



**Custom Solutions
Proposal
For**



In Response To:
RFP 6616Z1

Presented by:
Jason Evans
Senior Account Director

Due: January 21st, 2022 at 2:00 PM CST



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This proposal includes data that shall not be duplicated, used, or disclosed for any purpose other than to evaluate this proposal. If, however, a contract is awarded to Unite Private Networks as a result of or in connection with the submission of this data, the recipient shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the recipient's right to use information if it is obtained from another source without restriction. All data contained in this document, including its attachments, are subject to this restriction. Notwithstanding the foregoing, UPN understands that this data may be subject to a request under the Freedom of Information Act (FOIA) or other applicable state law. In that event, UPN requests prior written notice before the disclosure of any materials contained in this proposal.

Top-of-the-Line Private Fiber Networks Since 1998



Attn: Dianna Gilliland, Procurement Contracts (RFP # 6616 Z1)
State Purchasing Bureau / Network Nebraska
1526 K Street, Suite 130
Lincoln, Nebraska 68508

Jason Evans
Senior Account Director
3880 VerMaas Place
Lincoln, NE 68502
Jason.evans@upnfiber.com
402-651-3711

State Purchasing Bureau / Network Nebraska / RFP # 6616 Z1),

Unite Private Networks, LLC (UPN/Unite) is very pleased to provide State of Nebraska / Network Nebraska with this comprehensive Fiber-Optic proposal in response to your RFP 6616 Z1. State of Nebraska and Network Nebraska have been valued customers to UPN through the years and we look forward to continuing that relationship.

UPN understands the challenges that State of Nebraska / Network Nebraska is facing. With increases in portable wi-fi enabled devices, digital learning applications, and online testing, bandwidth demands are constantly growing. Because all of this functionality depends on reliable fiber connections, we believe bandwidth is now the third utility behind power and water! Our 100% fiber solution gives you the scalability to have the bandwidth you need for the anticipated growth of the future State of Nebraska / Network Nebraska network.

UPN is offering State of Nebraska / Network Nebraska an upgraded fiber-optic network that meets or exceeds the requirements of the Request for Bid. We value our relationship with State of Nebraska / Network Nebraska and have made significant investments to ensure the continued reliability of the network. This RFP response to 6616 Z1 represents an additional significant investment in order to preserve a long-lasting partnership for years to come.

Our Executive Summary section outlines many other benefits we provide. We believe that once the State of Nebraska / Network Nebraska understands our RFP to 6616 Z1 response in full, you will agree that Unite Private Networks is the best vendor partner for your fiber connections. Please feel free to contact me at jason.evans@upnfiber.com or 402-613-3655 if I can answer any questions or be of further assistance.

Best regards,
Jason Evans
Senior Director of Sales - Nebraska



Executive Summary

Unite Private Networks (UPN) has thoroughly read and understood the requirements associated with RFP # RFP 6616Z1 for E-rate services. Specifically, State of Nebraska wants to select a Service Provider to manage the increasing demands for broadband service in today's education environment.

Selecting UPN as your provider will give State of Nebraska the following advantages:

- **CUSTOM PURPOSE-BUILT FIBER NETWORK** - Our solution is designed specifically to meet the requirements of State of Nebraska. UPN proposes to deploy all new fiber-optic cable that is dedicated to the use of State of Nebraska.
- **PROJECT MANAGEMENT** - Our team includes many utility veterans who are knowledgeable of local laws, rights of way access and utility permitting. This solution is a full-turn-key solution consisting of engineering, permitting, construction, electronics, and maintenance. With our experience and knowledge, we can ensure a smooth implementation and successful project.
- **ENTERPRISE LEVEL SUPPORT** - We only provide network services to carrier, school, and business customers. We do not provide service to residential customers, so we do not have to prioritize which customers receive our highest level of support.
- **NETWORK OPERATIONS CENTER** – Our Network Operations Center in Kansas City is staffed by Enterprise Level technicians who can manage your inquiries 24 hours a day, seven days a week and 365 days a year.
- **DEDICATED EDUCATION TEAM** - We assign you a team that is focused on education solutions and has extensive knowledge with E-Rate processes and procedures.
- **LOCAL SUPPORT**- UPN has a local team located in Lincoln, NE with many personnel that are serving with many personnel that are serving other School Districts in the Nebraska market (Outside Plant, Construction, Field Engineering, etc.)
- **PROVEN TRACK RECORD** - We have a proven track record of building and providing turn-key custom fiber networks serving over 250 school districts in 21 states. Several of our past projects have been similar in scope and have been offered as examples under the reference section included in this proposal.
- **NETWORK DOCUMENTATION** – Geographic Network Maps, Logical Networks drawings and As-Built Network Diagrams provide you the information to know specifically where your fiber is located and how it works.
- **E-RATE CATEGORY 1 COMPLIANT** - Our Ethernet Wide Area Network solution is fully E-Rate Category 1 compliant, so you can be confident in your ability to secure your E-Rate funding. UPN's SPIN # is 143029868. Our Tax ID # is 35-2566703. Our FCCRN is 0014817357.
- **CUSTOMER PORTAL** – Our customer Portal allows real time access to district invoices, trouble/maintenance tickets, contracts, circuit IDs, and more.



Wide Area Network Advantages:

- **RELIABILITY** – This fiber-rich design creates a very robust Wide Area Network to reliably serve the State of Nebraska demand for bandwidth for the future. A robust core network design increases the reliability of the WAN by eliminating potential points of failure. With no backhaul to a central office or head-end, fewer switches are required, and your data moves directly from point-to-point on fiber between State of Nebraska facilities.
- **CAPACITY** - Our design provides the bandwidth specified in the RFP, and easy scalability when more bandwidth is required with simple optics upgrades.
- **NETWORK VISIBILITY AND CONTROL** - You control Routing and Quality of Service. Our solution allows you to see into your private network; whereas, legacy infrastructure, such as switches, central offices, and head end facilities, could limit the visibility you would have to your network.
- **PRIVACY AND SECURITY** - UPN delivers its service over fiber pairs that will be specifically deployed for use by the State of Nebraska. This assures the State of Nebraska of consistently available bandwidth and unprecedented flexibility in network management. Many incumbent vendors will often offer smaller bandwidth increments because of legacy equipment and facilities. These public systems can be less secure because they include routing through a central office or cable head end facility. UPN always recommends and implements full duplex bandwidth when deploying pure fiber WANs for school districts. This provides State of Nebraska a clean, secure, and reliable solution.



Company Overview

Top-of-the-Line Private Fiber Networks Since 1998

Unite Private Networks provides the pinnacle of service in more than 300 communities across 21 states.



UPN currently serves over 300 communities across 21 states with 10,000 metro fiber route miles and over 7,000 on-net buildings.

We have a proven history of successful completion of large and complex fiber-optic construction projects, on time and on budget. Our customer relationships typically include long-term agreements (10-20 years) for fiber-optic connectivity between multiple

facility locations. UPN manages all phases of the customer relationship, including RFP response, construction management, network reliability, technical assistance and customer service to facilitate a long-term partnership with our customers. Headquartered in the Kansas City metro area, UPN has been providing customer-focused communications solutions since 1998.

Industries of Focus

Unite Private Networks (UPN) provides high-bandwidth, fiber-based communications networks and related services to:

- Schools
- Governments
- Carriers
- Data Centers
- Hospitals
- Businesses

Our Services

Our offerings include:

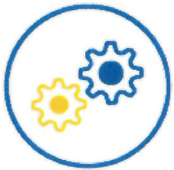
- Dark and Lit Fiber
- Private Line
- Optical Ethernet
- Internet Access
- Data Center Services
- Custom Solutions



Company Overview

Private, Secure, Fiber-Based Dedicated Networks

UPN dedicated fiber networks are custom designed for your organization's needs only. With more than 20 years of experience, successful dedicated network solutions are nothing new to us.



Custom Built to Accomodate Your Needs

Your organization's network needs are diverse and unique. UPN custom fiber networks are designed to meet all your needs and built to scale to meet your ever-changing demands.

Longevity in Fiber Networks Is Our Strength

We've spent nearly 25 years creating a network of more than 7,500 on-net buildings spanning over 10,000 fiber route miles. Our many years in business are proof of success in serving our customers.



Low Latency for Critical Operations at the Speed of Light

Our local 100% fiber-optic infrastructure minimizes delays in data transmission so your organization's data can run at the speed of light.



Company Overview

Private, Secure, Fiber-Based Dedicated Networks

UPN dedicated fiber networks are custom designed for your organization's needs only. With more than 20 years of experience, successful dedicated network solutions are nothing new to us.



A Diverse Network is Stronger

You'll never have to worry about the reliability, privacy or security of your internet connection with UPN's inherently diverse network infrastructure.

Fiber-Optic Ring

Self-healing fiber-optic ring infrastructure means additional protection for your connectivity, privacy and security. UPN networks can endure outages without interrupting your service or connection to our core network.



UPN is regulated by Public Service Commissions of each state in which UPN operates and also by the Federal Communication Commission, with periodic reporting requirements and service standards. UPN is a certified E-Rate service provider.



Our Partners

UPN's investors include Cox Communications, Ridgemont Equity Partners and the company's management team. The relationship with Cox and Ridgemont provides UPN with access to capital and an ability to leverage strategic insights and capabilities to accelerate long-term growth.

About Cox Communications

Cox Communications is a broadband communications and entertainment company, providing advanced digital video, Internet, telephone and home security and automation services over its own nationwide IP network. The third-largest U.S. cable company, Cox serves approximately 6 million residences and businesses. Cox Business is a facilities-based provider of voice, video and data solutions for commercial customers, and Cox Media is a full-service provider of national and local cable spot and digital media advertising. Cox is known for its pioneering efforts in broadband, voice and commercial services, industry-leading customer care and its outstanding workplaces. For nine years, Cox has been recognized as the top operator for women by Women in Cable Telecommunications; Cox has ranked among DiversityInc's Top 50 Companies for Diversity 11 times. More information about Cox Communications, a wholly owned subsidiary of Cox Enterprises, is available at www.cox.com.

