Network Nebraska—Education Services

December 30, 2014

Last updated: December 30, 2014

1. Rate (July 1, 2014 to June 30, 2015)

Participation Fee for Network Nebraska-Education Participants:

- $ 218.30/month/entity (e.g. K-12 schools, ESUs, public libraries, colleges)

Interregional Transport Fee for Network Nebraska-Education Participants:

- $ 57.79/month/entity for Non-E-rate eligible entities (e.g. colleges, universities
- $ 18.49/month/entity for E-rate eligible entities (e.g. K-12 schools, ESUs, public libraries)

2. General Overview:

Network Nebraska is a collaborative effort under the auspices of the Nebraska Information Technology Commission (NITC) to share telecommunications resources, network services, and applications among eligible participants. It provides the statewide multipurpose telecommunications backbone, associated service offerings and support. Network Nebraska is only possible because a consortium of public entities have worked together to establish a scalable, reliable and affordable infrastructure capable of carrying a spectrum of services and applications.
The **Participation Fee** includes all of the non-E-rate eligible costs of operating Network Nebraska-Education. This fee pays for core network equipment, equipment maintenance, software, software maintenance, staff support, and miscellaneous costs related to managing Network Nebraska-Education. This service is only available to educational entities participating in Network Nebraska-Education.
The **Interregional Transport Fee** includes all of the E-rate eligible costs of operating Network Nebraska-Education. This Fee pays for the backbone segments, aggregation ports, and aggregation circuits, where appropriate. This service is only available to educational entities participating in Network Nebraska-Education.

E-rate is the federal program administered by the Federal Communications Commission that provides discounts to assist most schools and libraries in the United States to obtain affordable telecommunications and Internet access. Further information about the e-rate program is available at: http://transition.fcc.gov/learnnet/ and http://en.wikipedia.org/wiki/E-Rate.
Further information about Network Nebraska is available at: http://www.networknebraska.net/.

3. Service Description:

The University of Nebraska Computing Services Network Operations Center (UNCSN NOC) provides technical support for Network Nebraska-Education.

The Statewide Network Backbone is a telecommunications transport layer that supports shared network services and applications. Contracts with service providers are in place to provide high-speed bandwidth, allow for economies of scale, and reconfiguration of existing networks for improved efficiencies where applicable.

As Network Nebraska continues to expand its network capabilities within Nebraska, we will continue to focus on our partner's needs in order to establish long lasting relationships. We are committed to providing strong partner support and quality of service.

The Participation Fee pays for:

- 6 core network routers, traffic shaper, and Ciena 10Gbps backbone gear and maintenance
- 6 ports of the OCIO MCU Bridge service for administrative videoconferencing
- Network management software and maintenance
- Staff support from UNCSN, State Administrative Services and OCIO
- Sponsored Education Group Participation (SEGP) membership in Internet2
- Physical facility rental, upgrades, remodeling, and maintenance
- Network Nebraska toll-free number, 1-888-637-6327
- E-rate support
- Automated Notification System

The Participation Fee does **NOT** pay for technical support beyond the premise demarcation of the education entity participating in Network Nebraska-Education.

The Interregional Transport Fee cost center pays for:

- 5 statewide backbone segments with 2.0Gbps capacity, connecting Scottsbluff, Grand Island, Lincoln, and Omaha
- 2 core aggregation circuits to ESU 6 in Milford and ESU 5 in Beatrice, each 1Gbps 24/7 network monitoring and call center
- Level 1 and Level 2 network troubleshooting and support on wide area networking, backbone, core network devices, and state contracted Internet access

The Interregional Transport Fee does not cover the cost of connecting to an aggregation point.

The benefits for the Network Nebraska Statewide Internet Fee include:

- Lower costs through aggregation, contract management, vendor management, and technical support.
- Access to the following services:
  - Internet 1 (commodity) service is available through Network Nebraska to eligible entities. Aggregation and volume purchasing provides lower unit pricing for participants.
  - Internet2 is an ultra-high speed network available to research universities, undergraduate institutions, K-12 schools, libraries, museums, and science centers for research and educational purposes. It enables widespread collaboration among participants.
  - Commercial Peering Service is a specialized Internet access provided by Internet2. It allows preferential routing for educational entities to reach commercial companies like Google, Microsoft and Apple for software updates.
  - Advanced network management tools such as Intrusion Prevention and Traffic Shaping are provided by Network Nebraska-Education to eligible and interested education entities. Use the contact information at the end of this document to find out more.
  - E-Learning uses web-based courses to deliver educational opportunities to students throughout Nebraska on an equitable and affordable basis. This initiative includes course management software, content management software, and infrastructure components.
  - The statewide synchronous video network allows interactive video exchange among all sectors connected to Network Nebraska-Education, including K-12 schools, colleges and universities, and the Nebraska Video Conference Network. Using the NITC-approved, low-bandwidth video and audio standard, entities are able to interconnect between any two or more distance learning or videoconferencing facilities.

