group Management Protocol (IGMP) v2

Distance-Vector Multicast Routing Protocol (DVMRP)

DHCP – Helper/Relay

Layer 3 Routing Performance

Up to 12,000 dynamic routes supported in IPv4 environments (8,000 in mixed IPv4/IPv6 environments)

Up to 512 RIP Routing Interfaces

Up to 128 OSPF Routing Interfaces; up to 128 OSPF Areas; up to 128 Routing Interfaces per OSPF Area; up to 8K routes for ECMP Routing; up to 4 next hops per ECMP

Up to 1K VLAN Routing Interfaces

Up to 2K Multicast Forwarding Entries

Up to 6144 ARP entries; Up to 2560 NDP entries

VLAN support for tagging and port-based as per IEEE 802.1Q; protocol-based VLANs

Up to 1000 VLANs supported

Dynamic VLAN with GVRP support

Protocol based VLANs

802.1x Auto VLAN

Limited Lifetime Warranty- Basic Hardware Service (repair or replacement) for life

Dell PowerConnect 5548P - 48 Port Layer 2 Switches (or equivalent)

Specifications include but not limited to:

48 10/100/1000BASE-T auto-sensing Gigabit Ethernet switching ports

*Include: PowerConnect MPS600 Power Supply for 5548P: For up to 15.4 watts per port

2 SFP+ ports for fiber media support

2 HDMI Stacking Ports

Switch Fabric Capacity 176.0 Gb/s

Forwarding Rate 100.2 Mpps

Up to 16,000 MAC Addresses

Auto-negotiation for speed, duplex mode and flow control

Auto MDI/MDIX

Port mirroring

Broadcast storm control

Energy Efficient Ethernet (IEEE802.3az) per port settings

Port profiles- predefined macros to help automatically configure ports.
Up to 64 Static Routes Supported
8 priority queues per port
Layer 2 Trusted Mode (IEEE 802.1p tagging), Layer 3 Trusted Mode (DSCP)
Adjustable Weighted-Round-Robin (WRR) and Strict Queue Scheduling
IPv4 and IPv6 support
Web-based management interface
Industry-standard CLI accessible via Telnet or Local Serial Port
SNMPv1, SNMP v2c, SNMPv3 supported
USB Drive Support: Auto-Configuration, Firmware
4 RMON groups supported (history, statistics, alarms, and events)
TFTP transfers of firmware and configuration files
Dual firmware images on-board
Multiple configuration file upload/download supported
Statistics for error monitoring and performance optimization including port summary tables
BootP/DHCP IP address management supported
Syslog remote logging capabilities
LLDP-MED
SNTP
iSCSI Auto Configuration
IEEE 802.1Q tagging and port-based, up to 4,000 user-configurable VLANs
Protocol-based VLANs
Dynamic VLANs with GVRP support
Spanning Tree (IEEE 802.1D) and Rapid Spanning Tree (IEEE 802.1w) with Fast Link support
Spanning Tree optional features – STP root guard, BPDU guard, BPDU filtering
Dual firmware images
Configuration file upload and download
Switch Auditing support
sFlow
Limited Lifetime Warranty- Basic Hardware Service (repair or replacement) for life

Dell PowerConnect 5524P – 24 Port Layer 2 Switches (or equivalent)

Specifications include but not limited to:

24 10/100/1000BASE-T auto-sensing Gigabit Ethernet switching ports
2 SFP+ ports for fiber media support
2 HDMI Stacking Ports
5524P: Up to 15.4 watts per port on all 24 ports
Switch Fabric Capacity 128.0 Gb/s
Forwarding Rate 65.47 Mpps
Up to 16,000 MAC Addresses
Auto-negotiation for speed, duplex mode and flow control
Auto MDI/MDIX
Port mirroring
Broadcast storm control
Energy Efficient Ethernet (IEEE802.3az) per port settings
Port profiles- predefined macros to help automatically configure ports.
Up to 64 Static Routes Supported
8 priority queues per port
Layer 2 Trusted Mode (IEEE 802.1p tagging), Layer 3 Trusted Mode (DSCP)
Adjustable Weighted-Round-Robin (WRR) and Strict Queue Scheduling
IPv4 and IPv6 support
Web-based management interface