About Ridgemont Equity Partners:

Ridgemont Equity Partners is a Charlotte-based middle market buyout and growth equity investor. Since 1993, the principals of Ridgemont have invested more than \$3.5 billion in 129 companies. The firm focuses on investments of \$25 million to \$100 million in industries in which it has deep expertise, including basic industries and services, energy, healthcare, and telecommunications/media/technology. For more info, visit www.ridgemontep.com.



Service Areas



Vendor Diversity Program

Diversity in our supply base is integral to our continued success and meeting the needs of our diverse customer base requires collaboration with diverse suppliers. A diverse supplier base provides us with a clearer understanding of our customers while providing economic growth in the communities we serve.

We actively seek diverse suppliers through membership in the National Minority Supplier Development Council and its affiliates to achieve diversity in our business partnerships by developing a supplier base that reflects the makeup of all Unite Private Networks customers and potential customers. We utilize ConnXus, a cloud-based subscription database, to analyze our existing vendors to ensure their participation is recognized as diversity spend.

We track the success of our supplier diversity program by measuring diversity as a percentage of how much we spend with suppliers, the number of diverse suppliers we work with and the savings that result from doing business with diverse suppliers.

We maintain affiliate membership in several organizations including: Women's Business Enterprise National Council, National Minority Supplier Development Council, National Gay & Lesbian Chamber of Commerce, and the Minority Supplier Development Council.



Solutions Overview

Unite Private Networks offers a full suite of solutions designed specifically to provide you with critical fiber infrastructure options that you control. The common elements of these solutions are reliability and cost-effectiveness.



Dark Fiber

The freedom to manage your own robust, dedicated private fiber-optic network with unlimited possibilities. We'll engineer, install, and maintain the fiber infrastructure while you turn up the network and enjoy all the bandwidth your organization requires. You can fix and control costs while easily managing and upgrading the network to meet your needs.

Features:

- Ultra-scalable
- Virtually unlimited bandwidth
- Industry-leading fiber supporting all optical levels
- Single entrance, dual entrance, or hub designs available
- Next-generation fiber infrastructure



Lit Fiber

Connecting your network together with 100% fiber-optic infrastructure and dedicated high-speed ports. Our flexible premise and access options ensure that you have redundancy, diversity, and the ability to interoperate with other services seamlessly. Delivered as point-to-point (EPL), point-to-multi-point (EHUB), or multi-point-to-multi-point (ELAN).

Features:

- 100% fiber delivered into your premise
- Industry-leading, carrier-grade equipment
- Premise redundancy and hand-off options
- Robust network protection with enhanced core and diversity
- Ultra-secure virtual private networks and a highly scalable platform



Internet

Scalable, secure, and delivered over our carrier-grade fiber-optic network with speeds up to 100 gigabits. With a dedicated high-speed Internet connection, your business can experience unsurpassed performance and reliability of SLA-backed service for your mission-critical applications and Internet needs. Delivered as EIA to your premise or DIA to your data center.

Features:

- 100% fiber-optic transport
- Access ring protection and route diversity options
- Multiple Tier 1 ISP upstream connections
- Scalable connections ranging from 100 Mbps-100 Gbps
- Single-homed, dual-homed, and multi-homed connections



Wavelengths

A high-speed, private network with dedicated transport and superior latency for net-generation applications. Our wavelength service provides 10 Gbps to 100 Gbps circuit speeds that are cost-effective, flexible, and unprotected or protected. With optional hand-offs and diversity options. UPN waves meet all of your high-speed bandwidth needs.

Features:

- LAN PHY, WAN PHY, and OTU-x options are available
- Scalable DWDM backbone to 4 terabyte
- Low-latency
- Fully Managed service



Cloud Connect

UPN Cloud Connect is making the cloud easy and safe again by providing a better way for networks and the cloud to interconnect. By using a direct Ethernet connection, your business will have high-speed, private connectivity to manage your critical applications.

Features:

- Multi-cloud-hyper-connectivity
- Ultra-scalable bandwidth
- Carrier grade switching equipment
- Nearly instant access to cloud, carrier, and content services across multiple platforms



FiberVoice

A complete suite of voice solutions to meet your ever-growing needs.

- >> Traditional Voice, including analog lines, PRI/TDM, toll free long distance and domestic and international long distance.
- >> VoIP services including SIP trunks and a feature rich hosted voice solution that delivers business-grade voice services.

Features:

Traditional Voice

- **Analog Service** - Traditional single and multi-line analog voice services with service delivered through UPN's fiber-optic network.
- **PRI/TDM** - TDM interface options for your on-premise telephone platform. Partial, full, and multiple-span PRI trunks provide digital interfaces for platforms of all sizes.
- **Toll-Free Long Distance** - Domestic & international long distance

VOIP

- **SIP Trunks** - Support modern IP-PBX or Unified Communications Platforms with highly-scalable and flexible SIP trunk services.
- **Hosted Voice** - An advanced, cloud-based, hosted telephone system delivering business-grade voice service and optimal features. Your connection via our 100% fiber-optic infrastructure, allows interconnection that unites your entire business with a single communications platform, so you can stay connected to your office no matter where you go.



Project Management

UPN has extensive resources to ensure the successful implementation of your wide area network. With a dedicated Project Manager working with an experienced team, your project will be managed for a thorough and timely completion. Once the contract is awarded, UPN will assign a Project Manager (PM) to oversee the implementation of the project. The PM has the following responsibilities:

- ✓ Act as a main point of contact for UPN and customer project teams
- ✓ Identify both UPN and customer members of the project team, including roles and responsibilities
- ✓ Coordinate the development of the implementation plan
- ✓ Hold planning sessions
- ✓ Confirm the scope of work
- ✓ Guide the execution of the project plan to ensure all tasks are completed in a timely manner
- ✓ Provide regular communication on project status via agreed upon methods
- ✓ Obtain proactive escalation of issues that impact service delivery
- ✓ Conduct project closing reviews



Phase 1: Planning

Early identification of the team members is critical to the successful implementation of the project. The UPN PM will lead and coordinate the internal project team that will be responsible for the project implementation. This UPN project team will include members from Sales, Sales Engineering, Customer Operations, Network Planning, Network Engineering, and Billing.

Prior to contract, your scope of work was clearly discussed and documented. Now in the planning phase, documented requirements, including services and equipment, are reviewed; In addition, significant milestones are identified; a detailed timeline is prepared; and a tracking spreadsheet of all locations is developed to monitor progress. Upon completion of the timeline, the UPN PM will arrange a kick-off meeting to begin the project implementation.

The UPN Project Manager will obtain the list of the customer team members, add the UPN team members, and create a complete project team list. Roles and responsibilities will be identified and the list will be distributed to the entire team. Project team members may include employees as well as sources contracted to assist with the implementation.



Project Management



Phase 2: Implementation

The UPN team will work closely with your project team to implement the services and successfully complete the project. In this phase, the PM will host the project kick-off meeting. An agenda will be prepared and distributed prior to the meeting. Members of the project teams will be invited to join a call to discuss the project. During the call, the services and the type of equipment UPN is providing will be confirmed and/or clarified. Activation request dates will be confirmed. We will also review the milestones. Additional information that is required, such as access to facilities and specific internal demarcation locations will be discussed. The customer communication plan will be established, including the frequency of updates, and the method of communication.

Throughout the project, the implementation plan will be monitored for plan compliance. The PM will schedule regular updates to discuss project status, exceptions, issues, and progress. Progress will be monitored against the established milestones using a project tracking spreadsheet. Identification of exceptions will be escalated as required and corrective action implemented. Early action will help the team ensure timely completion.

The UPN outside plant team will work with the appropriate member of your project team during the construction process to coordinate site visits and discuss the specifics of building entry work and demarcation points. Engineered building entry documentation will be provided to the customer for approval prior to construction beginning.

The PM will confirm the timing for final installation of the services. The Network Engineering team will work directly with the customer to discuss any special instruction and arrangements with regard to access to the facilities. Installation of equipment will be coordinated with the customer. The Network Engineering team will test and confirm the quality of the network.



Project Management



Phase 3: Follow-Up

Upon the successful testing and confirmation of your network, UPN will send a service commencement letter stating the contract number and the date service started. Instructions on repair reporting through UPN's Network Operations Center (NOC), along with an escalation list, will be provided as well. Billing will commence as stated in the contract. A billing letter will be sent for the customer to select one of two billing methods, billing at a discounted monthly rate or full billing, assuming the customer will file a BEAR form. Once the Agency receives its FCDL letter and files the Form 486, UPN can then bill the discounted amount if the Agency selects that option.

Following completion of the project, UPN will deliver documentation as described in the As-Built Documentation section. The PM will have a follow-up call with the customer to ensure all services have been completed successfully. Any open issues will be discussed and logged for review. There will be a post-implementation review of the project action item. At this stage UPN will assign a dedicated customer relationship manager to the customer to provide support during the contract term.

UPN has proven track record in the implementation of large Wide Area Networks. The UPN project team will work to ensure the project scope is clear and comprehensive at the project start, that the project plan is defined and communicated to all team members, and that the implementation is completed efficiently with minimal disruption. We look forward to working with you on your project.



Network Operations Center

UPN Network Operations Center Customer Benefits:



24x7x365 Comprehensive Support

- Constant, high-priority, mission-critical assistance
- Proactive monitoring of all network devices and LIT customer circuits through NMS alerts



Proactive, Timely, and Meaningful Customer Updates

- Relevant details are provided on an hourly basis until resolution is confirmed by customer



Immediate Trouble Shooting Engagement

- After identifying a potential concern, a NOC technician will begin isolating the issue in real-time
- Immediate access to live technicians without dial menus or auto-attendeess



Client Portal to Review Past Trouble and Maintenance Ticket History

- User-friendly access to a variety of customer online account information



Prompt Technician Dispatch

- When applicable, field engineer or OSP teams are deployed for hands-on assessment



E-Rate Overview

What is E-Rate?

