**Memorandum of Agreement**

Signature Page

The purpose of this Agreement is to outline the services and responsibilities of the OCIO and the responsibilities and associated fees of the Participant. This Agreement helps ensure that the proper elements and commitments are in place to provide dependable telecommunications service, support, and delivery to the participants of Network Nebraska-Education and to maintain the integrity of the network.

By signing this Memorandum of Agreement the parties agree to fulfill their respective responsibilities as described herein until at which time the Agreement is cancelled by either the Participant or OCIO.

**For the Participant**

|  |  |
| --- | --- |
| **Billed Entity Name:** |  |
| **Authorized Signature:** |  |
| **Date:** |  |
| **Printed Name:** |  |
| **Title:** |  |
| **Address:** |  |
| **City, ST Zip** |  |
| **E-mail Address** |  |
| **Phone:** |  |

**For the Office of the CIO**

**Ed Toner**

**Chief Information Officer**

**501 S. 14th, P.O. Box 95045**

**Lincoln, NE 68509-5045**

**ed.toner@nebraska.gov**

**402-471-3560**

|  |  |
| --- | --- |
| **Authorized Signature:** |  |
| **Date:** |  |



**Memorandum of Agreement**

**Between**

**The Office of the Chief Information Officer,**

**State of Nebraska**

**d.b.a. *Network Nebraska—Education***

**And**

**Network Nebraska—Education “Participant”**

**Auto-renewable July 1, through June 30 annually**

1. **Agreement Overview**
   1. This Agreement represents a Memorandum of Agreement (“MoA” or “Agreement”) between the Office of the Chief Information Officer (hereafter referred to as OCIO), State of Nebraska, doing business as *Network Nebraska-Education* and the Network Nebraska-Education Participant (hereafter referred to as “Participant”), as defined within N.R.S. 79-1201.01.

The Network Nebraska-Education Advisory Group (NNAG) is chartered by the Nebraska Information Technology Commission Education Council to provide strategic guidance to the State CIO and to represent participants’ interests regarding the operation of Network Nebraska-Education. Periodically, the NNAG and/or the OCIO may recommend amendments to this Agreement.

* 1. This original signed Agreement is automatically renewed each year on January 1, unless cancelled, with advanced written notification, by the Participant or the OCIO as described below in Section IV.

1. **Purpose**

The purpose of this Agreement is to outline the services and responsibilities of the OCIO and the responsibilities and associated fees of the Participant. This Agreement helps ensure that the proper elements and commitments are in place to provide dependable telecommunications service, support, and delivery to the participants of Network Nebraska-Education and to maintain the integrity of the network.

