MEETING AGENDA

Technical Panel of the Nebraska Information Technology Commission

Work Session

Friday, May 2, 2008 9:00 a.m. - 11:00 a.m. Nebraska Educational Telecommunications Board Room - 1st Floor 1800 N. 33rd St., Lincoln, NE

Teleconference Participation:
Dial 877-229-1563 and enter the conference code: 05020857

AGENDA

Meeting Documents: Click the links in the agenda or <u>click here</u> for all documents. (xx Pages)

- 1. Discussion of waiver request from ESU #10, first discussed at the April 8, 2008 Technical Panel meeting, and related topics.
 - Educational Service Unit #10 request for waiver from NITC 7-403 (Scheduling Standard for Synchronous Distance Learning and Videoconferencing)
 - Background and Options Document
 - Comments received to the Background and Options Document

NITC and Technical Panel websites: http://nitc.ne.gov/
Meeting notice was posted to the NITC website and Nebraska Public Meeting Calendar on April 22, 2008.

The agenda was posted to the NITC website on April 22, 2008.

<u>Agency Name</u> - Educational Service Unit #10 <u>Presented By</u> - John Stritt, Distance Education Director, jstritt@esu10.org <u>NITC Standards and Guidelines</u> - NITC Policy 7-403

Subject - Request for Exemption From State Scheduling System

Description of the problem:

ESU 10 currently provides distance education support for 29 schools in ESU 10, 9 schools in ESU 11, and 4 schools in ESU 7. As part of the statewide upgrade, the ESU 10 supported schools have made contractual agreements with transport vendors to upgrade existing networks to allow all of our member schools to operate in an IP based video network which will allow us to join Network Nebraska.

At the February 26 Distance Education Council (DEC) advisory meeting, we were made aware of NITC policy which contradicted the DEC distance education policy regarding the responsibility of all Network Nebraska member schools to have all codec devices scheduled.

As part of the NITC policy Section 1-103, it does state that a waiver exemption could be filed which we wish to do regarding NITC Policy 7-403. As ESU 10 is responsible for providing support for our area schools, we would like to be exempt from this requirement for the upcoming year of 2008-09.

The following is a brief overview supporting why we would like to be exempt from scheduling using the Renovo system.

- Renovo is the scheduling/reporting system selected to support the existing 3 and 1 codec solution and any bridge system. The southwest and the northeast distance education networks are supported for controlling their devices.
- ESU 10 has chosen to use a different technology solution in that each codec has an
 internal multiple connection unit (MCU). The reason we chose this solution was we
 felt it was less proprietary and would allow for a more mobile solution for locating the
 technology. Additionally the setup and purchasing cost of the 3 and 1 codec solution
 was at least twice as much as the mobile cart solution.
- In discussion with Renovo, they have indicated that their current scheduling solution
 was designed for the 3 and 1 codec solution or working as a scheduler for point-topoint devices. In early discussion, Renovo also indicated that they were not aware
 of an interest or need for multipoint device control.
- In November of 2007, Renovo shared that they were working on an upgrade of their scheduling system that would allow them to schedule multipoint devices.
 Renovo is aware that we are not planning on using the 3 and 1 codec and yet they have not demonstrated or shared that they are now capable of supporting this type of device.

At ESU 10, we believe that the vision for distance education services will continue to evolve to a portable multi-device system. In addition to being able to purchase additional codecs, we also believe that software based codecs become additional options.

Future questions that need to be answered related to the policy and the current service would include:

- Will all of these different codec systems need to be scheduled?
- Will all entities that wish to connect to a scheduled codec have to also be a licensed device or could this be a clearinghouse only cost?
- Do all higher institutions have to schedule all of their devices?
- Is the Renovo system the only solution for meeting the guidelines as stated in the scheduling standard for synchronous learning and video conferencing?
- Does Renovo even meet the defined standards?
 - Section 1.1 "Controlling the network and end point hardware and bandwidth..."
 - Section 1.1.1 "Control all hardware in a network"
 - · Section 1.1.1.6 "Have a defined quality of service"
 - Section 1.1.1.15 "Capable of controlling all specific equipment..."
 - Section 1.1.1.16 "Facilitate various types of events".
- Are there more cost efficient ways for the same or better services?

We at ESU 10 believe that the intent of the standards and guidelines are an admirable way to support a unified state system. Although we respect the intent, we believe that there is too many unknowns for the coming year including what devices the service can support, the cost of those services, the extent to which all codecs might have to be part of this service, and does this one service provide for future technology options or just take care of how we are used to doing things.

<u>Preferred Solution</u> - At minimum we would like our schools to have at least a one year option regarding licensing devices as outlined in the policy. The long term and best solution we believe is that K-12 schools should be allowed to make their own decision regarding the licensing of codec devices.

Educationally yours

John Stritt ESU 10 Distance Education Director



Nebraska Information Technology Commission

STANDARDS AND GUIDELINES

Scheduling Standard for Synchronous Distance Learning and Videoconferencing

Category	Video Architecture
Title	Scheduling Standard for Synchronous Distance Learning and Videoconferencing
Number	
	✓ State Government Agencies ✓ All Standard □ Excluding Not Applicable
Applicability	□ ExcludingNot Applicable □ State Funded Entities - All entities receiving state funding for matters covered by this document
Status	✓ Adopted □Draft □Other:
Dates	Version Date: April 17, 2006 Date Adopted by NITC: May 1, 2006 Other: Contact information updated in § 3.1.1 on February 28, 2008.

Prepared by: Technical Panel of the Nebraska Information Technology Commission Authority: Neb. Rev. Stat. § 86-516(6) http://www.nitc.state.ne.us/standards/

1.0 Standard

This document consists of a list of features that ought to be available in any system that is developed for use in scheduling of synchronous events using videoconferencing technology.

It is the intent that any and all such scheduling systems defined by the specifications below be accessible either through the Internet or within a defined intranet as decided upon by the system administrators.

The following sections attempt to describe the various levels and types of scheduling or coordination that might be considered.

1.1 Hardware control component

When attempting to link two or more sites electronically, some system must coordinate the connectivity between/among the sites. This includes controlling the network and endpoint hardware and bandwidth necessary to cause a successful connection.