E-rate is the commonly used name for the Schools and Libraries Program of the Universal Service Fund, which is administered by the Universal Service Administrative Company (USAC) under the direction of the Federal Communications Commission (FCC). The program provides discounts to schools and libraries so they can obtain affordable telecommunications services.

Who qualifies for E-Rate?

Schools, libraries, and consortia.

E-Rate Process

Step 1



Applicant files a Form 470 and/or issues an RFP (Request For Proposal)

Form 470 must describe the requested products and services with sufficient specificity to enable interested service providers parties (such as UPN) to submit quality responses.

All potential bidders must have access to the Form 470, the RFP, and any other related supplemental documents for a minimum of 28 days.

Any time after day 28, applicants must evaluate bids using pricing as the most heavily weighted evaluation factor.

Step 2



After selecting a provider and receiving necessary internal approvals, Applicant either: 1) enters into a contract with the winning bidder; or 2) agrees to purchase on a month-to-month or tariff basis.

Applicant files the Form 471 prior to the deadline established by USAC.

USAC reviews and approves Form 471 and issues FCDL (Funding Commitment Decision Letter)

Step 3

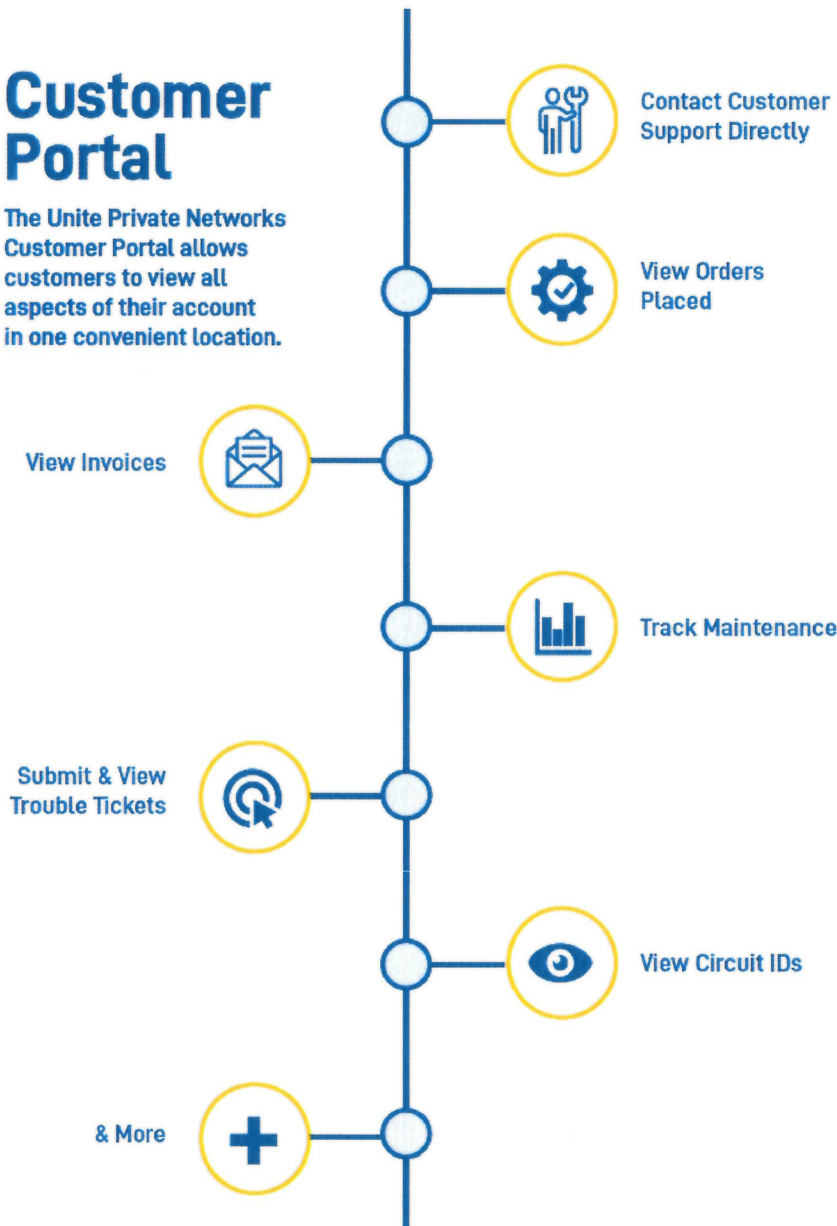


Selected Service Provider delivers requested product or service on or after July 1st of the following year.



Customer Portal

The Unite Private Networks Customer Portal allows customers to view all aspects of their account in one convenient location.





State of Nebraska

REQUEST FOR PROPOSAL FOR CONTRACTUAL SERVICES

SOLICITATION NUMBER	RELEASE DATE
RFP 6616 Z1	December 21, 2021
PROPOSAL OPENING DATE AND TIME	PROCUREMENT CONTACT
January 21, 2022 2:00 p.m. Central Time	Dianna Gilliland

PLEASE READ CAREFULLY!

SCOPE OF SERVICE

The State of Nebraska (State), Department of Administrative Services (DAS), Materiel Division, State Purchasing Bureau (SPB), is issuing this Request for Proposal (RFP) Number 6616 Z1 for the purpose of selecting a qualified Bidder(s) to provide high speed transport services to participants of Network Nebraska. A more detailed description can be found in Section II. The resulting contract(s) may not be exclusive contract(s) as the State reserves the right to contract for the same or similar services from other sources now or in the future.

The term of the contract will commence upon execution of the contract by the State through June 30, 2026. The Contract includes the option to renew for four (4) additional one (1) year periods upon mutual agreement of the Parties. The State reserves the right to extend the period of this contract beyond the termination date when mutually agreeable to the Parties.

ALL INFORMATION PERTINENT TO THIS REQUEST FOR PROPOSAL CAN BE FOUND ON THE INTERNET AT:

<http://das.nebraska.gov/materiel/purchasing.html>.

IMPORTANT NOTICE: Pursuant to Neb. Rev. Stat. § 84-602.04, State contracts in effect as of January 1, 2014, and contracts entered into thereafter, must be posted to a public website. The resulting contract, the solicitation, and the successful contractor's proposal or response will be posted to a public website managed by DAS, which can be found at <http://statecontracts.nebraska.gov>.

In addition, and in furtherance of the State's public records Statute (Neb. Rev. Stat. § 84-712 et seq.), all proposals or responses received regarding this solicitation will be posted to the State Purchasing Bureau public website.

The Master Agreement Revision #3 Terms and Conditions for High-Speed Transport Services for Network Nebraska RFPs 2020-2023, apply to this RFP.

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GLOSSARY OF TERMS

For this section refer to the Master Agreement Revision #3 Glossary of Terms.



SPECIAL TERMS

UNI: A connection between a carrier and Network Nebraska, used to deliver one circuit/VLAN/service.

NNI: A connection between a carrier and Network Nebraska, used to deliver multiple circuits or services, with each on their own VLAN.

EPL: A point to point circuit topology, may or may not use a VLAN.

EVPL: A hub and spoke circuit topology, each circuit delivered with a VLAN tag to one NNI.

ELAN: A full mesh circuit topology, one VLAN or service label is used for all circuits in the carrier's network.

PROCUREMENT PROCEDURE

GENERAL INFORMATION

The Request for Proposal (RFP) is designed to solicit proposals from qualified bidders who will be responsible for providing high speed transport services for participants of Network Nebraska at a

Top-of-the-Line Private Fiber Networks Since 1998



competitive and reasonable cost. Procurement procedures, terms and conditions, contractor duties and payment terms may be found in the Revised Master Agreement Revision #3.

Proposals shall conform to all instructions, conditions, and requirements included in the RFP. Prospective bidders are expected to carefully examine all documents, schedules, and requirements in the RFP, and respond to each requirement in the format prescribed. Proposals may be found non-responsive if they do not conform to the RFP or the bidder hasn't agreed to all the terms and conditions specified in the Revised Master Agreement Revision #3.

The Master Agreement Revision #3 Terms and Conditions for High-Speed Transport Services for Network Nebraska RFPs 2020-2023 apply to this RFP.

PROCURING OFFICE AND COMMUNICATION WITH STATE STAFF AND EVALUATORS

Procurement responsibilities related to this solicitation reside with State Purchasing Bureau. The point of contact (POC) for the procurement is as follows:

RFP Number: 6616 Z1
 Name: Dianna Gilliland, Procurement Contracts
 Officer/Agency: State Purchasing Bureau
 Address: 1526 K Street, Suite 130
 Lincoln, NE 68508
 Telephone: 402-471-4193
 State Purchasing - 402-471-6500
 E-Mail: dianna.gilliland@nebraska.gov
 State Purchasing as.materielpurchasing@nebraska.gov

From the RFP release date until the Intent to Award is issued, communication is limited to the POC listed above. The recipient of the Intent to Award may communicate with individuals the State has designated as responsible for negotiating the contract on behalf of the State. No member of the State Government, employee of the State, or member of the Evaluation Committee is empowered to make binding statements regarding this Request for Proposal. The POC will issue any answers, clarifications or amendments regarding this solicitation in writing. Only the SPB or awarding agency can award a contract. No communication or attempt to communicate with or influence any evaluator involved in this RFP is allowed.

The following exceptions to these restrictions are permitted:

1. Contact made pursuant to pre-existing contracts or obligations,
2. Contact required by the schedule of events or an event scheduled later by the Request for Proposal POC, and
3. Contact required for negotiation and execution of the final contract.