Industry-standard CLI accessible via Telnet or Local Serial Port
 SNMPv1, SNMP v2c, SNMPv3 supported
 USB Drive Support: Auto-Configuration, Firmware
 4 RMON groups supported (history, statistics, alarms, and events)
 TFTP transfers of firmware and configuration files
 Dual firmware images on-board
 Multiple configuration file upload/download supported
 Statistics for error monitoring and performance optimization including port summary tables
 BootP/DHCP IP address management supported
 Syslog remote logging capabilities
 LLDP-MED
 SNTp
 iSCSI Auto Configuration
 IEEE 802.1Q tagging and port-based, up to 4,000 user-configurable VLANs
 Protocol-based VLANs
 Dynamic VLANs with GVRP support
 Spanning Tree (IEEE 802.1D) and Rapid Spanning Tree (IEEE 802.1w) with Fast Link support
 Spanning Tree optional features – STP root guard, BPDU guard, BPDU filtering
 Dual firmware images
 Configuration file upload and download
 Switch Auditing support
 sFlow
 Limited Lifetime Warranty- Basic Hardware Service (repair or replacement) for life

Location	Quantity	Switch Replacements	SFP 1000 SX TRANSCEIVER	10GBase Uplink Module (supports 2 SFP+) with SFP+ Single Mode Optics	Stacking Modules and Redundant Stacking Cable
Central Office (Current Location)	2	Dell PowerConnect 7048 P (PoE Layer 3)	1	1 Module and 2 SM Optics	Yes
Central Office (New Location)	3	Dell PowerConnect 7048 P (PoE Layer 3)	1	1 Module and 2 SM Optics	Yes
Gym (New Location)	1	Dell PowerConnect 7048 P (PoE Layer 3)	1	No	No
High School Main Wiring Center	5	Dell PowerConnect 7048 P (PoE Layer 3)	6	No	Yes
High School Technology Center	3	Dell PowerConnect 5548 P	1	No	Yes
High School Kitchen	1	Dell PowerConnect 5524 P	1	No	No
High School FiberNet VideoConf	1	Dell PowerConnect 5524 P	1	No	No
High School AEST Room	1	Dell PowerConnect 5524 P	1	No	No
High School Lower Server Room	2	Dell PowerConnect 5548 P	1	No	Yes
High School Gym	1	Dell PowerConnect 5548 P	1	No	No
Elementary Main Wiring Center	3	Dell PowerConnect 7048 P (PoE Layer 3)	5	1 Module and 1 SM Optics	Yes
Elementary Computer Lab	2	Dell PowerConnect 5548 P	1	No	Yes
Elementary Middle Building Office	2	Dell PowerConnect 5548 P	1	No	Yes
Elementary Kitchen	1	Dell PowerConnect 5524 P	1	No	No
Elementary Lower Server Room	2	Dell PowerConnect 5548 P	1	No	Yes
Elementary "Room 13" Middle Bld	1	Dell PowerConnect 5524 P	1	No	No
	31		25		

Include Quantity 9 – 3 Meter Stacking Cables for redundant stacking in each closet where stacked switches will reside.

Quantity 25- ST-LC 2M Multi-Mode Fiber Patch Cables

Quantity 5- ST-LC 2M Single-Mode Fiber Patch Cables

Uninterruptible Power Supply:

Quantity 2- SMX1500RM2U APC Smart-UPS X 1500VA Rack/Tower LCD 120V (or equivalent)

Quantity 1- SUA750RM1U APC Smart-UPS 750VA USB & Serial RM 1U 120V

Item 2: Wireless Access Points, Controllers, Mounting Hardware and Installation (Quote Specified Brand or Equivalent)

Installation of equipment will include configuration of access points and controllers for developing a dedicated VLAN for wireless access, setup of private, public and guest authentication/SSID, along with basic network training to administrative technical staff.