1.1.1 Standards for hardware control system

A system should be able to control all hardware in a network and be capable of linking into all the other systems listed in this standard to enable the following:

1.1.1.1	Browser-based access
1.1.1.2	Locate devices by IP address (both static and DHCP)
	· · · · · · · · · · · · · · · · · · ·
1.1.1.3	Locate devices by MAC address
1.1.1.4	Facilitate far-end control in endpoint devices with the capability
1.1.1.5	Display a call list that is understood by non-techs using plain
	English site description
1.1.1.6	Have a defined quality of service
1.1.1.7	Hardware and software systems must work such that the
	scheduling system is available for use at least 99.9% of the time
1.1.1.8	The system should not require reset/reboot more often than once
	per week
1.1.1.9	Have a minimum of a one-year warranty
1.1.1.10	Annual maintenance fees after the warranty has run out should not
	exceed 10% of original purchase price
1.1.1.11	Keep automated log data that may be defined by and searched in
	ways to be defined by the system administrator(s) with multiple
	possible search definitions
1.1.1.12	Maintain security in ways that can be defined by system
	administrators including:
	1.1.1.12.1 Keeping log information secure
	1 0 0
	1.1.1.12.2 Limiting access to an event
	1.1.1.12.3 Turning encryption on/off in endpoint devices with the
	capability

	1.1.1.12.4	Identifying security capability to system administrators and event coordinators by site
	1.1.1.12.5	Provide an identity management system that allows for multiple levels of user access as defined by system administrators
1.1.1.13	Facilitate ad administrate	hoc events by users with permission from system
1.1.1.14	Facilitate sc administrato	heduled events by users with permission from system ors
1.1.1.15	•	of controlling all specific equipment used in the network outers, switchers, MCUs, firewall systems, etc.)
1.1.1.16	•	rious types of events
	1.1.1.16.1	Broadcast to all
	1.1.1.16.2	Broadcast to some
	1.1.1.16.3	2-way point-to-point
	1.1.1.16.4	2-way multipoint
	1.1.1.16.5	A combination of broadcast and 2-way

1.2 Event logging component

If a system coordinator has a requirement to track information about events some mechanism would have to be in place. This may include knowing the number of people at a site, the minutes an event runs at any given site, or the number of events a specific organization schedules.

1.2.1 Standards for event logging system

A system should be able to automatically store data and permit reports and be capable of linking into the all the other systems listed in this standard to include the following:

1.2.1.1	Browser-bas	sed access		
1.2.1.2	Store data in an ODBC compliant relational database			
1.2.1.3	Provide field	ls for logging various pieces of information		
	1.2.1.3.1	minutes a site is available/not available		
	1.2.1.3.2	minutes a site is used		
	1.2.1.3.3	number of event attendees		
	1.2.1.3.4	type of event as defined by system administrators		
	1.2.1.3.5	number of sites per event		
1.2.1.4	Permit syste	m administrator defined fields (no fewer than 64)		
	1.2.1.4.1	Definable by site, groups of sites, and groups of		
		groups		
1.2.1.5	Related GUI	entry for call setup as defined by system		
	administrators			
	1.2.1.5.1	Physical site location		

	1.2.1.5.2 Local contact and facility arra 1.2.1.5.2.1 Costs, availabili 1.2.1.5.2.2 ADA options av	ity, site rules
	1.2.1.5.3 Searchable criteria for descril	bing or accessing spaces
	1.2.1.5.4 Must have a GUI that is unde English	erstandable in plain
1.2.1.6	Facilitate search to know what facilities are conflict	e in conflict or are often in
	1.2.1.6.1 number of conflicts for a give amount of time	n site over a specific
1.2.1.7	Accommodate a facility "wait" list / availabil	lity queue
	1.2.1.7.1 If a facility is already confirmed log who has requested the same notify the requester(s) if the expression is cancelled	ame facility then auto
1.2.1.8	Account for billing charges per event/location generation after the event	on and total bill

1. 3 Facilities coordination component

If an event will include locations for which more than one person/organization has responsibility, then some mechanism must exist for coordinating use of facilities. There may be technical or administrative limits as to the number or types of sites that can participate in any given event. This could be as simple as users coordinating times over the telephone or through e-mail, but for some applications there may be a greater need for pre-scheduling and coordination among multiple administrators.

1.3.1 Standards for facilities coordination system

A system should enable access to facilities based on defined permissions, resolve conflicts based on pre-determined policies and be capable of linking into all the other systems listed in this standard to include the following:

1.3.1.1	Browser-ba	ased access
1.3.1.2	System edi	table user access
	1.3.1.2.1	Activate a facility such that it is known to the system
		and to system users
	1.3.1.2.2	Building level admin such that the facilities at a
		specific location can set policies for that site and
		permit use by others
	1.3.1.2.3	Regional admin (organization / geo-political) such that
		a group of facilities can set policies for all related sites
		and permit use by others

	1.3.1.2.4	Sys admin (configuration) such that technical system
	1.3.1.2.5	setup, operation and maintenance may be conducted
	1.3.1.2.3	Sector admin such that groups of groups of facilities can set policies for all related sites and permit use by
		others
	1.3.1.2.6	
	1.3.1.2.0	Room request such that any designated site user or administrator may request access to a facility they do
		not already have rights to schedule
	1.3.1.2.7	Participant access defaults
	1.3.1.2.1	1.3.1.2.7.1 All denied unless specifically permitted
		1.3.1.2.7.1 All defined diffless specifically defined
	1.3.1.2.8	User account directory service with definable
	1.5.1.2.0	permissions for each account
1.3.1.3	Types of co	·
1.5.1.5	1.3.1.3.1	Event posting to inform others of possible access
	1.3.1.3.1	Site joining to allow other to access
	1.3.1.3.2	Ad hoc to allow immediate activation of unscheduled
	1.0.1.0.0	events
	1.3.1.3.4	Pre-planned events that may occur once or cyclically
	1.3.1.3.5	Inter network coordination to permit interaction of
	1.0.1.0.0	sites both within and outside a controlled network
	1.3.1.3.6	Intra network coordination to permit interaction of
	1.0.1.0.0	sites within a controlled network
	1.3.1.3.7	Administrator defined bandwidth prioritization to
	1.0.1.0.7	minimize network bottlenecks
	1.3.1.3.8	Administrator defined asset prioritization to minimize
	1.0.1.0.0	system conflicts
	1.3.1.3.9	Site-requested bandwidth speed
1.3.1.4		formation to be posted
	1.3.1.4.1	Identify technology available by site
	1.3.1.4.2	Physical site location
	1.3.1.4.3	Local contact and facility arrangement info
		1.3.1.4.3.1 Costs, availability, site rules
		1.3.1.4.3.2 ADA options available
1.3.1.5	Event infor	mation to be posted
	1.3.1.5.1	Definable credit type
	1.3.1.5.2	Definable student type
	1.3.1.5.3	Event/course prerequisites
	1.3.1.5.4	Event/course descriptions
	1.3.1.5.5	Teacher / event leader / presenter
	1.3.1.5.6	Materials needed
	1.3.1.5.7	Event coordinator info
	1.3.1.5.8	Target audience
	1.3.1.5.9	Mapquest-like link

1.4 People coordination component

If a specific location is to be used this implies that operational people may need to be dedicated to cause successful events. Since there will be a variety of site designs and operations, then there will be a variety of the demand of staff time. Likewise each facility will have limits on how many people can attend at any one location. Finally, there may be limitations as to the total number of event participants allowed.

