Project Name: Russellville Independent Schools District WAN Connectivity

**Russellville Independent Schools, 355 South Summer Street, Russellville, KY 42276**

## Section 1: Overview

Russellville Independent Schools (RISD) is seeking a fiber connected wide area network (WAN) provided by a single billing vendor/provider. This service is currently delivered via a leased dark fiber service to each district entity location and includes a core router location offering complete network operations center (NOC) services (redundant power, climate control, etc.)

RISD (Owner) is accepting proposals for lit fiber (vendor owned, maintained, and lit), dark fiber (vendor owned and maintained, district operated), and self-provisioned fiber as part of this project. Owner is also accepting proposals for network hardware and hardware maintenance for lit, dark, and self-provisioned fiber that meet the state KETS standards. Vendors are encouraged to submit proposals with multi-year (5 year or 10 year) agreements and a set period of years for renewal options.

Cost proposals should show distance, materials, and costs for connections for all sites individually. Additionally, proposals should describe any costs for right-of-way easements, pole attachments, and all associated permits.

Proposals shall address the following district requirements:

* Minimum data speed of 1Gbps, 10 Gbps preferred to all locations see section 6 below.
* Reliability of service
* Expandability to additional school sites
* Potential to take advantage of future technologies.
* Capabilities such as VoIP, streamingvideo,

Proposals Shall include the following:

* Initial install costs
* On-going support and maintenance costs
* Recurring and non-recurring charges

Proposals should also include any monthly payment schedules over the life of the contract and costs to upgrade the infrastructure as newer technology becomes available.

Potential vendors should provide adequate references for past projects of this size and scope. All questions must be submitted in writing via email to david.guffy@russellville.kyschools.us AND danny.perry@russellville.kyschools.uswith the subject line of “Russellville Independent Schools District WAN Connectivity”.

Owner reserves the right to determine the ability of any vendor, contractor, or subcontractor to perform the work and/or reject all proposals. The billing vendor must have a valid E-Rate SPIN number and meet all E-Rate guidelines for the life of the agreement. Failure of the selected vendor to maintain eligibility for E-Rate reimbursement is grounds for termination of the contract without penalty to the district. Denial of the district’s request for funding from the E-Rate program or denial of funding support from the Kentucky Department of Education are grounds for early termination of the agreement without penalty to the district.

In determining the quality of the vendor’s proposal, the Owner shall take into consideration the cost of service (initial and life of contract), vendor's skill, experience, facility, NOC, previous work standing, financial standing, past experiences with the vendor, capacity and ability to handle new work. In addition to projects that are already in progress, quality and efficiency of construction plant, compatibility with existing district equipment, and quality of equipment to be utilized on the project.

This document does not replace any code, either partially or wholly. The contractor must be aware of local codes that may impact on this project. If this document or any document listed herein conflicts with each other or any national, state or local codes, the Service Provider has the responsibility to determine and adhere to the most recent release when developing the proposal.