Quantity	Description
27	<p>Cisco Aironet 1142N Lightweight 802.11a/g/n Fixed Unified Dual-Radio Access Point AIR-LAP1142N-A-K9 (or equivalent) <i>Must Include Mounting Hardware</i></p> <p>802.11n Capabilities:</p> <ul style="list-style-type: none"> • 2x3 multiple-input multiple-output (MIMO) with two spatial streams • Maximal ratio combining (MRC) • Legacy beamforming (hardware supports this capability; not yet enabled in software) • 20- and 40-MHz channels • PHY data rates up to 300 Mbps • Packet aggregation: A-MPDU (Tx/Rx), A-MSDU (Tx/Rx) • 802.11 dynamic frequency selection (DFS) (Bin 5) • Cyclic shift diversity (CSD) support <p>Data Rates Supported: 802.11a: 6, 9, 12, 18, 24, 36, 48, and 54 Mbps 802.11g: 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, and 54 Mbps 802.11n data rates (2.4 GHz and 5 GHz):</p> <p>Integrated Antenna: 2.4 GHz, Gain 4.0 dBi, horizontal beamwidth 360° 5 GHz, Gain 3 dBi, horizontal beamwidth 360°</p> <p>Indicators: Status LED indicates boot loader status, association status, operating status, boot loader warnings, boot loader errors</p> <p>Interfaces:</p> <ul style="list-style-type: none"> • 10/100/1000BASE-T autosensing (RJ-45) • Management console port (RJ45) <p>System Memory:</p> <ul style="list-style-type: none"> • 128 MB DRAM • 32 MB flash <p>Warranty: Limited Lifetime Hardware Warranty</p>

	<p>The warranty includes 10-day advance hardware replacement and ensures that software media is defect-free for 90 days.</p> <p>Calculated Mean Time Between Failure: 390,000 Hours</p>
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Item 2 Continued: Wireless Access Points, Controllers, Mounting Hardware and Installation (Quote Specified Brand or Equivalent)

Quantity	Description
2	<p>Cisco 2504 Wireless LAN Controller with 25 AP Licenses AIR-CT2504-25-K9 (or equivalent)</p> <p>Cisco 2504 Wireless Controller Rack Mount Bracket AIR-CT2504-RMNT= (or equivalent)</p> <p>Wireless Standards: IEEE 802.11a, 802.11b, 802.11g, 802.11d, WMM/802.11e, 802.11h, 802.11n.</p> <p>Encryption:</p> <ul style="list-style-type: none"> • WEP and Temporal Key Integrity Protocol-Message Integrity Check (TKIP-MIC): RC4 40, 104 and 128 bits (both static and shared keys) • Advanced Encryption Standard (AES): CBC, CCM, Counter Mode with Cipher Block Chaining Message Authentication Code Protocol (CCMP) • DES: DES-CBC, 3DES • Secure Sockets Layer (SSL) and Transport Layer Security (TLS): RC4 128-bit and RSA 1024- and 2048-bit • DTLS: AES-CBC <p>Management Interfaces:</p> <ul style="list-style-type: none"> • Designed for use with Cisco Wireless Control System • Web-based: HTTP/HTTPS individual device manager • Command-line interface: Telnet, SSH, serial port <p>RF Management: Provides both real-time and historical information about RF interference impacting network performance across controllers, via systemwide Cisco <u>CleanAir technology</u> integration</p> <p>CleanAir Technology: Detects, classifies, locates, and mitigates RF interference to provide performance protection for 802.11n networks.</p> <p>High-Performance Video: Integrates Cisco VideoStream technology as part of the Cisco medianet framework to optimize the delivery of video applications across the WLAN</p> <p>OfficeExtend:</p> <ul style="list-style-type: none"> • Supports corporate wireless service for mobile and remote workers with secure wired tunnels to the Cisco Aironet® 600, 1130, 1140 or 3500 Series Access Points • Extends the corporate network to remote locations with minimal setup and maintenance requirements • Improves productivity and collaboration at remote site locations • Separate service set identifier (SSID) tunnels allow both corporate and personal Internet access • Reduced carbon dioxide emissions from a decrease in commuting • Higher employee job satisfaction from ability to work at home • Improves business resiliency by providing continuous, secure connectivity in the event of disasters, pandemics, or inclement weather