1.4.1 Standards for people coordination system

A system should enable interaction of people based on policies set by system administrators and be capable of linking into all the other systems listed in this standard to include the following:

1.4.1.1	Browser-based access
1.4.1.2	Allow for multiple permission levels
	1.4.1.2.1 View schedules
	1.4.1.2.2 Request systems/facilities
	1.4.1.2.3 Approve systems/facilities use
1.4.1.3	Provide information about instructor/facilitator and their availability
1.4.1.4	Allow for predetermined maximum number of attendees
1.4.1.5	Track and display count of committed attendees
1.4.1.6	Track and display remaining permitted attendees
1.4.1.7	Allow for predetermined maximum number of sites
1.4.1.8	Track and display count of committed sites
1.4.1.9	Track and display remaining permitted sites

1.5 Event clearinghouse component

As system users see a need for pre-scheduled events coordinated among a large number of facilities and administrators, the concept of a virtual location for brokering of events becomes attractive. Such a clearinghouse could serve as a way that event coordinators might let others know the specifics of events they are planning (a certain class with a specific sort of content will be offered on a certain schedule for a certain period of time or a specific event will happen one time on a specific day at a specific time).

Such a clearinghouse could also serve as a way for interested parties to find events that meet their specific needs (a school administrator has a certain number of students who need a specific class that is not offered locally). Availability might also include information about participant or site number limitations (the total seats/sites in the class/event, the number requested/registered so far and the number remaining of the total).

1.5.1 Standards for an event clearing house system

A system should enable online interaction for publishing of event information and be capable of linking into all the other systems listed in this standard to include the following:

1.5.1.1	Browser-based access
1.5.1.2	Posting of one-time single events
1.5.1.3	Posting of sequenced or cyclical events
1.5.1.4	Posting of costs to participate in an event
1.5.1.5	Permit system administrator defined fields (no less than 256)
1.5.1.6	Provide for automated multiple time zone accommodation
1.5.1.7	Posting of multiple standard bell schedules related to formal
	educational events
1.5.1.8	Permitting or excluding view of encrypted/secured events such that
	those with permission may see that the events are available and
	those without permission won't even be able to know that these
	events are taking place
1.5.1.9	Posting of all, part or none of the information defined in the
	standards in this document as defined by system administrators
1.5.1.10	Use an ODBC compliant relational database
1.5.1.11	System administrator defined search/reporting capability
1.5.1.12	Posting of facility group affiliation
1.5.1.13	Provide for automated email notification of site
	requests/confirmations
	1.5.1.13.1 Events offered
	1.5.1.13.2 Events needed
	1.5.1.13.3 Event outages
	1.5.1.13.4 Event conflicts
1.5.1.14	Provide for automated site schedule generation to include
	1.5.1.14.1 Events offered
	1.5.1.14.2 Events needed
	1.5.1.14.3 Event outages
	1.5.1.14.4 Event conflicts
1.5.1.15	Provide for event cancellation "drop dead" date policies for events
	to include automated email notifications
	1.5.1.15.1 Minimums not met
	1.5.1.15.2 Facilities conflict not resolved
	1.5.1.15.3 Email notification
1.5.1.16	Provide for links to asynchronous event-related material
	(eLearning)
1.5.1.17	Provide for automated billing
1.5.1.18	Provide for post event evaluations as defined by system
	administrators

2.0 Purpose and Objectives

The purpose of this standard is to establish and define the needs for scheduling to be addressed when purchasing and maintaining scheduling coordination systems.

2.1 Background

The State of Nebraska is about to exceed 300 IP-based videoconferencing facilities within the sectors of K-12 education, higher education, informal education, telehealth, and state agencies. In order for any particular entity to be able to connect to any other particular entity (within or outside their subsector), some software system is required to complete the connection, maintain the connection, and to list the directory of participating entities.

The standards expressed herein is a product of a meeting that took place on February 3, 2006, with input from over 20 representatives from the NITC Technical Panel's Statewide Synchronous Video Work Group, coming from institutions all across the State. It is this unselfish dedication to achieving a common good that makes such a software system possible.

When describing scheduling of teleconferencing events there is a variety of descriptive language expressed by those who use the technology. Depending on how "scheduling" is defined, the need may be described on a continuum from "not needed" to "locally coordinated" to "centrally coordinated".

2.2 Objective

The objective of this standard is to enable all existing and future synchronous distance learning and videoconferencing facilities in Nebraska to achieve interoperability and maintain an acceptable quality of service through scheduled and ad hoc event coordination.

3.0 Applicability

These standards apply to synchronous distance learning and videoconferencing facilities as follows:

- If utilizing state-owned or state-leased communications networks:
 - Any synchronous distance learning facility or videoconferencing application which utilizes state-owned or state-leased communications networks must comply with the scheduling standards listed in Sections 1.1 through 1.5; or
 - The entity must provide, or arrange for, coordination on their behalf through some other entity with the stated capability.

If using state funding:

- All new facilities or applications receiving state funding must comply with the scheduling standards listed in Sections 1.1 through 1.5.
- All existing facilities or applications receiving state funding for ongoing operations must convert to the standards listed in Sections 1.1 through 1.5 as soon as fiscally prudent or upon renewal of any existing scheduling system service contract, whichever comes first.
- These standards do not apply to the following entities:
 - University of Nebraska (relating to the university's academic research mission)
 - Any entity which applies for, and receives, an exemption.

General Statement on Applicability

The Governing board or chief administrative officer of each organization is responsible for compliance with these standards. The NITC will consider adherence to technical standards as part of its evaluation and prioritization of funding requests

3.1 Exemption

Exemptions may be granted by the NITC Technical Panel upon request by an agency or other entity.

3.1.1 Exemption Process

Any agency or other entity may request an exemption from this standard by submitting a "Request for Exemption" to the NITC Technical Panel. Requests should state the reason for the exemption. Reasons for an exemption include, but are not limited to: statutory exclusion; federal government requirements; or financial hardship. Requests may be submitted to the Office of the NITC via e-mail (ocio.nitc@nebraska.gov) or letter (Office of the NITC, 501 S. 14th Street, Lincoln, NE 68509). The NITC Technical Panel will consider the request and grant or deny the exemption. A denial of an exemption by the NITC Technical Panel may be appealed to the NITC.

4.0 Responsibility

An effective program for scheduling standards compliance involves cooperation of many different entities. Major participants and their responsibilities include:

- 1. Nebraska Information Technology Commission. The NITC provides strategic direction for state agencies and educational institutions in the area of information technology. The NITC also has statutory responsibility to adopt minimum technical standards and guidelines for acceptable and cost-effective use of information technology. Implicit in these requirements is the responsibility to promote adequate quality of service and uniformity for information systems through adoption of policies, standards, and guidelines.
- 2. <u>Technical Panel Statewide Synchronous Video Work Group</u>. The NITC Technical Panel, with advice from the Statewide Synchronous Video Work Group, has responsibility for recommending scheduling standard policies and guidelines and making available best practices to operational entities.
- 3. <u>Agency and Institutional Heads</u>. The highest authority within an agency or institution is responsible for interoperability of information resources that are consistent with this policy. The authority may delegate this responsibility but delegation does not remove the accountability.
- Information Technology Staff. Technical staff must be aware of the opportunities and responsibility to meet the goals of interoperability of information systems.