The State reserves the right to reject a contractor's proposal, withdraw an Intent to Award, or terminate a contract if the State determines there has been a violation of these procurement procedures.

SCHEDULE OF EVENTS

The State expects to adhere to the procurement schedule shown below, but all dates are approximate and subject to change.

ACTIVITY	DATE/TIME
1. Release Request for Proposal	December 21, 2021
2. Last day to submit written questions – Questions must be submitted via ShareFile ShareFile link: https://nebraska.sharefile.com/r-reda9d356829048e0bdf7ec4ed0edea6	January 5, 2022



3.	State responds to written questions through RFP "Addendum" and/or "Amendment" to be posted to: https://das.nebraska.gov/materiel/bidopps.html	January 12, 2022
4.	<p>Electronic Proposal Opening</p> <p>Upload electronic submission via ShareFile, per emailed instructions received after signing Master Agreement Revision #3 Acceptance Page</p> <p>IT IS THE BIDDER'S RESPONSIBILITY TO UPLOAD ELECTRONIC FILES WITH ENOUGH AMOUNT OF TIME IN CASE OF USER ISSUE OR SOFTWARE ISSUE.</p> <p>Join Zoom Meeting https://us02web.zoom.us/j/86786179559?pwd=c0tqRloxSiZacW9kN282RGFybXkxWdz09</p> <p>Meeting ID: 867 8617 9559 Passcode: 504140One tap mobile +13462487799,,86786179559#,,,,*504140# US (Houston) +16699006833,,86786179559#,,,,*504140# US (San Jose)</p> <p>Dial by your location +1 346 248 7799 US (Houston) +1 669 900 6833 US (San Jose) +1 253 215 8782 US (Tacoma) +1 312 626 6799 US (Chicago) +1 929 205 6099 US (New York) +1 301 715 8592 US (Washington DC) Meeting ID: 867 8617 9559 Passcode: 504140 Find your local number: https://us02web.zoom.us/j/kndBZAGTz</p>	<p>January 21, 2022</p> <p>2:00 PM Central Time</p>
5.	Review for conformance to RFP requirements	January 21 -26, 2022
6.	Evaluation period	January 27-February 4, 2022
7.	Post "Notification of Intent to Award" to: https://das.nebraska.gov/materiel/bidopps.html	February 10, 2022
8.	Contract finalization period	February 10-25, 2022
9.	Contract award	February 28, 2022
10.	Contractor(s) start date	March 1, 2022

WRITTEN QUESTIONS AND ANSWERS

Questions regarding the meaning or interpretation of any Request for Proposal provision must be submitted in writing to State Purchasing Bureau and clearly marked "RFP Number 6616 Z1, High Speed Transport Services for Participants of Network Nebraska Questions". The POC is not obligated to respond to questions that are received late per the Schedule of Events.

Vendors should present, as questions, any assumptions upon which the bidder's proposal is or might be developed. Any proposal containing assumptions may be deemed non-responsive. Non-responsive proposal may be rejected. The contract will not incorporate any known or unknown assumptions of a bidder.

Questions should be uploaded using the following ShareFile link:

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<https://nebraska.sharefile.com/-reda9d356829048e0bddf7ec4ed0edeab6>

It is recommended that Bidder's submit questions using the following format.

Solicitation Section Reference	Solicitation Page Number	Question

Written answers will be posted at <https://das.nebraska.gov/materiel/bidopps.html> per the Schedule of Events.

SUBMISSION OF PROPOSALS

Bidders should submit electronic proposal which should include the completed Form A, "Contractor Proposal Point of Contact". Proposal file names should use the file name template recommended in the Master Agreement Revision #3. It is the bidder's responsibility to ensure to complete and submit the Master Agreement Revision #3 Acceptance Page with enough time for the State to provide instructions on how to electronically submit the related RFP proposal before or by the date and time indicated in the RFP Schedule of Events. Electronic proposals must be received by the State Purchasing Bureau by the date and time of the proposal opening per the RFP Schedule of Events. No late proposals will be accepted.

The Request for Proposal form may be manually signed in an indelible manner or by using DocuSign and uploaded to the ShareFile folder by the proposal opening date and time along with the bidder's Request for Proposal and any other requirements as stated in the Request for Proposal document.

It is the responsibility of the bidder to check the website for all information relevant to this Request for Proposal to include addenda and/or amendments issued prior to the opening date. Website address is as follows: <https://das.nebraska.gov/materiel/bidopps.html>

Emphasis should be concentrated on conformance to the solicitation instructions, responsiveness to requirements, completeness, and clarity of content. If the bidder's proposal is presented in such a fashion that makes evaluation difficult or overly time consuming the State reserves the right to reject the proposal as non-conforming.

By signing the "Request for Proposal for Contractual Services" form, the bidder guarantees compliance with the provisions stated in this RFP.

The State shall not incur any liability for any costs incurred by bidders in replying to this solicitation, in the demonstrations and/or oral presentations, or in any other activity related to bidding on this RFP.

The Cost Proposal should be presented in a separate Excel formatted file.

PROJECT DESCRIPTION AND SCOPE OF WORK

INTRODUCTION

The Bidder should carefully read, review, and respond with the information requested, section-by-section, in response to this RFP.

The objective of this RFP is to update and expand the statewide network that is currently in place to serve the eligible entities of Network Nebraska as defined by Neb. Rev. Stat. 86-5,100 and 79-1201.01(3). Network Nebraska is defined in Neb. Rev. Stat. 86-5,100 (LB1208, 2006). "Network Nebraska shall consist of contractual agreements with providers to meet the demand of state agencies, local governments, and educational entities. Such network shall provide access to a reliable and affordable infrastructure capable

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of carrying a spectrum of services and applications, including distance education across the state. Participation in Network Nebraska shall not be required for any educational entity. The Chief Information Officer shall aggregate demand for those state agencies and educational entities choosing to participate and shall reduce costs for participants whenever feasible."

Network Nebraska has grown to include 292 separate entities, and serves 99.6% of public-school districts, 100% of Educational Service Units, 100% of public colleges and universities, 54% of private colleges, 20% of private K-12 schools, and several public libraries and municipalities. Network Nebraska is jointly managed by the State of Nebraska Office of the CIO, in partnership with the University of Nebraska.

Network Nebraska is comprised of a seven-segment statewide backbone, six major aggregation points, and over 300 fiber Ethernet circuits, either directly handed off to Network Nebraska equipment at the aggregation points, or sub-aggregated at Educational Service Units. The Office of the CIO, on behalf of Network Nebraska, purchases three sources of commodity internet and two sources of commercial peering. The Network Nebraska participants may purchase their fiber Ethernet circuits either through the state contracts resulting from this and other State RFPs, or by using a local or regional procurement.

The State of Nebraska bids these services on behalf of numerous E-rate eligible education entities and some non-E-rate eligible entities across the State. Each E-rate eligible entity must be allowed a reasonable duration to hold a public meeting of its administrative board to approve its purchase from the resulting state contract(s) and to file its E-rate Form 471 prior to the national 2022 E-rate deadline and each succeeding year to be established by the USAC. Once Intent to Award has been announced by the State, each contractor must work expeditiously toward a signed contract to allow enough time for the local approval process. Failure to reach a signed contract with the State prior to Friday, March 1, 2022, may risk negation of purchases for the July 1, 2022 through June 30, 2023 performance year.

Nebraska Special Construction E-rate Matching Funds. On May 19, 2020 the Nebraska Public Service Commission voted to approve NUSF-117, which instigated changes to the Nebraska Universal Service Fund to provide E-rate eligible schools and libraries with access to \$1 million in funding over four years to assist with the payment of special construction charges for broadband. Applications to apply for these funds from the NUSF are currently

limited to E-rate Funding Years 2021-2024.

On August 14, 2020, the FCC and USAC approved the Nebraska program to be eligible for the increased federal and state matching funds, not to exceed 100% of the fiber construction costs for these E-rate eligible entities. <https://www.usac.org/e-rate/applicant-process/before-you-begin/fiber-summary-overview/additional-discount-to-match-state-tribal-funding-for-special-construction/>

While itemized Special Construction costs may be a new procurement expectation for service providers, it enables the eligible E-rate entities to qualify for an additional discount of up to 20% toward special construction costs and may also permit service providers the anchor tenancy needed to improve telecommunications services to other anchor institutions in rural areas, as well as commercial and residential customers en route to the eligible E-rate applicant.

Bid cost data will be accepted through two different appendices:

1. Appendix A: Ethernet leased lit fiber circuits for E-rate eligible entities and non-E-rate eligible entities connected to Network Nebraska aggregation points.
2. Appendix B: Ethernet fiber circuits for E-rate eligible entities connected to Network Nebraska aggregation points that involve the itemization of Special Construction charges.

E-RATE

The originating FCC Form 470 for this RFP can be found at <https://portal.usac.org/suite> and searching "Records > FCC Forms 470 > Funding Year 2022 > Nebraska > BEN 225870.

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Each Bidder must have a Service Provider's Form 498 I.D. # (formerly SPIN) from the Universal Service Administrative Company (USAC) and be eligible to participate in the Universal Service Fund discount program for telecommunications services provided to the E-rate eligible entities for the life of the contract and all applicable renewals. Bidder agrees to provide any discounts, including any accrued credits, for which the entity is eligible under the Universal Service Fund for school telecommunications services. Bidder will, at its expense, prepare, file, and continually keep current all carrier documents and reports required for the eligible entities to receive the benefit of such discounts and credits. The Bidder's Service Provider's Form 498 I.D. # (formerly SPIN) issued to bidder by the Universal Service Administrative Company should be included in the responding bid.