1. **Authority**
   1. **N.R.S. 86-520 Chief Information Officer; duties. The Chief Information Officer shall**: (10) Establish and maintain Network Nebraska pursuant to section 86-5,100; (11) Apply in aggregate for reimbursements from the federal Universal Service Fund pursuant to section 254 of the Telecommunications Act of 1996, 47 U.S.C. 254, as such section existed on January 1, 2006, on behalf of school districts requesting to be included in such aggregated application.
   2. **N.R.S. 86-5,100 Network Nebraska; development and maintenance; access; Chief Information Officer; duties; cost**. The Chief Information Officer, in partnership with the University of Nebraska, shall develop and maintain a statewide, multipurpose, high capacity, scalable telecommunications network to be called Network Nebraska. The network shall consist of contractual arrangements with providers to meet the demand of state agencies, local governments, and educational entities as defined in section 79-1201.01. Such network shall provide access to a reliable and affordable infrastructure capable of carrying a spectrum of services and applications, including distance education, across the state. The Chief Information Officer shall provide access to each school district, each educational service unit, each community college, each state college, and the University of Nebraska at the earliest feasible date and no later than July 1, 2012. Access may be provided through educational service units or other aggregation points. 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. The Chief Information Officer shall 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. The Chief Information Officer shall annually provide a detailed report of such costs to each participant and to the Legislative Fiscal Analyst. The report submitted to the Legislative Fiscal Analyst shall be submitted electronically.
   3. **N.R.S.79-1201.01 Terms, defined**. Educational entity means a school district, a private, denominational, or parochial school, an educational service unit, a community college, a state college, the University of Nebraska, or a nonprofit private postsecondary educational institution.
2. **Agreement Terms** 
   1. **Period:**    
      The annual performance period of this Agreement is concurrent with the performance period of the USAC E-rate funding year, July 1 to June 30.
   2. **Renewal:**   
      This original signed Agreement will automatically renew on January 1 of each calendar year, unless cancelled with prior written notice by the Participant or the OCIO.
   3. **Cancellation:**   
      This Agreement can be cancelled, with prior written notice by the OCIO, for nonpayment of fees, egregious violation of network security or management, failure to uphold the basic responsibilities of the Participant as outlined in this Agreement or for any change in statutory authority or direction assigned to the OCIO. This Agreement can be cancelled, with prior written notice by the Participant, for any reason, providing that it occurs on or before the January 1 renewal date for the following performance period, July 1-June 30. The January 1 renewal date is critical because withdrawal from Network Nebraska-Education has implications for E-rate filing and funding and for the fee structure charged to the other Participants.
   4. **Amendments**:
      1. Pursuant to Section V.b., Appendix 1 will be amended annually by the OCIO.
      2. Pursuant to Section V.c., Appendix 2 will be amended annually by the OCIO.
      3. All other amendments to this agreement will be made using the following procedures:
         1. The OCIO, in consultation with the NNAG, may propose amendments to this Agreement;
         2. Any proposed amendment will be posted at <http://www.networknebraska.net> for review by Participants;
         3. Any proposed amendment will include an effective date for the amendment;
         4. Any proposed amendment will be posted for at least 30 days prior to the January 1 automatic renewal date for the year in which the amendment is to be effective. This requirement will allow Participants to review any amendment prior to the automatic renewal pursuant to Section IV. b. and provide Participant the ability to cancel this Agreement, pursuant to Section IV.c. prior to the effective date of the amendment.
3. **Responsibilities of OCIO, University of Nebraska, d.b.a. Network Nebraska-Education**
   1. **Services:**

The Chief Information Officer, in partnership with the University of Nebraska, shall develop and maintain a statewide, multipurpose, high capacity, scalable telecommunications network to be called Network Nebraska. Such network shall provide access to a reliable and affordable infrastructure capable of carrying a spectrum of services and applications, including distance education, across the state. [N.R.S. 86-5,100]

* 1. **Costs and Billing** [See Appendix 1 for Cost Structure]