5.0 Related Documents

- 5.1 Statewide Synchronous Video Work Group Charter: http://www.nitc.state.ne.us/tp/workgroups/video/charter.pdf
- 5.2 Glossary of Technical Terms http://www.nitc.state.ne.us/itc/citizens/glossary.htm

NITC 7-403 Scheduling Standard for Synchronous Distance Learning and Videoconferencing

Introduction:

On Tuesday, April 8, staff from ESU 10 in Kearney presented the NITC Technical Panel with a request for waiver from NITC Standard 7-403 on behalf of 38 schools in ESUs 10 and 11. The NITC Technical Panel tabled the request until their May 13, 2008 meeting, pending further information and discussion.

The objective of the 7-403 standard is to "enable all existing and future synchronous distance learning and videoconferencing facilities in Nebraska to achieve interoperability and maintain an acceptable quality of service through scheduled and ad hoc event coordination". The standard's technical requirements state that any statewide software system for videoconferencing and video distance learning must include five separate components: 1.1 Hardware Control; 1.2 Event Logging; 1.3 Facilities Coordination; 1.4 People Coordination; and 1.5 Event Clearinghouse. Pursuant to LB 1208 (2006), the State of Nebraska Office of the CIO competitively bid the statewide software scheduling system based on the NITC standard and awarded the statewide contract to the Qwest Corporation/Renovo Software in November of 2006. The Distance Education Council, created by LB 1208, is tasked with the administration of this software for education entities and was allocated over \$1 million by the Legislature to purchase, install and support the system. Support for ongoing maintenance of Renovo software licenses is also provided by the Legislature to the Distance Education Council.

The Renovo software system is currently being used by 92 K-12 entities in northeast Nebraska, approximately 37 K-12 entities in southwest Nebraska, and three community colleges. This request for waiver, if approved, would allow the 38 schools in ESUs 10 and 11 to have partial or full exemption from the standard over a temporary or permanent duration of time. If the waiver is denied, the entities would be required to comply with the standard if A) they use Network Nebraska for Internet or backbone transport; and B) if their new or existing facilities or applications use state funding.

Since this issue of interoperability between codecs and the use of such a clearinghouse and device control system extends far beyond these 38 schools in south-central Nebraska, the NITC Technical Panel is seeking your input and comments prior to a public work session which has been scheduled for Friday, May 2, 9:00am-11:00am, in Lincoln. Entities may respond by e-mail by submitting questions, clarifications, or by providing comments of a pro, con or neutral and informative nature. The comments will be synthesized into a document that will assist the NITC Technical Panel to act on the waiver request at their regularly scheduled meeting on Tuesday, May 13, 2008 at 9:00am.

Responses to this solicitation should be addressed to rick.becker@nebraska.gov and rick.becker@nebraska.gov and rick.gov and rick.gov and rick.gov and rick.gov and rick.gov<

Supporting documents:

ESU 10 Waiver Request http://www.nitc.state.ne.us/tp/meetings/documents/20080408/waiver_7-403_ESU10.pdf
Standard 7-403 http://www.nitc.state.ne.us/standards/video/SchedulingStandards_20060501.pdf
State Contract-Qwest/Renovo http://www.nitc.state.ne.us/materiel/purchasing/contracts/pdfs/22707(o4)awd.pdf
4/8/08 Technical Panel Meeting Agenda http://www.nitc.state.ne.us/tp/meetings/agenda/tpagenda20080408.html

NITC 7-403 Scheduling Standard for Synchronous Distance Learning and Videoconferencing

Background information:

- 1. 79-1233 The CIO shall bid for such (distance education) equipment and software and shall allow educational entities as defined in section 79-1332 to participate in such statewide leasing or purchasing contracts.
- 2. 79-1336 The (equipment) reimbursements may include installation costs for such hardware or software. Applications shall be accepted by the department beginning in the first year that the school district or the educational service unit **accesses Network Nebraska** and ending June 30, 2013.
- 3. 79-1335 The Distance Education Council shall only provide assistance in brokering or scheduling courses to educational entities that have **access to Network Nebraska**.
- 4. 79-1332 (5) Qualified distance education course means a distance education course...for which all of the participating educational entities are required to have **access to Network Nebraska**;
- 5. 79-1248 The duties of the Distance Education Council (ESU Coordinating Council, as of 7-1-2008) include: (6) Compliance with technical standards as set forth by the Nebraska Information Technology Commission and academic standards as set forth by the State Department of Education related to distance education; (8) Scheduling and prioritization for access to Network Nebraska by educational entities in cooperation with the Chief Information Officer and using scheduling software or scheduling services which meet any applicable standards established by the commission;
- 6. NITC Standard 7-403 includes five components: 1.1 Hardware Control; 1.2 Event Logging; 1.3 Facilities Coordination; 1.4 People Coordination; 1.5 Event Clearinghouse.
- 7. NITC Standard 7-403 Applicability reads: These standards apply to synchronous distance learning and videoconferencing facilities as follows:
 - A. If utilizing state-owned or state-leased communications networks:
 - a. Any synchronous distance learning facility or videoconferencing application which utilizes state-owned or state-leased communications networks must comply with the scheduling standards listed in Sections 1.1 through 1.5; or
 - b. The entity must provide, or arrange for, coordination on their behalf through some other entity with the stated capability.
 - B. If using state funding:
 - a. All **new** facilities or applications receiving state funding must comply with the scheduling standards listed in Sections 1.1 through 1.5.
 - b. All **existing** facilities or applications receiving state funding for ongoing operations must convert to the standards listed in Sections 1.1 through 1.5 as soon as fiscally prudent or upon renewal of any existing scheduling system service contract, whichever comes first.
- 8. The Nebraska Legislature, through LB 1208, provided approximately \$1,008,000 to purchase the statewide scheduling software, as administered by the Distance Education Council. This amount was based on the projected cost of three codec licenses, installation, maintenance and hosting services, for every public high school, ESU and public college campus in the State. Additional Legislative disbursements were described in the LB 1208 fiscal note to help pay for ongoing maintenance.

Timeline of Development for Standard 7-403:

- 1. LB 1208 was introduced on 1-18-06, heard in the Education Committee on 2-13-06, and passed by the Legislature on 4-13-06;
- 2. The Technical Panel's Statewide Scheduling System work group met all day on 2-3-06 to begin drafting the NITC standard, in response to LB1208 (K-12, higher ed, telehealth, CIO, NET, and military were all represented):
- 3. A draft of the statewide scheduling standard was presented to the Technical Panel on 3-13-06, put out for 30 days public comment (no comments) and was approved by the NITC on 5-1-06:
- 4. RFP1683Z1 was released on 10-3-06 and awarded to Qwest/Renovo on 11-20-06. There were four bidders and the DEC Executive Director and two ESU staff were included on the six-member bid evaluation team;
- 5. Configuration of the Renovo Clearinghouse and codec control system continued through spring 2007;
- 6. Phase I implementation of Renovo was completed in August 2007 with 97 entities in northeast Nebraska.