As required by the Federal Communications Commission (FCC), providers of eligible services must comply with the Lowest Corresponding Price (LCP) rule:


1. **47 CFR § 54.500(f)**
Lowest Corresponding Price (LCP) is the lowest price that a service provider charges to non-residential customers who are similarly situated to a particular school, library, or library consortium for similar services. ("Similarly situated" means the "geographic service area" in which a service provider is seeking to serve customers with any of its E-rate services.)
2. **47 CFR § 54.511(b)**
Providers of eligible services shall not charge schools, school districts, libraries, library consortia, or consortia including any of these entities a price above the lowest corresponding price for supported services, unless the Federal Communications Commission, with respect to interstate services or the state commission with respect to intrastate services, finds that the lowest corresponding price is not compensatory.

The Billed Entity Applicant Reimbursement (BEAR) FCC Form 472 is filed by the applicant and approved by the service provider after the applicant has paid for services in full. The Service Provider Invoice (SPI) FCC Form 474 is filed by the service provider after the applicant has been billed for the non-discount portion of the cost of eligible services. Note: An applicant may choose its method of invoicing; the service provider cannot force applicants to use a particular method.

As required by USAC policy, the contractor must retain documents from the bidding process through ten (10) years past the last date of service. Documents may be retained in electronic format or paper. The document list includes, but is not limited to, copies of bids, signed contracts, proof of service delivery, invoices, documentation of any service down time, and any other document retention required by the FCC. The Bidder shall provide the following information in response to this RFP and must provide prior to contract award.

The successful contractor(s) for Appendix B Special Construction sites must agree to participate in the E-rate applicant's Program Integrity Assurance (PIA) review and response of any Form 471 submission.

Service Provider's Form 498 I.D. # (formerly SPIN): 143029868

Bidder has read and agrees to comply. 



NETWORK TOPOLOGY

Appendix A and Appendix B sites involve Ethernet connectivity from Network Nebraska participant locations to one or more of the listed core aggregation locations (below). An award will be made for each participant location to a single core aggregation location based on lowest cost. If bid pricing is identical to two or more aggregation locations, and is awarded, the specific aggregation location will be decided by the Network Nebraska engineers and communicated to the contractor(s) during the project

implementation phase.

1. Omaha–Peter Kiewit Institute, 1110 S. 67th Street
2. Omaha-1623 Farnam LLC, 1623 Farnam Street
3. Lincoln-Nebraska Hall, 901 N. 17th Street
4. Grand Island-College Park, 3180 W. Hwy 34
5. Kearney-UNMC Health Sciences Education Complex, 2402 University Drive (this co-location site is not accepting additional provider equipment; only replacements for existing equipment will be allowed)
6. Scottsbluff-Panhandle Research Center, 4502 Avenue I

An award will be made for each circuit in Appendix A and B based on lowest overall cost over the 48-month initial contract term.

IMPORTANT NOTES:

1. Most services listed above will be offered to Schools and Libraries and therefore must meet E-rate guidelines for eligible services, products, service providers and contracts.
2. All State agencies, the University of Nebraska, political subdivisions and other "eligible participants" will be allowed to purchase off the resulting contract(s).
3. There is no guarantee that any or all the institutions listed will purchase any or all of the services requested in this RFP.
4. Circuit topology must be stated on all bids on Appendix A and Appendix B.
5. Network Nebraska's preferred circuit topology is an EVPL terminating to an existing, or new, NNI.
6. Circuits delivered via an ELAN will only be considered for existing UNIs.
7. If an existing ELAN circuit is to be upgraded to a speed less than 1Gbps, include non-recurring costs to groom it to an EVPL delivered to a new/existing NNI.
8. If an existing ELAN circuit is to be upgraded to a speed of 1Gbps or greater, the circuit must be groomed to an EVPL delivered to a new/existing NNI. Network Nebraska's six (6) core aggregation points have specific handoff locations:
 - a. Peter Kiewit Institute
University of Nebraska –
Omaha 1110 South 67th
Street, Room 166
Omaha, NE 68182-0694
 - b. 1623 Farnam, LLC.
1623 Farnam Street, Suite
300A Omaha, NE 68102
 - c. University of Nebraska Data Center
Nebraska Hall Room 230
901 North 17th Street
Lincoln, NE 68588-
0521
 - d. College Park
3180 W Hwy 34. Room 208.5
Grand Island, NE 68801-7279



- e. UNMC Health Sciences Education Complex
2402 University Drive, Room 113
Kearney, NE 68845
(this co-location site is not accepting additional provider equipment at this time; only replacements for existing equipment will be allowed)

- f. Panhandle Research and Extension Center
4502 Avenue I, Electrical/IT Closet
Scottsbluff, NE 69361-4939

Bidder has read and agrees to comply. *je*

PROJECT OVERVIEW

The objective of this RFP is to identify Contractor(s) who will design, develop, and implement high-speed data connectivity that will meet the current and future telecommunications needs of eligible participants over the term of the contract. Each Bidder will provide cost-effective, scalable and flexible high-speed data transport services that can connect eligible entities listed in Appendix A and B to Network Nebraska. The Bidder may bid on one, some or all of the eligible entities listed in Appendix A and B.

Each site/service will be reviewed individually. When bidding Appendix A and B locations, the Bidder must bid all costs to provide connectivity from the entity listed to at least one of the Network Nebraska aggregation points listed at the top of the Cost Proposal.

For Appendix A and B, the Bidder will include transport from the identified location with connectivity through the carriers' cloud and ending at one of the identified aggregation locations. Connectivity back to the aggregation location must have the capacity to support all eligible entities bid transmitting at full capacity at any given time; oversubscription is not permitted. A ten (10) Gigabit Ethernet interface physical hand-off is required as a minimum for the connection at the identified aggregation locations. The cost for connectivity back to the Network Nebraska core aggregation rack MUST be figured into the MRC (monthly recurring charge) for the individual sites being bid. The State of Nebraska will not accept separate costs for the aggregation ports that connect all of the eligible entities to Network Nebraska. All co-location data center cross-connect, and fiber path costs needed to provide the physical interface hand-over to Network Nebraska equipment will be the responsibility of the Bidder. A co-location space will be provided at each of the aggregation locations for the Contractor.

For Appendix B, the Bidder will itemize costs for E-rate **Special Construction**, as identified by the FCC. Special Construction charges that are eligible for E-rate Category 1 support includes: A) Construction of network facilities; B) design and engineering, and C) project management. The term "special construction" does not include network equipment necessary to light the fiber or the services necessary to maintain the fiber. Charges for network equipment and fiber maintenance are eligible for Category 1 as separate non-recurring services, but not as special construction.

Eligible entities may include colleges, universities, state government, political subdivisions and K-12 institutions. The network design must accommodate the full implementation of Network Nebraska connections including a statewide, multi-purpose backbone.

All proposals must meet the technical requirements as stated in the RFP. The State requires the Bidder to bid a multi-purpose transport connection to interconnect the listed institutions along with the corresponding services that considers present, as well as future, state-of-the-art technologies.

Bidder has read and agrees to comply. *je*



PROJECT ENVIRONMENT

The current project environment consists of a multi-provider, layer-2 high-speed Ethernet network of over 300 fiber circuits. Multiple provider clouds connect to the various eligible entities. Providers hand off eligible entities to Network Nebraska at one of the identified core aggregation points and the Network Nebraska MPLS backbone interconnects the core aggregation points and provides transport to at least two Internet egress points.

At each service site location, the demarcation point to the customer premise equipment will provide at least 1 (one) 20-amp outlet and sufficient rack or wall space to mount the contractor's termination equipment. Prospective bidders may request an appointment with the site contact listed in Appendices A and B to inspect the customer premise location in order to make a more informed bid.

Bidder has read and agrees to comply. *J*

PROJECT REQUIREMENTS

For the E-rate eligible entities that request services from the state contracts must be converted by July 1, 2022, or if ordered in Year 2 or 3, by July 1 for each succeeding year. The circuits must be installed and tested no later than the first Friday in August 2022 and each succeeding year, however neither the State nor the participating eligible entities can incur charges on these circuits until after July 1 of the implementation year due to E-rate. The cutover to the customer must be complete by the first Friday in August 2022 and each succeeding year or incur liquidated damages (see Section II.O. Contract Performance). Existing services must remain active until the final cutover (see Section II, G. Transition Requirement). The contractor(s) will provide a cost-effective, scalable, and flexible transport service that will be able to meet the demands of the network participants. Bidders shall identify services that are a normal part of their offering without additional fees.

The State of Nebraska reserves the right to reject proposals that attempt to substitute the contractor's commercial contracts and/or SLA documents for the State's Master Agreement, or legal and/or technical terms of this RFP.

The contractors may submit with their technical proposal any E-rate, tax exemption, USF affidavit, user agreement, service level agreement, or similar documents that the contractor wants incorporated into the Contract. The State will not consider incorporation of any document not submitted with the contractor's proposal as the document will not have been included in the evaluation process. These documents shall be subject to review and/or negotiation and will be incorporated as addendums if agreed to by the Parties.

If a conflict or ambiguity arises after the Addendum to Contract Award has been negotiated and agreed to, the Addendum to Contract Award shall be interpreted as follows:

1. If only one Party has a particular clause then that clause shall control,
2. If both Parties have a similar clause, but the clauses do not conflict, the clauses shall be read together,
3. If both Parties have a similar clause, but the clauses conflict, the State's clause shall control.

Bidder has read and agrees to comply. *J*



TRANSITION REQUIREMENT

Upon award of replacement contract(s) to a new contractor in 2026, the awarded Contractor under this RFP shall, upon request, or until a Notice of Termination is submitted, continue providing any part or all of the services in accordance with the terms and conditions, requirements and specifications of the contract for a period not to exceed ninety (90) calendar days after the expiration or termination of the contract for a price not to exceed those prices set forth in the contract. The service will become month-to-month, if requested by the customer.