## Section 2: Wide Area Network Specifications and Requirements Option A: Lit Fiber

1. As a managed service the fiber should be pre-lit.
2. Fiber handed off to Owner must be with LC connectors.
3. Vendor must provide all necessary termination materials to connect to Owner's equipment.
4. Required data speed of 1Gbps minimum (10Gbps preferred) and ability to easily upgrade at a later time without infrastructure change. Pricing shall be provided for 1Gbps and 10Gbps.
5. An existing presence of service in the area(s) of the district facilities is preferred. Multiple provider agreements with a single billing agent will be accepted for review.
6. All connections must provide assurance of the bandwidth requested.
7. The WAN must remain isolated from traffic on the service provider's other networks or transmission medium.
8. Service provider shall not sniff or inspect any data that is transmitted by the Owner without express written consent for each instance and only for use in troubleshooting network related issues.
9. The service provider shall be responsible for determining all make-ready charges, application, and ongoing fees for right of way, pole rental agreements and permits throughout the life of the contract, or for the life of the infrastructure installed. Responsibility for these charges must be specified in the proposal.
10. The provider must be responsible for all physical and infrastructure changes required by city, county, state, or federal agencies, and must adhere to all local, state, and federal codes.
11. The service must connect to the Owner’s existing network equipment (no new equipment shall be required to be purchased by the district).
12. Managed service provider will only provide Layer II connectivity, no Layer III routing. If co-located, access to NOC shall be provided as needed for troubleshooting and upgrading of any district owned equipment.
13. Owner shall not be required to contact the provider when making VLAN configuration changes.
14. Service provider shall in no way place restrictions on the content, data or data types that may be transmitted across the fiber network.
15. Service provider will be responsible for all fiber repair(s) at no cost to the district.
16. Fiber shall use existing poles and follow existing communication routes into the building. Existing conduits should be considered before trenching or burrowing new routes. Any new entries must meet National and State Electrical Codes and be pre approved by the RISD Director of Maintenance and Director of Technology.
17. Service shall be compatible with Kentucky Department of Education guidelines and all KETS master contract network hardware manufacturers. The manufacturers can be located here: <http://education.ky.gov/districts/tech/kpur/Pages/Net-Hardware.aspx>
18. Service provider will use commercially reasonable efforts in keeping with industry standards to ensure that the services are available to the Owner twenty-four hours a day, seven days a week. In the event of prolonged loss of service, provisions will exist for service credit.

## Option B: Dark Fiber

1. Owner will light the dark fiber solution.
2. A minimum of two strands of single mode fiber with LC connectors will be handed off to Owner at each location.
3. Vendor must provide all necessary termination materials to connect to Owner's equipment.
4. All fiber will be home run from each outlying site (see Section 5) to the core hub site.
5. All fiber strands will be terminated in a rack or wall mounted patch panel at each site.
6. Single mode fiber must support speeds of 10Gbps or higher.
7. An existing presence of service in the area(s) of the district facilities is preferred. Multiple provider agreements with a single billing agent will be accepted for review.
8. All connections must provide assurance of the bandwidth requested.
9. The WAN must remain isolated from traffic on the other service provider's networks or transmission medium.
10. Vendor shall not sniff or inspect any data that is transmitted by the Owner without express written consent for each instance and only for use in troubleshooting network related issues.
11. The service provider shall be responsible for determining all make-ready charges, application and ongoing fees for right of way, pole rental agreements and permits

throughout the life of the contract, or for the life of the infrastructure installed. Responsibility for these charges must be specified in the proposal.

1. The provider must be responsible for all physical and infrastructure changes required by city, county, state, or federal agencies, and must adhere to all local, state and federal codes.
2. The service must connect to the Owners existing network equipment (no new equipment shall be required to be purchased by the district).
3. Service provider will only provide Layer I connectivity.
4. All fiber pathways shall be point to point between Owner sites and the network core, see Section 5. If co-located, access to NOC shall be provided as needed for troubleshooting and upgrading of district owned equipment.
5. All joints should be fused and not jumpered.
6. Service provider shall in no way place restrictions on the content, data or data types that may be transmitted across the fiber network.
7. Fiber shall successfully pass all NECA and FOA fiber optic requirements and test results shall be provided to the owner.
8. Service provider will be responsible for all fiber repair(s) at no cost to the district.
9. Fiber shall use and follow existing communication routes into the building. Existing conduits should be considered before trenching or burrowing new routes. Any new entries must meet National and State Electrical Codes and be preapproved by the RISD Director of Maintenance and Director of Technology.
10. Service shall be compatible with Kentucky Department of Education guidelines and all KETS master contract network hardware manufacturers. The manufacturers can be located here: <http://education.ky.gov/districts/tech/kpur/Pages/Net-Hardware.aspx>
11. Service provider will use commercially reasonable efforts in keeping with industry standards to ensure that the Services are available to Customer twenty-four hours a day, seven days a week. In the event of prolonged loss of service, provisions will exist for service credit.