4. Roles and Responsibilities:

Responsibilities of the (OCIO):

- Aggregate demand for those educational entities choosing to participate in Network Nebraska-Education and shall reduce costs for participants whenever feasible;
- Establish a cost structure based on actual costs, including necessary administrative expenses but not including administrative travel or conference expenses, and shall charge participants according to such cost structure;
- Annually provide a detailed report of such costs to each participant and to the Legislative Fiscal Analyst; [N.R.S. 86-5,100]
- Bill monthly individual entities or groups of entities as requested;
- Annually file for federal E-rate on the eligible portion of the Interregional (high bandwidth backbone) Transport and statewide Internet access and then bill the post-E-rate portion to eligible entities;

- Respond to reported incidents of service outages and mitigate disruptions of service related to the Interregional (high bandwidth backbone) Transport, statewide Internet access, and Wide Area Network circuits purchased off of State contracts, within the same business day.

Responsibilities of the agency/client:

- Contract and fully fund the Chief Information Officer's recommended Wide Area Network transport bandwidth needed to interconnect the Participant's premise with the Network Nebraska-Education aggregation point;
- Install and maintain appropriate network security measures, virus and malware protection, and firewalls, in order to preserve the integrity of the network, as defined by their institutional or regional network security officer;
- Provide notice in writing, if required by guidelines established by the University of Nebraska and the Chief Information Officer for participation in Network Nebraska, to the distance education director of the Educational Service Unit Coordinating Council, the University of Nebraska, and the Chief Information Officer prior to the use of any new or additional equipment that will impact the use of Network Nebraska by such education-related political subdivision or other education-related political subdivisions [N.R.S. 86-520.01];
- Develop and maintain a security policy that includes desktop and server anti-virus protection, wireless access point security, firewall rules for internal and external protection, and for K-12 schools and libraries, Internet filtering that complies with the Children's Internet Protection Act (CIPA) ;
- Provide two-deep technical contact information for the Network Nebraska automatic notification system, which includes at minimum, contact name, e-mail address, work phone number, and a cell phone number;
- Keep technical contact information current by notifying the UNCSN NOC by email (noc@nebraska.edu) or by manually updating it themselves in the RedCell network management tool;
- Establish what portion of a day they want the technical contact to be notified of scheduled or unscheduled outages and by what method;
- Inform their institutional or regional network coordinator and the Network Nebraska staff of any anticipated disruption or scheduled maintenance on any IP routing devices or circuits that are being monitored by the Network Nebraska staff or that may affect the overall network;
- The Network Nebraska staff, if determining that a device or network modification adversely affects the core network to the detriment of other participants, or

threatens the stability or integrity of the core network, taking steps to limit the bandwidth or shut down a site, until the problem is resolved;

- Assume its assigned share of the Network Nebraska Interregional Transport Fee, which will be reviewed annually by the Network Nebraska Advisory Group, and communicated annually by the Chief Information Officer, and to make prompt payment to the Office of the CIO as billed or rebilled on the Participant's behalf;
- To have on file with the Nebraska Department of Education a continuously updated and approved Technology Plan, as required by the FCC and USAC policies [not applicable to higher education];
- Submit a signed, certified Letter of Agency to the OCIO as requested, in order to authorize the OCIO to act and file E-rate on the Interregional Transport on their behalf [not applicable to higher education].

5. Requesting Service:

For more information about the service, contact Tom Rolfes, tom.rolfes@nebraska.gov, 402-471-7969.

6. Billing Information:

The Office of the CIO will send monthly invoices to the entities participating in Network Nebraska-Education Service.

7. Service Hours, Response Times and Escalation:

The Network Nebraska-Education Help Desk is operated by the University of Nebraska Computing Services Network and is staffed 24 hours per day, 365 days per year. Each Participant is encouraged to notify the Network Nebraska-Education Help Desk of its own specific response conditions (e.g. trouble ticket routing, time of day alerts, phone, texting, e-mail contact, or other method.)

If any problems are detected, please contact Network Nebraska-Education Network Operations Center: Toll Free 1-888-637-6327 (1-888-NET-NEBR), Local 402-472-7656 or NOC@nebraska.edu

For further information, please contact:

Office of the CIO Help Desk
cio.help@nebraska.gov
402-471-4636 or 800-982-2468