Bidder has read and agrees to comply. *JE*

SCOPE OF WORK

The Contractor shall design, develop and implement a high-speed, IP-based, layer-2, Ethernet, wide area network to interconnect eligible entities as requested. The network interface to the customer's Customer Premise Equipment (CPE) must physically be Ethernet with the capability to provide multiple virtual Ethernet interfaces via 802.1Q Virtual Local Area Network (VLAN) tagging.

The network connections must be bid according to the bandwidth ranges and to the acceptable aggregation sites as stipulated in Appendices A and B. Any circuit conversions will be performed between April 1 and July 1, 2022 and must be as transparent as possible. All of the network connections must be operational by the first Friday in August 2022 and each succeeding year.

For Appendix A and B, each connection that is bid must be connected from the customer site demarcation to the aggregation site demarcation. The core aggregation handoff MUST have the capacity to support all eligible entities' connectivity to the core site transmitting at full purchased capacity over a single 10 Gigabit Ethernet interface. Multiple interfaces are allowed only as a redundant path for the primary connectivity. The new connectivity capacity can be aggregated at an existing "core" site interface as long as the overall capacity of the core interface is not exceeded due to the introduction of the additional remote site capacity. The State will not allow a separate cost for this "aggregation connection", that cost must be included as part of the individual site or sites being bid.

Appendices A and B may include core aggregation point choices that are "grayed out". The State will only accept bids for the bandwidths cited between the locations and the core aggregation sites that are not "grayed out". The Bidder can choose to give a price to bring the eligible entity back to any one or more of the eligible core destination locations except locations that are "grayed out" within the Appendix.

For locations where multiple speeds have been requested, the State will add the costs of all bandwidths bid to arrive at a total overall site cost that will be the basis for a lowest cost award.

All bids for a single service location to multiple aggregation points will be compared against each other. Each service location will only have one award and the State will award the lowest cost bid from that service location to one of the identified locations that meets the technical requirements as stated in the RFP. If a bidder bids identical pricing for a particular site to two or more core aggregation locations, and is awarded the site, the Network Nebraska engineers will select one of the core locations for the circuit.

The support of end-to-end customer VLANs (C-VLANs) is REQUIRED. Support can be provided either by using the IEEE 802.1ad provider bridging standard (also referred to as QinQ tunneling), or by directly bridging the customer VLANs from end-to-end, without C-VLAN modification and without provider interaction. For example, as a customer VLAN tagged packet travels from a customer to the service provider, a customer-specific 802.1Q tag is added by the provider to each packet. This additional tag is used to segregate traffic into service-provider-defined service VLANs (S-VLANs). The original customer 802.1Q tag of the packet remains and is transmitted transparently, passing through the service provider's network. The Service Provider VLAN (S-VLAN) tag is added on egress for incoming packets, optionally

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including untagged packets. As the packet leaves the S-VLAN in the downstream direction, the service provider 802.1Q tag is removed, leaving the original customer tag on the packet.

Eligible entities that participate and order the contracted circuits will purchase their own network equipment. The Contractor will need to work closely with these eligible entities (e.g. school districts, educational service units, libraries; etc.) to ensure that the appropriate network equipment is coordinated and ready for installation at the time the network conversion takes place.

To the extent possible, a contact person and contact information has been provided for each fiber site location. Prospective bidders may arrange mutually convenient appointments for site inspections or technical walk-throughs in order to prepare a more informed bid.

Bidder has read and agrees to comply. *JE*

I. TECHNOLOGY REFRESH

The State and the Contractor will work in partnership to ensure the services provided under this contract will be continuously refreshed as technologies evolve and user needs grow. The OCIO staff, in conjunction with, or on behalf of, all other participants, will assume the primary role in seeking and proposing network enhancements that comply with FCC and E-rate rules and policies. This technology refreshment clause will be a required condition of the contract.

The State and the Contractor may conduct an annual review of the contract to review service offerings and pricing. These reviews may result in upgrading the services provided by the Contractor to include new pricing elements or pricing modifications associated with improved economies of scale and/or technological innovations. Changes in the industry related to regulation and/or pricing mechanisms may also result in modification of rates identified in the services offered by the Contractor. These reviews will commence at the request of the State.

Bidder has read and agrees to comply. *JE*

TECHNICAL REQUIREMENTS

The bidder must provide a network design in which:

1. Layer 2 (802.1q/802.1p) VLAN and QoS tags must be allowed through the provided network connection and must remain unchanged by the provider.
2. Ethernet frames containing a 1500-byte payload (for a total minimum supported Ethernet frame size of 1542 bytes), must be allowed and flow as a single complete frame without any fragmentation by the provider's equipment. Reference: http://en.wikipedia.org/wiki/Ethernet_frame.
3. Layer 2 performance must be adequate to support jitter and latency sensitive applications (i.e., video over IP).
4. The network interface to the customer's CPE must be an Ethernet-based handover connection. The connection must support either 802.1q tagged frames or must support 802.1ad provider bridging.; The provider must either tunnel the customer VLAN tags through the provider network or must leave the customer VLAN tags unchanged from end-to-end.
5. Allow participating institutions to manage their own IP address space and routing.
6. Performance metrics on contracted circuits must be provided to Network Nebraska staff within 24 hours of request.
7. Network Nebraska must be notified within 24 hours of performing QoS changes, network monitoring changes or any other network changes that may have a positive or negative effect on performance as outlined in the RFP.

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8. The provided connection must be tested to prove performance before it will be considered complete and usable. Testing according to ITU-T Y.1564sam or RFC-2544 for performance, frame-loss and latency is preferred but detailed performance, frame-loss, latency and QOS test disclosure is also acceptable.
9. Testing must validate the minimum frame size specified is supported.
10. Every connection's receive AND transmit capacity must meet or exceed the bandwidth amount that is bid. Testing must validate that capacity meets the amount purchased before the connection will be considered complete and usable. If proof of end-to-end circuit capacity and testing is not provided, circuit acceptance will be delayed until networking personnel can verify that the circuit meets requirements.
11. To the extent possible, existing aggregate interfaces should be prioritized and used before laterally scaling equipment.
12. Network Nebraska engineers can request a circuit reprovision to fix issues without the need to renegotiate/renew the contract.
13. Any carrier provided equipment placed at the customer premise must be connected to a, carrier provided, networked UPS. The UPS must be able to successfully power carrier provided equipment, detect when commercial power has failed, and report that back to the carrier. The carrier must be able to view this information and provide it when a trouble ticket is opened.

Bidder has read and agrees to comply.

PROJECT PLANNING AND MANAGEMENT

The State of Nebraska acknowledges that project management and implementation procedures will require alignment and adjustment of work processes for the Contractor's organizations, the eligible entities, and the State. The alignment will be part of the contract finalization; however the Bidder will respond to this RFP assuming the following responsibilities.

1. STATE OF NEBRASKA AND NETWORK NEBRASKA ENTITY MANAGEMENT STAFF

The State of Nebraska and educational entity management staff will:

- a. Provide overall project direction and management.
- b. Review and approve all project plans and deliverables.
- c. Ensure that technical assistance and support are provided during the Contractor's implementation phases and ongoing upgrade design of this project.
- d. Establish project management guidelines by meeting with the Contractor's project management team as needed.
- e. Review and approve all project specific documentation standards and requirements for the various types of reports, technical/procedural documentation, and management materials that will be produced during the project.
- f. Coordinate other resources as needed to support the implementation process.
- g. Provide on-site assistance, as needed during the implementation phases of the project.
- h. Assist the Contractor in identifying eligible participants in the network as well as establishing guidelines with the Contractor for ordering, moving, adding or changing services.
- i. Provide adequate and reasonable space for contractor equipment, including at least one single source, unprotected electrical outlet.

2. CONTRACTOR

The Contractor will:

- a. Coordinate and administer the requirements of the network service(s) that are proposed.
- b. Maintain toll free lines for voice and facsimile from the State to operational facilities for order entry and after hours help desk. Installation and maintenance may be subcontracted to one or more third parties to adequately cover the locations of the core transport backbone sites and to provide for rapid response in the event of a service disruption. The Contractor will provide information regarding intent to maintain its facilities after project implementation has been completed.
- c. Maintain toll free voice lines for after-hours helpdesk support for the duration of the contract. This point of contact will serve as the single point of contact for all services and equipment provided by



- d. Provide upon request, technical information, graphs, charts, maps, photographs, block diagrams, operating manuals, and other information that will clearly show that the services offered are in full compliance with the minimum requirements of this RFP. In the event that the documentation
- e. furnished is at variance with the requirements of this RFP, the Contractor will explain in detail, with full engineering support data, the reasons why the proposed services meet the RFP requirements and should not be considered an exception.
- f. Provide upon request, detailed network diagrams and drawings that clearly illustrate the network configuration and the functional relationships, as they are associated with the proposed services. These network diagrams will be available to the State electronically in a format agreed upon by the Contractor and the State to allow for import into various computer programs.
- g. Provide upon request, basic technical specifications for each item of equipment included in the proposal. The information to be provided will be in the form of published specification sheets or other illustrative literature.
- h. Provide escalation lists and complete contact information.
- i. Communicate with the onsite technology contact prior to any required construction to confirm and document the exact demarcation location and minimum point of entry for each site address.

If the Contractor is working with other "last mile" telecommunication providers to create an end-to-end solution, the Contractor should provide the State with technical contacts for the "last mile" provider.

If the Bidder intends to sub-contract any part of its performance hereunder, the Bidder must provide:

1. Name, address, and telephone number of the subcontractor(s);
2. Specific tasks for each subcontractor(s);
3. Percentage of performance hours intended for each subcontract; and
4. Total percentage of subcontractor(s) performance hours.