	<p>Power Management: Organizations may choose to turn off access point radios to reduce power consumption during off-peak hours</p>
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Item 3: Category 6 Cabling, Fiber Cabling, & Racks

Fiber cabling to connect new District Office to Elementary

Equipment to include:

- 2500' Single-Mode 6 Strand Drop Fiber
- 2 Fiber LIU cabinets
- 12 ST Single-Mode connectors
- 2 ST Single-Mode Coupler panels
- 2 Fan Out Kits for Fiber
- 2 3 meter ST-LC Single-Mode fiber patch cables

Fiber cabling to connect Elementary to Existing District Office

Equipment to include:

- 1200' Single-Mode 6 Strand Drop Fiber
- 1 Fiber LIU Cabinet
- 12 ST Single-Mode connectors
- 2 ST Single-Mode Coupler panels
- 2 Fan Out Kits for Fiber
- 2 3 meter ST-LC Single-Mode fiber patch cables

***Please provide a separate quote for 375 feet of Single-Mode 6 Strand Drop Fiber that will not be Erate eligible. This is the length that will cross public access roads and is not Erate eligible. Installation of this fiber across the public access road is also not Erate eligible and will need to be included on the separate quote as well.**

25 Category 5e Access Point Drops

Equipment to include:

- 5,000' Category 5e Cable
- 25 Category 5e Jacks
- 25 RJ45 Crimp Ends
- 25 3FT Category 5e Patch Cables

2 Category 6 Access Point Drops

Equipment to include:

- 200FT Category 6 Cable
- 2 Category 6 Jacks
- 2 RJ45 Crimp Ends
- 2 3FT Category 5e Patch Cables

92 Category 6 Network Cable Drops

Equipment to include:

- 18,500' Category 6 Non Plenum Cable
- 23 4 Port Face Plates
- 23 1.5in Mount Boxes
- 23 8' stick of 1.5in Raceway
- 92 Category 6 Network Jacks
- 92 Category 6 3 Foot Patch Cables

- 92 Category 6 10 Foot Patch Cables
- 2 24 Port Category 6 Patch Panels-Populated
- 1 48 Port Category 6 Patch Panels-Populated

Quantity 1: 45U 4 Post Open Frame Rack
Black steel frame with square, numbered mounting holes.
Include Vertical Cable Management.
Include quantity 6 Horizontal Cable Management

Quantity 1: 10U Wall Mounted Enclosure Rack with Swing-Out Cabinet
Adjustable Front and Rear Vertical Rackmount Rails
Locking, Reversible Front Door with Locking
Removable Side Panels
5 Year Warranty

Item 4: VoIP Phone System

Coffeeville School District is looking to replace the current 3Com NBX Phone System. We are looking for a Phone System that is not server dependent, one that is highly scalable, and highly reliable. Coffeeville School District currently utilizes a PRI. There is a 10MB Connection between all schools and the District Office.

All existing telephones should be replaced with equivalent new IP phones that support basic telephony features. An employee should be able to log in anywhere on or off the company network (home phone or cell phone) and automatically receive calls without administrative intervention. Also, any system proposed should have a failover option to POTS lines should the PRI Service experience an interruption. And PSTN failover capabilities should the WAN experience an interruption.

Coffeeville School District requires that any system have the capability to service remote locations with the same features and functionality as the main office should the need arise. Each location should be able to access all the features and functionality available at the main site even in the event of a service interruption. System directories, class of service for telephony capabilities, trunk group access, should apply to all locations.