Synopsis of arguments presented by ESU 10 for non-compliance with NITC Standard 7-403:

- 1. The Applicability of the Standard is too broad. There are questions whether it should apply to all of the following devices or clusters of devices:
 - A. Triple-codec configurations (e.g. Cytek, Dascom configurations);
 - B. Single codec with internal MCU (e.g. BNI, Sony GS-70, Lifesize, Polycom 8000/9000);
 - C. Single codec with no internal MCU (e.g. Tandberg, Polycom, Sony);
 - D. Desktop, Laptop videoconferencing (e.g. any of a variety of desktop videoconferencing configurations)
 - E. External MCU or bridge (e.g. Codian, Polycom MGC-100)

NOTE: The Technology Refreshment meeting of 3-18-07 assigned the following tasks:

- a. The Distance Education Council and the Nebraska Department of Education will review the minimum equipment (e.g. codec, laptop) and video viewing requirements (e.g. size of display) to comply with Rule 10 "Simultaneous Presence": 004.04D1 Synchronous Course Option: Synchronous courses are those multi-site or distance learning courses in which the teacher and student(s) are simultaneously present; can both see and hear one another; and questions may be answered and instructional accommodations made immediately.
- b. The NITC Technical Panel will be prepared to review and update the Standard 7-403 (Statewide Scheduling Standard for Synchronous Distance Learning and Videoconferencing), especially in the applicability section: Any synchronous distance learning facility or videoconferencing application which utilizes state-owned or state-leased communications networks must comply with the scheduling standards listed in Sections 1.1 through 1.5.
- 2. There are additional cost implications. As classroom videoconferencing devices proliferate beyond the three codec licenses allocated and purchased by the Distance Education Council, districts and colleges are having to purchase their own licenses (e.g. \$570/codec, \$103 installation, \$74 ongoing maintenance).

NOTE: The scheduling software costs are not an eligible service under the Federal E-rate program, but they are an allowable cost under the special state aid Technology Allowance provision for equalized schools. Also, high schools that exchange qualified distance education courses are eligible for up to \$1000 for each semester class sent or received under Neb. Rev. Stat. 79-1337.

3. The chosen software company, Renovo, did not have internal MCU codec control capabilities at the start of the 2007-08 year. Through the Technology Refreshment Clause meeting of March 18th, Renovo was asked by the CIO to test and verify that their software can perform this function by July 1, 2008, in time for it to be purchased by Phase I and II entities.

NOTE: Further discussions with Renovo reveal that software control of Lifesize and Polycom internal MCU codecs will be ready by June 1, 2008, and BNI functionality could be developed by July 1, 2008 if an order for BNI codec licenses is placed.

4. ESU 10 staff contend that the Renovo Hardware Control component is unnecessary; that classroom teachers can manually start classroom conferences on a daily basis simply by using the software and hand-held remote that comes with each codec.

NOTE: Although technically true, the intent of the NITC standard and subsequent software purchase was to unite and integrate course postings and device control into a single system and to interconnect codec devices from all over the State, regardless of manufacturer or location. Senator Stuhr, during floor debate on LB 1208, directly referred to this statewide "connectiveness" as something that was needed to be achieved "between the K-12 school districts, the ESUs, the community colleges, the postsecondary schools, and the universities".

NITC Technical Panel Options:

1. Deny the waiver request.

Implications: All entities connected to Network Nebraska for the 2008-09 program year and beyond would be required to utilize the Renovo software comprised of all five components (i.e. 1.1 Hardware Control; 1.2 Event Logging; 1.3 Facilities Coordination; 1.4 People Coordination; 1.5 Event Clearinghouse). K-12 districts would presumably have their first three codecs licensed and provided by the Distance Education Council and any codecs over and above the first three would be paid for by the school district. Higher education participation in the Renovo system, with the exception of dual credit origination codecs (which may be funded by the Distance Education Council), would be funded by the higher education entities.

- 2. Grant a temporary (2008-09) waiver of all five standard components to ESU 10 and ESU 11 area schools.

 Implications: More education entities would probably follow with waiver requests of their own. For the 2008-09 school year, this would create an environment where ESU 10/11 school classes are not listed in the clearinghouse and codecs are controlled manually whereas other schools' classes are posted to the Renovo Clearinghouse and their codecs are controlled by the Renovo scheduling software. This may present an impediment to the interregional posting and exchange of courses between groups of schools that are software-scheduled and those that are not.
- 3. Grant a permanent waiver of all five standard components to ESU 10 and ESU 11 area schools.

Implications: More education entities would probably follow with waiver requests of their own. For the foreseeable future, this would create an environment where ESU 10/11 school classes are not listed in the clearinghouse and codecs are controlled manually whereas other schools' classes are posted to the Renovo Clearinghouse and their codecs are controlled by the Renovo scheduling software. This may present an impediment to the interregional posting and exchange of courses between groups of schools that are software-scheduled and those that are not.

4. Grant a <u>temporary</u> (2008-09) partial waiver of only the hardware control component to ESU 10 and ESU 11 area schools.

Implications: All ESU 10 and ESU 11 area schools would be required to utilize the four components of the Renovo software (i.e. 1.2 Event Logging; 1.3 Facilities Coordination; 1.4 People Coordination; 1.5 Event Clearinghouse) for the 2008-09 year, with the exception of the 1.1 Hardware Control. Other entities would be able to see the classes offered by the ESU 10 and ESU 11 schools in the Clearinghouse; the ESU 10 and ESU 11 schools just wouldn't have their codecs controlled by the Renovo software. In July 2009, the ESU 10 and ESU 11 area schools would be required to comply with the hardware control component.

- 5. Grant a <u>permanent</u> partial waiver of only the hardware control component to ESU 10 and ESU 11 area schools. **Implications**: All ESU 10 and ESU 11 area schools would be required to utilize the four components of the Renovo software (i.e. 1.2 Event Logging; 1.3 Facilities Coordination; 1.4 People Coordination; 1.5 Event Clearinghouse), but not the 1.1 Hardware Control. Other entities would be able to see the classes offered by the ESU 10 and ESU 11 schools in the Clearinghouse; the ESU 10 and ESU 11 area schools just wouldn't have their codecs controlled by the Renovo software.
- 6. Grant a <u>permanent</u> partial waiver of only the codecs of ESU 10 and ESU 11 area schools that exceed the three per site funded by the DEC.

Implications: Requires full software utilization and licensing of the first three codecs of every school district but removes the standards requirement for the additional codecs and therefore, the fiscal impact.

Possible follow-up Work, depending upon the Technical Panel decision of 5-13-08:

- 1. Revise the 7-403 Scheduling Standards to apply only to specific codec devices and situations (e.g. recurring course exchange over static IP codecs and not laptop/desktop videoconferencing)
- 2. Revise the 7-403 Scheduling Standard to include four of the five components but not require the hardware control component.
- 3. Convert the 7-403 Scheduling Standard to a Guideline.
- 4. Amend the Scheduling Software contract with Qwest/Renovo to include a deliverable and cost for a Clearinghouse-only product listing.