1. The Chief Information Officer shall aggregate demand for those state agencies and educational entities choosing to participate in Network Nebraska-Education and shall reduce costs for participants whenever feasible. The Chief Information Officer shall 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. The Chief Information Officer shall annually provide a detailed report of such costs to each participant and to the Legislative Fiscal Analyst. [N.R.S. 86-5,100]
2. The OCIO will annually notify each participant the projected monthly costs of Network Nebraska-Education before the performance year begins and post updates to www.networknebraska.net .
3. The OCIO will bill monthly individual entities or groups of entities as requested.
4. The OCIO will annually file for federal E-rate on the eligible portion of the Interregional Transport (high bandwidth backbone) and Internet access and then bill the post-E-rate portion to eligible entities.
   1. **Service** **Standards:** [See Appendix 2 for list of Services]
5. Staff of the OCIO and University of Nebraska Computing Services Network (UNCSN) will respond to reported incidents of service outages within the same business day and mitigate disruptions of service related to the Interregional Transport as soon as possible. (See Section VII. Service Response Procedures) “Interregional Transport” is comprised of all transport segments, the routing circuits interconnecting Network Nebraska routers to the primary provider routers, and any of the associated routers and switches at these locations.
6. On Internet access purchased off of a State Master Contract bid on behalf of eligible entities, the State of Nebraska will intervene on issues of vendor performance.
7. On Internet access NOT purchased off of a State Master Contract bid on behalf of eligible entities, the OCIO and/or UNCSN will help the education entity where it can to resolve issues of vendor performance.
8. On Wide Area Network circuits purchased off of a State Master Contract bid on behalf of eligible entities, the State of Nebraska will intervene on issues of vendor performance. In order to accomplish this, telecommunications companies will provide circuit information, maintenance notifications, and general performance metrics to the OCIO and/or UNCSN for each of the sites covered under a State Master Contract.
9. On Wide Area Network circuits NOT purchased off of a State Master Contract bid on behalf of eligible entities, the OCIO and/or UNCSN will help the education entity where it can to resolve issues of vendor performance. In order to accomplish this, Network Nebraska Participants must request that their telecommunications companies provide circuit information, maintenance notifications, and general performance metrics to the OCIO and/or UNCSN for each of the sites covered under a privately held contract.
10. On Local Area Network issues on the Participant side of the demarcation, the OCIO and/or UNCSN will NOT intervene as part of this Agreement.
11. On Local Area Network issues on the Participant side of the demarcation, the participant may contact and individually contract with UNCSN for technical assistance and support.
12. **Responsibilities of “Participant”** 
    1. **Network Integrity**:
13. Participant agrees to 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 (as listed in Appendix 3).
14. Participant agrees to install and maintain, on its own or as part of a consortium, appropriate network security measures, virus and malware protection, and firewalls, in order to preserve the integrity of the network, as defined by its institutional or regional network security officer.
15. Participant agrees to 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]
16. Participant agrees to develop and maintain a security policy that includes, but is not limited to:
17. Desktop and server anti-virus protection
18. Wireless access point security
19. Firewall rules for internal and external protection
20. For K-12 schools and libraries, Internet filtering that complies with the Children’s Internet Protection Act (CIPA) <http://www.fcc.gov/cgb/consumerfacts/cipa.html>
21. Participant agrees to 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.
22. Participant agrees to keep technical contact information current by notifying the UNCSN NOC by email ([noc@nebraska.edu](mailto:noc@nebraska.edu)) or by manually updating it themselves in the network management tool.
23. Participant agrees to establish what portion of a day it wants technical contact(s) to be notified of scheduled or unscheduled outages and by what method. Choices for time of day include 24 hours by 7 days (including holidays), 6 AM to 10 PM Monday through Friday, or 8 AM to 5 PM Monday through Friday. Methods of notification include email, phone call, or text message. Participant agrees that their technical contact, if needed, will be available to work with the Network Nebraska staff to complete the restoration of their service.
24. Participant agrees to inform its 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 Participant understands that if the Network Nebraska staff determines 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, the Network Nebraska staff will take steps to limit the bandwidth or shut down a site, until the problem is resolved.
    1. **Prompt Payment**
       1. Participant agrees to assume its assigned share of the Network Nebraska Participation Fee [See Appendix 1], which will be reviewed annually by the Network Nebraska--Education Advisory Group, and communicated annually by the State CIO, and to make payment within 45 days to the OCIO as billed or rebilled on the Participant’s behalf.
       2. Participant agrees to assume its assigned share of the Network Nebraska Interregional Transport Fee [See Appendix 1], which will be reviewed annually by the Network Nebraska-Education Advisory Group, and communicated annually by the Chief Information Officer, and to make prompt payment within 45 days to the OCIO as billed or rebilled on the Participant’s behalf.
       3. K-12 Participant agrees to pay the full cost of its assigned share of the Network Nebraska Interregional Transport Fee, should the federal E-rate reimbursement be denied or discontinued in any way.
    2. **E-rate**
       1. A Participant who seeks E-rate funding agrees 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, that includes clear goals and realistic strategies; a professional development strategy; an assessment of technology needs and services; and an ongoing evaluation process.
       2. A Participant who is eligible for E-rate funding agrees to submit a signed, certified Letter of Agency and any other authorizations that may be required by the FCC to the OCIO as requested, in order to authorize the OCIO to act and file E-rate on the Interregional Transport and Internet on their behalf.
25. **Service Response Procedures** [See Appendix 2 for list of Services]
    1. **Participant Inbound Communications concerning Network Nebraska-Education Services or infrastructure (backbone, routing, state master contract Internet, Internet2, Renovo software)**
       1. Participant should immediately call 1-888-NET-NEBR (638-6327) or 402-472-7625 or e-mail to [noc@nebraska.edu](mailto:network@nebraska.edu) and give information about the problem or issue, plus the name and contact information of the person reporting the problem or issue.
       2. Participant should indicate the urgency of the problem or issue and ask for a UNCSN trouble ticket number.
       3. Participant may inform their regional or institutional technology representative.
       4. UNCSN will resolve the trouble ticket and inform the originator of the ticket about the resolution.
    2. **Participant Inbound Communications concerning other non-Network Nebraska—services or infrastructure (WAN, non-state master contract Internet, DNS issues, etc…)** 
       1. Participant should attempt to contact its institutional or ESU technical support person, utilizing their Helpdesk procedures.
       2. If no response, Participant may call 1-888-NET-NEBR (638-6327) or 402-472-7625 or e-mail to [noc@nebraska.edu](mailto:network@nebraska.edu) and give information about the problem or issue, plus the name and contact information of the person reporting the problem or issue.
       3. Participant should indicate the urgency of the problem or issue and ask for a UNCSN trouble ticket number.
       4. UNCSN staff will then route the trouble ticket to the most appropriate institutional or ESU technical support person, using the contact information on file.
       5. Institutional or ESU technical support person will be responsible for resolving the trouble ticket and informing the originator of the ticket about the resolution.
    3. **Network Nebraska Outbound Communications to Participant concerning scheduled and unscheduled outages**
       1. UNCSN staff or OCIO staff will utilize an automatic notification system to inform Network Nebraska—Participants with the greatest amount of lead time possible using the least intrusive mode of communication to match the event.
       2. If a scheduled maintenance event is to occur, notification will come via e-mail and will be posted on the portal of the network management system
       3. If an unscheduled outage occurs, notification may come by desk phone, cell phone or text message. It will also be posted on the network management system portal and will be kept updated as work proceeds.

