E-Rate Form 470 Request for Proposals
for Modulating Electronics for Self-Provisioned Dark Fiber

Issued by:
Hillsboro School District 1J
3083 NE 49th Place
Hillsboro, OR 97124

Issue Date: January 21, 2022

RFP Due Date: February 25, 2022 by 2:00 p.m.

Form 470 Number: 220014477

Question Submission: Procedural or inquires about submission may be submitted electronically via email to TSRFPResponse@hsd.k12.or.us.

Proposal Posting and Updates Site: https://www.hsd.k12.or.us/domain/1260
Check this site often for updates or addendums. Check this site prior to submission.

Project Name: Modulating Electronics for Self-Provisioned Dark Fiber

Purpose:
Hillsboro School District 1J is seeking bids for modulating electronics to light self-provisioned dark fiber at the new ES29 Elementary School (7201 SE Kinnaman Road, Hillsboro, OR 97123) that will open in Fall 2023. Equipment would be purchased and delivered in the spring of 2023. All bid responses should offer fully operational configurations and related components.

Submission of information:
1. All proposals should be bundled into a single PDF document and emailed to: TSRFPResponse@hsd.k12.or.us

2. All proposals should be formatted with the below sections in the provided order:
   a. Section 1: Table of Contents
   b. Section 2: Company Background & Information
      i. General company background and E-rate history
         1. Required for submission: Provide E-rate SPIN
      ii. Contacts for this RFP
   c. Section 3: Proposed Modulating Electronics (requirements below)

    d. Section 4: Confirmation of Automation support requirements for Routing/Switching equipment (listed below)

    e. Section 5: Provide information and documentation of the manufacturers warranty and support. HSD prefers to go directly to the manufacturer for technical support.

    f. Section 6: Pricing

        i. Include budgetary total cost for all needed Modulating Electronics

            1. No professional services are being requested

        ii. Provide any options for purchasing through a state contract, reciprocal government agency contract or consortium purchase

Modulating Electronics Specifications and Quantities:

1. Edge Devices needed:

    a. Required Quantity: 2

    b. Reference design: Juniper EX3400-24P with EX-24-EFL, or equivalent

    https://www.juniper.net/assets/us/en/local/pdf/datasheets/1000581-en.pdf

- 24x 1G Base-T PoE+ ports minimum
- 4x 10G SFP+ and/or 25G SFP28 ports minimum
- 2x 40G QSFP and/or 100G QSFP28 ports minimum
- VRF-Lite, with ospf, ospf3, pim, dhcp forwarding
- QnQ
- 9000 MTU minimum
- 16,000 IPv4 ARP table minimum
- 32,000 MAC table minimum
- IPv6
- Support for SR, LR, ER, ZR, BiDi, and DWDM optics, preference for third party compatibility options
- Dual power supply
- Virtual chassis support
- Prefer lifetime warranty
- Flexible vlan tagging and ethernet encapsulation

2. Automation support requirements for Routing/Switching equipment:

    a. Programmable interface (API). The device MUST have an on-device programmable API (NETCONF or REST) that allows an external script to:

        i. Get device configuration

        ii. Get operational data

        iii. Change device configuration.

    b. Structured operational data.

        i. The device MUST return operational data as structured data (JSON or XML format).

ii. The device MUST NOT return operational data as text printouts wrapped in XML or JSON envelopes.

c. Device configuration in structured format. The device SHOULD return its configuration in structured format (JSON or XML) with meaningful structure; for example, ACL lines should be within the ACL.

d. Atomic configuration changes.Changes to device configuration MUST be atomic, either all the submitted changes are accepted or none is.

e. Configuration rollback. The device MUST support rollback to a previous configuration.

f. Configuration replace. The device MUST support replacing current configuration with a new configuration without a reload.

g. Configuration diff. The device SHOULD be able to create a list of configuration commands needed to transform one configuration into another.

h. Support for industry-standard models. The device SHOULD support industry-standard configuration data models such as IETF and/or OpenConfig.

i. Feature parity and all functionality requested in the RFP must be fully supported by the device API and meet the above requirements. Detail in Section 6 of response.

RFP Evaluation Scoring:

Scoring of the proposal shall follow the below weighting:

- Price of eligible equipment (60%)
- Specification requirements (40%)