Technical Panel of the Nebraska Information Technology Commission

May 2, 2008

Comments Received

Educational Service Unit #10 request for waiver from NITC 7-403 (Scheduling Standard for Synchronous Distance Learning and Videoconferencing)

Yvette Holly, University of Nebraska Medical Center	1
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John Fiene, University of Nebraska-Omaha	21

From: Yvette Holly [yholly@unmc.edu] Sent: Friday, April 25, 2008 1:08 PM

To: Rolfes, Tom

Cc: Arnold J Bateman; Walter Weir/UNCA/UNEBR%UNIVERSITY OF NEBRASKA

Subject: Re:

Tom,

In reviewing ESU's request for waiver, I suggest the NITC Technical Panel grant ESU a temporary waiver.

Yvette

Yvette Holly, Assistant Vice Chancellor Information Technology Services University of Nebraska Medical Center 985030 Nebraska Medical Center Omaha, NE 68198-5030

email: yholly@unmc.edu phone: 402-559-7253 fax: 402-559-5579 **From:** Carlson, Craig [mailto:CCarlson@mccneb.edu]

Sent: Wednesday, April 23, 2008 9:43 AM

To: Rolfes, Tom

Subject: RE: Waiver request

Hi Tom.

I have reviewed the documents available for this request.

I would fully support the request by Educational Service Unit #10 to not use the Renovo Scheduling System.

Metropolitan Community College has used the Renovo system for several years with good success. As our system moved from automated and dedicated room system to the IP Cart solution, the need and usefulness of the Renovo system dropped drastically. We now have taken the Renovo system off line and have not renewed our support contract. As a result our Just-In-Time use has risen and we no longer have connection conflicts to deal with. We use our in-house, on line, room scheduling system to prevent conflicts and provide use logs. The CODECs do keep connection logs as well.

Our IP Cart solution is much like ESU #10 in that each cart has the internal four port multipoint software activated. This significantly lowers the cost over the "3 and 1" CODEC solution. The Renovo software that MCC had, DID allow for multipoint connection, so I am not sure why they would indicate they were working on an upgrade for the State system (perhaps integration issues).

I would think that it is also possible for ESU #10 to make their own connections within their area and still be in the Renovo Database allowing others to connect to them via the Renovo Scheduler. (Inclusion in the database may be a cost issue).

I would be glad to discuss this in more detail if you would like.

Craig C. Carlson, NCE
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COMMENTS ON TRI-VALLEY DISTANCE EDUCATION CONSORTIUM REQUEST FOR EXEMPTION FROM STATE SCHEDULING SYSTEM

4/28/2008

Introduction:

Central Community College (CCC) supports the goals outlined in LB1208 legislation to develop a statewide video system for education. We would like to express concern and offer an alternative to the Tri-Valley Distance Education Consortium (TVDEC) request for an exemption from the LB1208 scheduling requirements. If the NITC wishes to approve a postponement but not an exemption, CCC would support moving the TVDEC changeover to Network Nebraska to July 1, 2009. This would allow the current year to be used as an opportunity to find solutions for the TVDEC concerns.

Issues as we understand them:

CCC understands TVDEC concerns:

- 1. Scheduling software requirement.
 - a. Cost related to licenses for codec devices
 - b. Impact related to requirement to join Network Nebraska
 - c. Changes in video conferencing technology
- 2. The TVDEC feels they need more time to understand how the scheduling system will affect their current equipment.
- 3. The TVDEC DEC advisory team needs more time to identify measureable goals and data collection and study.

Other questions:

- 1. For courses to receive high school credit, the classrooms must have continuous presence. The point-to-point nature of connections outlined by TVDEC is continuous presence; however, there is a question by some about whether the network TVDEC proposed will meet this requirement for more than one site.
- 2. If a school in Network Nebraska wanted to send or receive a course to a non-Network Nebraska school, is the school eligible to use that course for its state reimbursement under LB1208?

It is our understanding the Renovo Company and BNI equipment manufacturer are in communication and are working on solutions for the equipment control. The TVDEC and others are waiting for that control to be tested and proven.

As part of the TVDEC presentation to the NITC Tech Board TVDEC pointed out several important points about changing directions in video conference technology.

Desktop and open source software is used to connect to conferences these connections
designed as one-to-one or one-to-bridge systems. There is still a need to schedule the bridge
connection. The student then needs to find a point from which to connect. The connection
may be from a classroom or from their home. In either case, the user needs to be assured the

- equipment is available for their use and the instructor needs to be assured the students can connect.
- Additionally, the use of the roll-about or portable carts presents a clearly cost-effective
 alternative to the dedicated classroom. These carts are one-third the cost of a dedicated room
 and allow the technology to come to the class rather than the class to come to the technology.
 Again, the issue is to make sure the equipment is available in the scheduled space, is
 connected to the network and open to the students/meeting.

Under the LB1208 legislation, the expressed goal is to encourage sharing resources and improving educational opportunities. To carry this out, the NITC is to bring the education community and public agencies of the state together into one network with common standards, scheduling and related tasks. From the presentation by the TVDEC, we understand schools tend to connect to each other in point-to-point or classroom-to-classroom situations. The need for scheduling software is less in these situations but still relevant and important.

Discussion:

Prior to the Northeast conversion, CCC was a member of the following video network consortiums:

- Crossroads (ESU 7)
- TVDEC, Tri-Valley North (ESU10)
- TVDEC, Tri-Valley South (ESU 11)
- Central Nebraska Distance Education Consortium (ESU 9)

Under the new enlarged network, TVDEC represents half of the counties in the CCC service area. Three additional counties are in the Mid-Plains Community College service area and one county is in the Northeast Community College area.

Video conferencing and delivering courses to the area high schools is an important part of the CCC mission. It is the mission of Nebraska schools and the community colleges to offer educational events to enhance educational opportunities for students, particularly students who are time and place bound. Network Nebraska and Renovo software are the tools to accomplish this.

With the adoption of LB1208 we moved forward with enthusiasm to plan and develop programs to take advantage of a single video network. Meanwhile, the economy and cost of fuel has made the network an even more important tool for CCC to serve students who are time and place bound. We would like to expand our course offerings in the evenings and summers at the high schools. Automated equipment in the right place at the right time is important to making this possible.

The table below shows, besides our six campus sites each year, our connections to roughly 50 sites. This is in addition to outside agencies and meetings scheduled between the community colleges and other organizations.

COURSES DELIVERED BY CENTRAL COMMUNITY COLLEGE TO AREA HIGH						
SCHOOLS AND FOCUSED ON EARLY ENTRY STUDENTS						
	03-04	04-05	05-06	06-07	07-08*partial	
					year	
Credit generated	3861	3471	2442	2576	2362	
Different courses	59	42	30	31	22	
Sites	53	54	60	55	49	

INTERNAL TO CENTRAL COMMUNITY COLLEGE CAMPUSES AND CENTERS					
Credits generated	1623	2367	4276	4492	4022
Different courses	19	29	33	58	58

We use our 12 classroom video network 50 weeks a year, 5 days a week (sometimes 6) from 7:30 AM to 10:00 PM. When we are not using the system for classes, we use the systems for other purposes (such as meetings and staff training). With such a large network we must have an automated system to reach remote sites otherwise scheduling becomes an overwhelming task. We must know and be assured that equipment is in the right place at the right time and that it will perform at the requested time. Hardware control, event logging, and facilities scheduling are keys to orderly operation of a video network.