## Option C: Self Provisioned Fiber

1. Owner will light the self provisioned fiber solution
2. A minimum of six strands of single mode fiber with LC connectors will be handed off to Owner at each location.
3. Vendor must provide all necessary termination materials to connect to Owner's equipment.
4. All fiber will be home run (point to point) from the each outlying site to the core hub site. If co-located, access to NOC shall be provided as needed for troubleshooting and upgrading of district owned equipment.
5. All fiber strands will be terminated in a rack or wall mounted patch panel at each site.
6. Single mode fiber must support speeds of 10Gbps or higher.
7. An existing presence of service in the area(s) of the district facilities is preferred. Multiple provider agreements with a single billing agent will be accepted for review.
8. All connections must provide assurance of the bandwidth requested.
9. The WAN must remain isolated from traffic on the service provider's transmission medium.
10. Service provider shall not sniff or inspect any data that is transmitted by the Owner without express written consent for each instance and only for use in troubleshooting network related issues.
11. The service provider shall be responsible for determining all make-ready charges, application and ongoing fees for right of way, pole rental agreements and permits throughout the life of the contract, or for the life of the infrastructure installed. Responsibility for these charges must be specified in the proposal.
12. The service provider must be responsible for all physical and infrastructure changes required by city, county, state, or federal agencies, and must adhere to all local, state and federal codes.
13. The fiber must connect to the Owner’s existing network equipment (no new equipment shall be required to be purchased by the district).
14. All joints should be fused and not jumpered.
15. Vendor shall in no way place restrictions on the content, data or data types that may be transmitted across the fiber network.
16. Fiber shall successfully pass all NECA and FOA fiber optic requirements and test results shall be provided to the owner.
17. Fiber shall use existing poles on RISD grounds and follow existing communication routes into the building. Existing conduits should be considered before trenching or burrowing new routes. Any new entries must meet National and State Electrical Codes and be preapproved by the RISD Director of Maintenance and Director of Technology.
18. Service shall be compatible with Kentucky Department of Education’s guidelines and all KETS master contract network hardware manufacturers. The manufacturers can be located here: <http://education.ky.gov/districts/tech/kpur/Pages/Net-Hardware.aspx>

## Section 3: Hardware and maintenance

1. All fiber strands are terminated in a rack mounted patch panel at each end.
2. Self-provisioned fiber will be lit by the Owner.
3. Fiber is single mode and terminated using LC connectors.
4. Vendor must provide all necessary termination materials to connect to Owner's equipment.
5. The hardware must connect to Owner’s existing network equipment (no new equipment shall be required to be purchased by the district).
6. All fiber pathways are point to point between Owner sites and the network core, see Section 6.
7. Service shall be compatible with Kentucky Department of Education’s guidelines and all KETS master contract network hardware manufacturers. The manufacturers can be located here: <http://education.ky.gov/districts/tech/kpur/Pages/Net-Hardware.aspx>
8. E-Rate eligible maintenance agreements will also be considered for this project.

## Section 4: E-Rate Program Compliance

1. The selected vendor agrees to abide by all rules and regulations of the Universal Service Program
2. The Selected vendor agrees to bill the district and district seek
3. Vendor agrees to maintain records in accordance with E-Rate rules (currently 10 years).

## Section 5: Additional Information

## Technical Point of Contact:

David Guffy

Director of Technology

Russellville Independent School District

david.guffy@russellville.kyschools.us

Danny Perry

Director of Technology

Russellville Independent School District

danny.perry@russellville.kyschools.us

## Section 6: District Locations:

**Russellville High School**

**1101 W 9th St**

**Russellville, KY 42276**

**Russellville 21st Century Center**

**1103 W 9th St**

**Russellville, KY 42276**

**R.E. Stevenson Elementary School**

**1000 N Main St**

**Russellville, KY 42276**

**Russellville Board of Education**

**355 S Summer St**

**Russellville, KY 42276**

**Russellville Technology Office (Network Hub Site)**

**210 E 7th St**

**Russellville, KY 42276**