Unified Communications System Requirements- ShoreTel or Equivalent:

Three locations with 35 users.

All users to have a voicemail and extension license.

1 ShoreGear 220T1A Voice Switch with Rack Mount Tray for existing rack.

1 Year of Partner Support for Phone System. Not to include support for the telephones.

5 Professional Access Licenses or equivalent. The licenses must allow for video calls if the user has a webcam.

5 Operator Access Licenses

25 Personal Access Licenses

Dell PowerEdge R710 Server or equivalent to store voicemail for all users & auto attendant.

Specifications as follows:

8GB Memory (4x2GB), 1333MHz 1R LV UDIMMs for 1 Processor, Advanced ECC
Intel® Xeon® E5620 2.4Ghz, 12M Cache, Turbo, HT, 1066MHz Max Mem
Dual Two-Port Embedded Broadcom® NetXtreme II 5709 Gigabit Ethernet NIC
PERC 6/i SAS RAID Controller, 2x4 Connectors, Internal, PCIe, 256MB, Cache, x6
Broadcom 5709 Dual Port 1GbE NIC w/TOE iSCSI, PCIe-4
DVD ROM, SATA, Internal
Bezel, ReadyRails Sliding Rails With Cable Management Arm
Riser with 2 PCIe x8 + 2 PCIe x4 Slot
RAID 5 for H700 or PERC 6/i Controllers
(3) 250GB 7.2K RPM SATA 3.5" Hot Plug Hard Drive
Energy Smart Power Supply, 570W
3Yr Basic Hardware Warranty Repair: 5x10 HW-Only, 5x10 NBD Onsite
Microsoft Windows Server 2008 Standard Edition License (Academic)

Complete Installation & Configuration of Phone System & Server.

Required Specifications for Voice Appliance:

Simultaneously support up to 70 IP phones, two loop start trunks, four analog extension ports and a T1

2 RJ-45 local area network (LAN) connectors

1 RJ-45 T1 port for connecting the switch to a telephone company

1 RJ-45 T1 monitor port for connecting test equipment

1 RJ-21X port for punchdown block, patch panel, or 12-port harmonica connector

2 loop start trunk ports (FXO)

4 analog extension ports (FXS)

1 DB-9, RS-232C maintenance port for serial communications

1 3.5 mm stereo input for connecting a music-on-hold source

1 3.5 mm stereo output for connecting to a overhead paging system or night bell

SIP trunking and extension support

Power Consumption: 29W (Max)

If not quoting a ShoreTel VoIP System, please provide the following:

- What hardware is being proposed? Please provide the model name and number, be sure to include MTBF information.
- Provide a diagram of the system architecture.
- Describe how the Solution delivers reliability for voice services including maintaining dial tone during WAN outages, failure of the systems Windows / Linux based servers, and power outages.
- Describe the architecture of the proposed voice mail solution including how voice mail is accessed by users from their extension, remotely, mobile devices and from their desktop computer
- Explain how the system will scale to up to 20% additional user capacity and how additional sites are added to the system
- Describe the operating system used for the proposed system providing "call control" does it require any hard drives

- During a system upgrade, explain how each component of the system is upgraded including estimate total time for upgrade for the proposed system and the estimated time each service or component is off-line.

Bid Form: E-Rate Year 15 Internal Connections Project
 Include this page before any quotes and/or product specifications.

Vendor Information

Vendor Name: _____

Vendor Main Address: _____

Vendor City: _____ State: _____ ZIP: _____

Vendor SPIN: _____

Vendor Telephone: _____ Fax: _____

Authorized Signature, Title and Date: _____

Item	Description	Cost
E-Rate Eligible Internal Connections Proposal		
1	Switches, Modules, UPSs, and Installation	
2	Wireless Access Points, Controllers, Mounting Hardware and Installation	
3	Category 6 Cabling, Fiber Cabling, Racks, & Installation	
4	VoIP Phone System & Installation	
Total Bid (Not to Exceed)		