Conclusion:

If the exemption were approved, CCC would have to operate in three consortiums and schedule in at least two different networks:

- TVDEC- Tri-Valley asking for the exemption
- ESU 7- has already joined Network Nebraska
- ESU 9- has been moved to the 09-10 change over

In addition, we have concerns about how effective and efficient the interconnection of the three video networks would work.

An exemption from the standards would:

- 1. Not carry out the goals of the TVDEC or the NITC
- 2. Not allow us to test and prove all the systems meet the state video and audio standard.
- 3. Not require the Renovo Company to work with BNI equipment manufacturer to prove out controls of the codecs.
- 4. Set a dangerous precedent for opting in and out of a statewide network to support not only K-12 but also postsecondary education to rural Nebraska.

Questions:

Will classes sent or received on BNI codec systems (assuming they cannot be scheduled) be ineligible for incentives even though they were purchased before LB 1208 was passed but are still used for distance learning?

If BNI devices are now compliant with NITC standards but Renovo is unwilling to update the scheduling software so that BNI Systems can be scheduled and controlled, unless they (Renovo) are compensated, whose responsibility will it be to cover the costs to have Renovo update their software?

At the time that RFP1683Z1 was issued wasn't it known that BNI systems were in use by a considerable number of schools, ESUs and other entities including: Henry Doorly Zoo, Homestead National Monument and the Joslyn Art Museum?

Why wasn't RFP1683Z1 written with requirements that all BNI codec systems be able to be scheduled and controlled by the chosen scheduling and device control system, since it was known that there were a large number of BNI systems in use in the state and since it could have been anticipated that these systems would be able to be updated if they didn't meet standards at the time the RFP was written?

Will software programs such as Polycom's PVX be required to be licensed and controlled by Renovo?

Isn't it very likely that Polycom's PVX and other software codecs will continue to be improved and gain popularity but will not be able to be used for distance learning because NITC policy will prevent the use of these devices unless someone pays Renovo to write the code to schedule and control them?

Are MCU Bridges considered to be codec devices and, if so, do they have to be licensed and controlled by Renovo if the entities that own them are members of Network Nebraska? If this is the case, isn't this placing a big financial burden on these entities?

Will all codec devices owned by libraries, hospitals, colleges and the State have to be licensed and controlled by Renovo?

Has the State licensed all of its codec devices and notified the Distance Education Council of these licenses?

Does deciding not to license all codec devices also mean that the offending entity cannot be a member of Network Nebraska?

Must schools and other entities that agree to have their codec devices licensed with Renovo also have those devices controlled by Renovo, or can they choose to use Renovo for clearinghouse services only and/or setup all their reservations as "No Transmit" conferences?

Comment:

It is considerations of these types that guided the DEC Advisory Committee to pass policies concerning the use of the scheduling system. The workgroup that wrote the policies were all distance learning coordinators that deal with distance learning issues on a daily basis. The policies that they wrote, and that both the Advisory Committee and the Distance Education Council approved, recognize the importance of scheduling and clearinghouse services but do not agree with a requirement that every device must be licensed and controlled by Renovo. I urge the NITC Tech Panel to amend its policy and work with the Distance Education Council Advisory Committee to arrive at a new policy that responds to the requirements of the legislation but does not stifle innovation and the use of new technology.

Gordon Roethemeyer
Distance Education Council

Thoughts and Comments...

If you truly want a statewide sharing of educational opportunities for all Nebraska learners then the cornerstone is now in place for that reality to happen in our state.

The Renovo Software System is currently being used by 92 K-12 entities in northeast Nebraska, approximately 37 K-12 entities in southwest Nebraska, and three community colleges.

Having everybody in the State of Nebraska on a single scheduling and clearinghouse system makes perfect sense. One system makes it much easier for everyone to know what is available or not available for sites and classes. If you want to do a session with someone whom is not using the State of Nebraska scheduling and clearinghouse software for your classes or video conferencing, you will have to contact that site person each time; you lose reliability, confidence and over-all use due to lack of far-end site knowledge.

For all Nebraska entities, a Single System for Scheduling, Reporting, Conflict Checking, Clearinghouse and Trouble shooting. Everything resides under one database – all knowledge is in one location, providing no guessing and user success!

For any Nebraska post secondary to have access to a Nebraska K-12 School District to offer curriculum, content and/or educational opportunities the notion of different scheduling systems between geographic locations or ESU's is absurd. "Who are you going to call?

If people are not scheduling their session(s) utilizing the current scheduling software, then you run the risk of not being able to make a connection because someone else has manually turned on that codec for another purpose. This causes frustration on several levels! First of all surprise; then whose problem is it, originate site or receive site, who gave administrative permission or not, how to turn on the room, no participants, there's more! Personally, this has happened to me several times over the past months.

Sometimes a common ground or single piece is necessary for all the parts to work together and be successful!

Nigel Buss

From: John Stritt [jstritt@esu10.org]

Sent: Monday, April 28, 2008 2:07 PM

To: Rolfes, Tom; Becker, Rick

Subject: NITC Waiver Request Followup

As you will be meeting on Friday to review the waiver request, I wanted to share a few additional thoughts regarding that request.

In our presentation, we sought to address the NITC policy requiring mandatory scheduling from several angles. These included technical, cost, and Network Nebraska participation. I believe there is a fourth item which should be considered which is the intent behind LB1208.

Technical - As the Technical Panel is for providing analysis and recommendations to the NITC, your review of this waiver should be mostly influenced from that angle. Questions related to the policy requirement could include:

- Does the purchased software meet all five components as outlined in standard 7-403?
 - o What is the standard for or meaning of "hardware control"?
 - Is the only way to do event logging, facilities coordination, and people coordination through a scheduling program?
 - o Is the "event clearinghouse" a function that must be tied directly to a scheduling program?
- What implications are their for defining "some other entity with the stated capability?"
 - o Is a bridge with management software "fit" the standards as outlined in 7-403?
 - o Are their other scheduling or management programs that "fit" the standards?
 - What standard is there regarding a clearinghouse?
- How is a scheduled device unit determined?
 - Are the video and audio standards clearly defined to identify all devices that should be scheduled as CODECS?
 - o Are there CODECS that could be exempt because they are not used for class purposes?
 - o Are all Network Nebraska members responsible for having ALL devices scheduled?
 - o If not, which members are exempt and why?
- Are there CODECS that "must" be controlled to allow for operability?
 - How does the 3 in 1 polycom system differ from the internal MCU when connecting to multiple sites?
 - Will the scheduling system override and thus solve a problem if an unscheduled "ad hoc" session is going?
 - Should all sessions be required to be scheduled events?