Bidder has read and agrees to comply. *JF*

SERVICE LEVEL GUARANTEES

This network must support production applications that require a high degree of reliability and must operate with little or no service disruptions for twenty-four (24) hours a day, seven (7) days a week. Contractor(s) must provide solutions with the necessary redundancy, backup systems, and/or other disaster avoidance and recovery capabilities to support these needs. Contractor(s) must have the necessary staff for the installation and maintenance of their network responsibilities and necessary staff to assist the State in its installation and maintenance of critical network services. Upon request, the contractor will provide an explanation of any redundancy that is available as part of the site/service that will assure the required availability of the services. The following maintenance specifications are required service level guarantees. The Contractor will conform to these service level agreements, which are to include details concerning restoration procedures and goals, escalation procedures, and non-conformance penalties.

The State of Nebraska reserves the right to reject proposals that attempt to substitute the contractor's commercial contracts and/or documents for this RFP or its technical requirements.

Installation Deadline: Failure to meet the deadline dates for the deliverables as agreed upon by the parties may result in an assessment of liquidated damages equal to the difference between newly contracted monthly costs and the cost of the circuit or service being replaced, if incurred, until the deliverables are approved.

Up Time Requirement: The contract expectation is for a service that, at a minimum, will meet or exceed required specifications 99.99% of the month, not to exceed a maximum of 4.32 minutes of unscheduled downtime/service non-compliance per calendar month. Any service not meeting contract specifications which includes violation of QoS parameters will incur a contract performance penalty per the following formula:

For every hour and fraction of an hour of service violation exceeding the identified 99.99% uptime requirement, the customer will be refunded one day of service credit. Repeated violations of service performance agreements during any single calendar day will be considered a continuous event from the

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beginning of the original violation until the last violation. Violations on consecutive days will be considered continuous from the initial violation until the service has been restored. The service will be considered restored when no violation has occurred for 24 continuous hours (the 24-hour validation period is not

considered part of the damages). Damages duration will round up to the next whole hour. Damages per calendar month shall not exceed the total cost of the one-month MRC.

Example: Intermittent connectivity from 9:15am-2:20pm on the same day; Duration of the actual service violation would be 5 hours and 5 minutes, or 5 hours 1 minute over the maximum allowable downtime of 4.32 minutes. Violation assessment is rounded up to the next whole hour, so the duration would be considered as 6 total hours of downtime if no previous downtime had been experienced for the service in the current month, or up to X hours depending on the amount of cumulative violations experienced in the month that exceeds the 99.99% uptime requirement. This would translate to 6 days of per diem charges credited to the account. For continual or accumulated outages totaling 30 hours, 30 days of charges (one-month MRC) would be credited to the account.

Latency Requirement: The contract requirement is for an Ethernet service to have a maximum round-trip latency of 15 milliseconds.

Bidder has read and agrees to comply.

MAINTENANCE SPECIFICATIONS

When planned network maintenance activities are conducted by the Contractor which entails the risk of interrupting or diminishing service to Network Nebraska or its participants, the Network Nebraska Operations Center, noc@nebraska.edu or 1-888-638-6327 must be notified at least three (3) business days in advance of the maintenance planned. Additionally, the contractor must agree to work with the Network Nebraska Participants to find an alternate date and time of maintenance, if the proposed time would be particularly detrimental to Network Nebraska Participant needs. Mutually agreed upon maintenance activities are not considered a service violation and will not incur a service penalty.

The contractor should have in inventory the necessary spare equipment capable of restoring service in the event of contractor equipment failure. Maintenance contracts specifying next-day replacement or longer will not be considered an acceptable substitute for carrying inventory of appropriate replacement equipment.

The Contractor must operate its own Network Operations Center(s) and provide a centralized trouble reporting and maintenance system that is staffed 24 hours a day, seven (7) days a week. The Contractor shall provide sufficient staff for peak and critical hours. The Contractor shall provide Network Nebraska with a local and toll-free number for trouble reporting.

The Contractor must respond to trouble reports within one (1) hour of notification. The Contractor must also provide an escalation procedure and contact list to be used for unresolved issues, including names, titles and phone numbers of contact persons in the escalation chain. Major service-affecting problems that are not resolved within two (2) hours of time after the notification of trouble shall constitute a prolonged outage and must be escalated.

Access to performance service metrics is required, with a preference toward live metrics.

Bidder has read and agrees to comply.



IMPLEMENTATION PLAN

The Bidder may submit with its proposal response, but must provide by April 1, 2022, an implementation plan for the deployment of the services, that reflect the services to be included in the associated contract. The plan must clearly represent the constraints of time, scope and cost. At a minimum the implementation plan must include the work breakdown structure (WBS), schedule, milestones, deliverables, risk assessment, mitigation strategies, resource planning and communication plans.

The Contractor will adhere to the implementation plan for deployment of services submitted as a requirement of this RFP. The Contractor will agree to participate in pre-scheduled project management conference calls as arranged by the Office of the CIO Project Management Office.

Bidder has read and agrees to comply. *je*

CONTRACT PERFORMANCE

If the Contractor fails to perform an obligation under the contract, the State may declare the contractor in breach and provide a right to cure. Payment will not be made for goods not delivered or services not performed, without penalty until such deficiency is cured or otherwise adjudicated.

Bidder has read and agrees to comply. *je*

DEPLOYMENT STATUS REPORTS

The Contractor's designated project manager will provide weekly reports of the status of any deployment schedules to the State's designated project manager. Deployment status reports will provide weekly information related to the adherence to the deployment schedule identified in Section II.E. Project Requirements, including identification of issues affecting the deployment schedule, and recommended resolution(s) to any identified barriers to network deployment.

Bidder has read and agrees to comply. *je*

CERTIFICATION

The State requires that the Bidder be certificated or permitted by, or registered with, the Public Service Commission (PSC) to provide the services outlined in this Section of this RFP (Neb.Rev.Stat. § 81-1120.19).

Bidder has read and agrees to comply. *je*



COST PROPOSAL REQUIREMENTS

Proposals will address the impact of normal growth, as well as planned and unplanned network expansion or service enhancement. All prices shall be proposed as an individual location/school cost on a recurring or non-recurring basis. All bidder costs must be reflected in either the monthly recurring costs, non-recurring costs, or taxes and fees columns listed in Appendix A and B. No additional charges will be accepted. The State shall not be required to purchase any specific service or minimum quantities of network services. The bandwidth increments provided are for the sole purpose of assisting the Bidders in preparation of their proposals and for the State to consider the feasibility of the proposed network solutions. The State shall not be responsible for any cost that is not identified in the Bidder's cost proposal. The State will not consider bids that offer conditional discounts or price structuring based upon the number of network locations that are awarded to a provider or the numbers of entities that order services.

Please display costs in the format provided in Appendix A and B. The bid prices listed must include the cost of doing business as indicated below. Provide a cost number in the appropriate cell.

1. NETWORK EQUIPMENT AND HARDWARE COSTS

Network equipment and hardware (non-CPE) will be part of and included in the itemized circuit costs. Circuit costs will be bundled costs and must include all necessary components needed to utilize the circuit at the bandwidth bid.

2. INSTALLATION COSTS

If non-recurring installation/set-up charges are applicable, these rates shall be delineated in the cost portion of the proposal. This cost for the circuit installation shall include all one-time costs associated with termination to the demarcation point from the network side and/or fees associated with interconnection to local exchange carriers.

a. *All fees that would be incurred for a fully functioning end-to-end connection, whether recurring or non-recurring, must be included in the cost. All cross-connect, and facilities-related charges that would be incurred to physically connect the circuit to Network Nebraska equipment on both ends must be included in the cost.*

- b. IF A BIDDER ONLY NEEDS TO INCUR ONE NON-RECURRING COST PER LOCATION IN ORDER TO ESTABLISH THE DESCRIBED SERVICES, (e.g. \$2,500 one-time NRC for all bandwidths 100Mbps to 1,000Mbps), THEN THE BIDDER SHOULD INSERT THE NRC COST ITEM ON ONLY ONE LINE (e.g. 100Mbps) AND INSERT A COMMENT INTO THAT CELL.
- c. IF A BIDDER WISHES TO CHARGE A NON-RECURRING COST EACH TIME A NEW BANDWIDTH IS ORDERED OVER THE LIFE OF THE CONTRACT, THEN AN NRC COST SHOULD BE INSERTED NEXT TO EACH BANDWIDTH INCREMENT.
- d. Pricing must be provided for all bandwidth increments for each site location, or risk being disqualified as a non-responsive or incomplete bid.

3. SOFTWARE, WARRANTY, AND MAINTENANCE COSTS

The Bidder will include warranty and maintenance of the provided circuits in the service rates.

4. QUANTITY

The State reserves the option to purchase any quantity of service in any increment proposed, and to be able to review and adjust the quantity up or down over the life of the contract term. There will be no minimum or maximum quantities imposed as a result of any contract. All State agencies, the University of Nebraska, political subdivisions and other "eligible participants" will be allowed to purchase off of the resulting contract(s).



5. COST PROPOSAL INSTRUCTIONS AND TABULATION FOR APPENDIX A

Column 'F', Circuit Topology and Column 'G', Circuit Handoff, is new information requested by the University of Nebraska engineering team on each circuit that is bid. (See Page 3, SPECIAL TERMS)

The Appendix A proposal cost for each site location will be tabulated with an intent to award made based on the SUM of the lines of the monthly recurring costs and monthly taxes/fees (if any), multiplied by the applicable length of service in months, forty-eight (48), not to include extensions, plus the addition of one-time non-recurring costs, if included. $TOTAL\ 48-MONTH\ COST = \sum [(MRC + Taxes/Fees) \times 48] + NRCs$

**If multiple NRC costs are inserted to establish service at different bandwidths, the Cost Proposal Tabulation will include the highest NRC value as a one-time build cost.

SAMPLE—Bidder 'A' will be compared to other bidders on School X based on overall cost of \$139,473.60 for 48 months.