**APPENDIX 1: Cost Structure** (annually updated – last update July 1, 2015)

Performance Year Network Nebraska Participation Fee Entity Number

2007-08 $200.00/month/entity 94 entities

2008-09 $197.80/month/entity 182 entities

2009-10 $192.47/month/entity 232 entities

2010-11 $195.13/month/entity 228 entities

2011-12 $190.21/month/entity 244 entities

2012-13 $203.48/month/entity 253 entities

2013-14 $215.83/month/entity 261 entities

2014-15 $218.30/month/entity 274 entities

2015-16 $205.35/month/entity 285 entities

Performance Year Network Nebraska Interregional Transport Fee Entity Number

2007-08 $ 0.00/month/entity 94 entities

2008-09 $ 93.35/month/entity ($34.21/month/E-rate entity) 182 entities

2009-10 $ 92.72/month/entity ($34.48/month/E-rate entity) 232 entities

2010-11 $115.78/month/entity ($36.45/month/E-rate entity) 228 entities

2011-12 $101.09/month/entity ($31.69/month/E-rate entity) 244 entities

2012-13 $ 61.28/month/entity ($18.67/month/E-rate entity) 253 entities

2013-14 $ 53.80/month/entity ($17.38/month/E-rate entity) 261 entities

2014-15 $ 57.79/month/entity ($18.49/month/E-rate entity) 274 entities

2015-16 $ 70.39/month/entity ($22.12/month/E-rate entity) 285 entities

Performance Year Network Nebraska Statewide Internet Access Entity Number

2012-13 $ 2.55/Mbps/month ($.7905/Mbps/month/E-rate entity) 15 entities

2013-14 $ 2.50/Mbps/month ($.7750/Mbps/month/E-rate entity) 15 entities

2014-15 $ 1.28/Mbps/month ($.3982/Mbps/month/E-rate entity) 32 entities

2015-16 $ .945/Mbps/month ($.3024/Mbps/month/E-rate entity) 34 entities

**See** [**www.networknebraska.net**](http://www.networknebraska.net) **for posted updates to this Appendix.APPENDIX 2: Network Nebraska Service Offerings**