Entity	Bandwidth	Bidder 'A' NRC	Bidder 'A' MRC	Bidder 'A' Monthly Taxes/Fees	Bidder 'A' 48-month Cost
School X	100Mbps	\$1,000**	\$500	\$34.75	\$25,668.00
School X	200Mbps	\$0	\$600	\$41.70	\$30,801.60
School X	300Mbps	\$0	\$700	\$48.65	\$35,935.20
School X	400Mbps	\$5,000**	\$800	\$55.60	\$46,068.80
Total					\$139,473.60

BIDDER COMMENT: \$1,000 NRC will be applied if the customer purchases 100Mbps, 200Mbps, or 300Mbps. \$5,000 NRC will only be applied when the customer purchases 400Mbps.

✓ Bidder has read and agrees to comply. *JE*

6. COST PROPOSAL INSTRUCTIONS AND TABULATION FOR APPENDIX B

Column 'F', Circuit Topology and Column 'G', Circuit Handoff, is new information requested by the University of Nebraska engineering team on each circuit that is bid. (See Page 3, SPECIAL TERMS)

In addition, Columns, H, I, and J are REQUIRED FIELDS for each circuit bid. Columns O, P, Q, R, are strongly recommended to be submitted with the Appendix B Cost Proposal but can be delayed until the Program Integrity Assurance (PIA) review on each E-rate funding request.

The Appendix B proposal cost for each site location will be tabulated with an intent to award made based on the SUM of Column H, Network Construction Costs; plus Column I, Design and Engineering Costs, plus Column J, Project Management Costs, plus the SUM of the lines of the monthly recurring costs and monthly taxes/fees (if any), multiplied by the applicable length of service in months, forty-eight (48), not to include extensions, plus the addition of one-time non-recurring costs, if included. $TOTAL\ 48-MONTH\ COST = \sum [(MRC + Taxes/Fees) \times 48] + NRCs$

**If multiple NRC costs are inserted to establish service at different bandwidths, the Cost Proposal Tabulation will include the highest NRC value as a one-time build cost.

SAMPLE—Bidder 'A' will be compared to other bidders on Library X based on overall cost of \$169,473.60 for 48 months.

Top-of-the-Line Private Fiber Networks Since 1998



Entity	Bandwidth	Bidder 'A' Special Construction = Network Construction + Design and Engineering + Project Management	Bidder 'A' NRC	Bidder 'A' MRC	Bidder 'A' Monthly Taxes/Fees	Bidder 'A' 48-month Cost
Library X		\$30,000				\$30,000.00
Library X	100Mbps		\$1,000**	\$500	\$34.75	\$25,668.00
Library X	200Mbps		\$0	\$600	\$41.70	\$30,801.60
Library X	300Mbps		\$0	\$700	\$48.65	\$35,935.20
Library X	400Mbps		\$5,000**	\$800	\$55.60	\$46,068.80
Library X	500Mbps					
Total						\$169,473.60

BIDDER COMMENT: \$1,000 NRC will be applied if the customer purchases 100Mbps, 200Mbps, or 300Mbps. \$5,000 NRC will only be applied when the customer purchases 400Mbps.

Bidder has read and agrees to comply. *je*



Form A
Contractor Proposal Point of Contact
 Request for Proposal Number 6616 Z1

Form A should be completed and submitted with each response to this solicitation. This is intended to provide the State with information on the contractor's name and address, and the specific person(s) who are responsible for preparation of the contractor's response.

Preparation of Response Contact Information	
Contractor Name:	Unite Private Networks, LLC
Contractor Address:	HQ: 1511 Baltimore Ave , Kansas City, MO 64108 Local Office: 3880 VerMaas Place Lincoln, NE 68502
Contact Person & Title:	Jason Evans: Senior Account Director
E-mail Address:	jason.evans@upnfiber.com
Telephone Number (Office):	402.651.3711
Telephone Number (Cellular):	402.613.3655
Fax Number:	816.903.9401

Each contractor should also designate a specific contact person who will be responsible for responding to the State if any clarifications of the contractor's response should become necessary. This will also be the person who the State contacts to set up a presentation/demonstration, if required. It is the responsibility of the contractor to contact the State when this information changes.

Communication with the State Contact Information	
Contractor Name:	Unite Private Networks
Contractor Address:	3880 VerMaas Place, Lincoln, NE 68502
Contact Person & Title:	Jason Evans, Senior Account Director
E-mail Address:	Jason.evans@upnfiber.com
Telephone Number (Office):	402-613-3655
Telephone Number (Cellular):	402-613-3655
Fax Number:	816-903-9401



BIDDER MUST COMPLETE THE FOLLOWING

REQUEST FOR PROPOSAL FOR CONTRACTUAL SERVICES FORM

By signing this Request for Proposal for Contractual Services form, the bidder guarantees compliance with the procedures stated in this RFP and agrees to the terms and conditions unless otherwise indicated in writing and certifies that contractor maintains a drug free workplace.

The Master Agreement Revision #3 Terms and Conditions for High-Speed Transport Services for Network Nebraska RFPs 2020-2023 apply to this RFP.

Per Nebraska's Transparency in Government Procurement Act, Neb. Rev Stat § 73-603 DAS is required to collect statistical information regarding the number of contracts awarded to Nebraska Contractors. This information is for statistical purposes only and will not be considered for contract award purposes.

NEBRASKA CONTRACTOR AFFIDAVIT: Bidder hereby attests that bidder is a Nebraska Contractor. "Nebraska Contractor" shall mean any bidder who has maintained a bona fide place of business and at least one employee within this state for at least the six (6) months immediately preceding the posting date of this RFP.

_____ I hereby certify that I am a Resident disabled veteran or business located in a designated enterprise zone in accordance with Neb. Rev. Stat. § 73-107 and wish to have preference, if applicable, considered in the award of this contract.

_____ I hereby certify that I am a blind person licensed by the Commission for the Blind & Visually Impaired in accordance with Neb. Rev. Stat. §71-8611 and wish to have preference considered in the award of this contract.

FORM MUST BE SIGNED USING AN INDELIBLE METHOD OR BY DOCUSIGN

FIRM:	Unite Private Networks, LLC
COMPLETE ADDRESS:	3880 VerMaas Place Lincoln, NE 68502
TELEPHONE NUMBER:	402.939.6749
FAX NUMBER:	816.903.9401
DATE:	1-19-2022
SIGNATURE:	
PRINTED NAME & TITLE OF SIGNER:	Jason Evans, Senior Account Director



TECHNICAL REQUIREMENTS

The bidder must provide a network design in which:

1. Layer 2 (802.1q/802.1p) VLAN and QoS tags must be allowed through the provided network connection and must remain unchanged by the provider.
UPN Response: UPN will allow VLAN and QoS tags through our Layer 2 network and not change them.
2. Ethernet frames containing a 1500-byte payload (for a total minimum supported Ethernet frame size of 1542 bytes), must be allowed and flow as a single complete frame without any fragmentation by the provider's equipment. Reference:
http://en.wikipedia.org/wiki/Ethernet_frame .
UPN Response: UPN will allow Ethernet frames with a 1500-byte payload (for a minimum total frame size of 1542 bytes) and not fragment.
3. Layer 2 performance must be adequate to support jitter and latency sensitive applications (i.e., video over IP).
UPN Response: The Layer 2 performance of Unite Private Networks is more than adequate to support jitter and latency sensitive applications such as video over IP.
4. The network interface to the customer's CPE must be an Ethernet-based handover connection. The connection must support either 802.1q tagged frames or must support 802.1ad provider bridging.; The provider must either tunnel the customer VLAN tags through the provider network or must leave the customer VLAN tags unchanged from end-to-end.
UPN Response: UPN will provide an Ethernet-based handoff. We will tunnel the customer VLAN tags through our network, so VLAN tags of the participating institutions will remain unchanged.
5. Allow participating institutions to manage their own IP address space and routing.
UPN Response: will allow participating institutions to manage their own IP address space and routing, as we would be providing a true Layer 2 network.
6. Performance metrics on contracted circuits must be provided to Network Nebraska staff within 24 hours of request.
UPN Response: UPN has read and will comply.
7. Network Nebraska must be notified within 24 hours of performing QoS changes, network monitoring changes or any other network changes that may have a positive or negative effect on performance as outlined in the RFP.
UPN Response: UPN has read and will comply.
8. The provided connection must be tested to prove performance before it will be considered complete and usable. Testing according to ITU-T Y.1564sam or RFC-2544 for performance, frame-loss and latency is preferred but detailed performance, frame-loss, latency and QOS test



disclosure is also acceptable. Testing must validate the minimum frame size specified is supported.

UPN Response: UPN has read and will comply.

9. Every connection's receive AND transmit capacity must meet or exceed the bandwidth amount that is bid. Testing must validate that capacity meets the amount purchased before the connection will be considered complete and usable. If proof of end-to-end circuit capacity and testing is not provided, circuit acceptance will be delayed until networking personnel can verify that the circuit meets requirements.

UPN Response: UPN has read and will comply.

10. To the extent possible, existing aggregate interfaces should be prioritized and used before laterally scaling equipment.

UPN Response: UPN has read and will comply.

11. Network Nebraska engineers can request a circuit reprovision to fix issues without the need to renegotiate/renew the contract.

UPN Response: UPN has read and will comply.

12. Any carrier provided equipment placed at the customer premise must be connected to a, carrier provided, networked UPS. The UPS must be able to successfully power carrier provided equipment, detect when commercial power has failed, and report that back to the carrier. The carrier must be able to view this information and provide it when a trouble ticket is opened.

UPN Response: UPN will be supplying the Vertiv PS15 Lithium-Ion UPS, which is rated at 1500VA/1350W and fully managed. They will deliver a minimum 2 hour uptime and very likely significantly more. As they are Lithium-Ion, they have expected life of 10 years, and UPN will continue to monitor them and replace as necessary.