**Comprehensive Listing of Network Nebraska—Education Services and Benefits (7/1/2015)**

**Student Learning Opportunities**

 Statewide Clearinghouse and Videoconferencing Scheduling Software (www.nvis.esucc.org)

 High quality exchange of Nebraska K-12 and college video distance learning classes

 High bandwidth Internet2 access to over 90,000 education partners and content providers

 Internet2 programming and virtual museum trips from across the U.S./world

 Transport for the ESUCC/NDE statewide learning object repository and other applications

 Participant in the 2013-15 Internet2 InCommon national pilot project for federated identity services

**Connectivity/Transport**

 Intranet Ethernet connectivity to all 285 Network Nebraska participants and Nebraska Dept of Ed

 Interregional (high bandwidth backbone) Transport between Grand Island, Lincoln, Omaha, and

Scottsbluff

 Access to commodity Internet1 service with one of the lowest rates in the U.S. (state contract purchase)

 3Gbps Internet2 Commercial Peering Service and prioritized routing to over 60,000 companies

 Limited co-location rack space at Grand Island, Lincoln, Omaha core locations on a space available basis

 Core router and core infrastructure cost avoidance through the University of Nebraska partnership

 Shared services for up to six simultaneous videoconferencing ports over the OCIO MCU bridges

Development of two dark fiber backbone projects partnered with UNCSN

Dynamic provisioning of statewide Internet access

**Network Management/Monitoring**

 24/7 network monitoring and call center

 Toll-free Network Nebraska number, 1-888-NET-NEBR (638-6327)

 Automated Notification System services

 Network abuse and nefarious activity monitoring

 Fortinet enterprise Intrusion Prevention Service

 Bandwidth measuring and assistance

Level 1 network troubleshooting and support on Network Nebraska - Education backbone, core network devices and State Contract and University of Nebraska contracts for Internet access

 Level 2 network troubleshooting and support on wide area networking and other participant routing and DNS issues

 Level 2 video/scheduling troubleshooting and support

 Traffic shaping of Network Nebraska Internet bandwidth at Omaha and Lincoln

 Onsite and/or remote technician assistance, upon request

**Administrative/E-rate**

 RFP development and State Master Contract negotiations

 E-rate filing on the K-12 eligible portion of the Interregional Transport and statewide Internet

 Sponsored Education Group Participation (SEGP 8 6 8&$1) Membership for Internet2

 Establishing the yearly eligibility list for LB1208 Distance Education Incentive Dollars

 Management of the statewide purchase contracts for statewide scheduling, WAN services, Internet access, Cisco equipment, and videoconferencing equipment.

 E-rate archiving of bid documents, invoices, correspondence

 Continual Management of Consortium Letters of Agency to maintain E-rate eligibility

 OCIO Financial Solutions Services for budget development and vendor service orders

 State Billing services for Network Nebraska Participation Fee and Interregional Transport

 Network Nebraska website (www.networknebraska.net) development and support

**APPENDIX 3: Wide Area Network (WAN) Circuit Minimums**

As part of the network requirements to be eligible to qualify for the Neb. Rev. Stat. 79-1336 and 79-1337 distance education incentives, the State CIO established in 2006 a Wide Area Network (WAN) circuit bandwidth minimum for public school districts and Educational Service Units (ESUs) in order to be considered as having “access” to a Network Nebraska-Education aggregation point.

**Entity Type WAN bandwidth**

Nebraska K-12 public school districts, ESUs 30Mbps or greater

Education entities not competing for Neb. Rev. Stat. 79-1336 and 79-1337 distance education incentives are also required to meet or exceed a minimum Ethernet bandwidth to connect to any Network Nebraska-Education aggregation point.

**Entity Type WAN bandwidth**

Nebraska K-12 nonpublic schools 10Mbps or greater

Nebraska higher education 10Mbps or greater

Nebraska public libraries 10Mbps or greater