Costs - As was shared, both post-secondary and secondary schools may be involved in some up front license costs as well as ongoing maintenance fees.

- Who is responsible to pay additional costs for "extra" expenses not covered as part of the original contract?
- As other CODECS including bridges and other new codecs are developed/released, who will be responsible for extra costs to meet code and license these devices?

Network Nebraska Participation – What impact will the current policy have on participation?

• What is the definition of a Network Nebraska participant?

- When can an entity participate/join Network Nebraska but not be responsible for meeting the scheduling requirement?
- If entities such as post-secondary or private schools are not eligible for incentives, what are the reasons for licensing "all" of their codec devices?
- Will all eligible agencies who elect to participate and receive incentives maintain the ongoing requirements beyond the "four year" commitment?

LB 1208 Intent – The "eyes of the beholder" go a long way in trying to see what the intent of LB 1208 might have been. What was the intent?

- Was the intent to have a backbone that would allow and encourage participation of "all" non-profit agencies?
- How does control of a network work both for and against the ongoing changes in technology?
- What was meant by "connect" all schools allowing them to share classes?
- Does connect mean technically schedule or does it mean provide information so that schools are aware of and will make arrangements/agreements for exchange of a course?

In 2006, the adoption of the policy may have looked like the correct way to start out with the network. The policy does serve as a filter. Filters are not new, but need to be revisited and changed when the costs are greater then the benefits. The scheduling program does provide a needed if not required technical service for the 3 in 1 systems as it would be a technical nightmare to have each site trying to connect together on a multiple entry. For other devices, it is simply a software program to override a service that is currently part of that system.

Let the schools decide the benefit of using the scheduling software based on the technology they own or wish to purchase. If schools know of educational opportunities and feel that they will benefit their students, they will review what the necessary technical arrangements might be to participate in that opportunity.

What our schools should be looking for are the long term benefits based on educational opportunities rather then buying licenses to acquire a short term financial outcome.

John Stritt
Tri-Valley Distance Education Director
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308-233-9066 (fax)
jstritt@esu10.org

Tom

It is my concern that we will handicap the use of video conferencing in schools if we restrict it to require all video conferencing units be scheduled and controlled. If this is the case then how are we to handle the unsupported equipment in schools that Renovo can't address. Items such as the i2eye video phones that deaf students us when receiving video interpreting services through CSD, which frankly I hadn't even thought about until last week. One of my schools has used such a device and I am sure they aren't wanting to pay for a license for that student to receive services they are already receiving.

I have felt that when the RFP was written for the scheduling software that it only looked at those units in the Northeast and Southwest Distance Learning consortium because they were either upgrading at the time or the first to be upgraded. I think as a state we failed to look at the needs of all schools coming on including those in years 2 and 3 and the BNI solutions which comprise a large portion of the State.

I also run the Polycom PVX software on my laptop and have no inclination of having Renovo control any aspect of my work machine nor do I want to address the firewall issues dealing with such control.

I would just like the NITC to reconsider the standards being proposed and to take the least restrictive stance not the most restrictive as there will be a number of possibilities our groups are thinking of how this may affect the learning of that student(s).

~~~~~
Craig Peterson
Media/Technology Coordinator
Network Administrator
COOP Coordinator
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From: Steven Stortz [mailto:sstortz@clnorfolk.org]

Sent: Monday, April 28, 2008 3:10 PM

To: Rolfes, Tom

Subject: Seeking input: NITC Scheduling Standard for Synchronous Distance Learning and

Videoconferencing

Tom,

As you and I talked at NETA, my thoughts are that the districts are receiving reimbursement for equipment, and should therefore conform to the requirements set forth by the committee. The choice to provide equipment beyond the initial room, is just that — a choice. They are responsible for the decision to purchase the equipment with the realization that in order to use it, they must conform to the set guidelines. For this all to work we need everyone on the same page.

Steve

Steven Stortz
Media Specialist
Christ Lutheran School

From: Wayne Bell [mailto:wbell@esu10.org]
Sent: Monday, April 28, 2008 3:15 PM
To: rickbecker@nebraska.gov; Rolfes, Tom
Cc: Ron Cone; John Stritt; buhing@esu1.org
Subject: Waiver form standard 7-403

Dear Sirs:

Thank you for allowing comment on the ESU 10 request for waiver of NITC Standard 7-403. I'm sure that Ron Cone and John Stritt will deal with the technical side of this issue. I just have some brief thoughts about statewide connectivity and the role of the NITC toward that end. It has been interesting to sit back and listen to people debate. There seems to be some blurred lines as to responsibility and control between the NITC and the DEC. More discussion will need to be held between these two entities to gain clarity as to roles and purposes.

If the legislative session would have been 90 days rather than 60 this whole concept of connectiveness would have been addressed and better defined. I have a feeling it will be addressed next year unless some sort of consensus is reached in the interim. When Senator Stuhr debated LB 1208 on the floor it is my opinion that she wanted a statewide connection. I can't remember it being mentioned that scheduling was an essential requirement to achieve this end. I'll need to do some historical research. That rigid train of thought though seems to be the overriding impetus in the interpretation of this standard.

Connectiveness can be viewed as the network that provides the opportunity to share courses. A data exchange of courses or clearinghouse also provides connectiveness as this supports the exchange of offerings to schools statewide. Device control, codecs, seems to add a technical piece that can or can not add convenience and functionality to a network, but it is not essential. It appears that Renovo considered upgrading their system to better meet needs but have not yet, to my knowledge, accomplished that task. To rely on this device as the controlling factor for a statewide system seems illogical.

Those who deal with standards in the world of distance education have a tough job. Change is constant and what was good 6 months ago can be archaic now. My request is that some solution be found for this issue that is not buried in rigidity and bureaucracy. This whole area of technology is fluid and all set and implied standards need to assure interoperability but must be flexible enough to embrace the newest of advances that continually improve opportunities for school districts and ESUs. What was perfect for the northeast one year ago is far less than perfect for central Nebraska this year. We need to stay ahead of the curve at our level and not get bogged down in the morass of exhaustive rule and regulation. To best meet the needs of the school districts of this state we need to find a process to think forward at all times pointed towards the future and not be constrained by the past and present. To do this will require excellent leadership and great flexibility, but the minds in this state are up to the challenge.

This waiver is a step in the right direction to keep people connected and moving forward. We need to embrace new ideas – not repel them!

Thanks for allowing me to respond.

Wayne A. Bell, Administrator Educational Service Unit 10

From: Peters, B. J. [mailto:BPeters@ESU13.ORG]

Sent: Monday, April 28, 2008 2:07 PM

To: Rolfes, Tom

Subject: NITC Scheduling standard for distance learning

Tom.

Some thoughts on the ESU #10 request for exemption from the state scheduling system.

My biggest fear is that if allowed we start heading back towards the days of where we were before and that is a regional approach to distance learning instead of a statewide network of interoperability.

I understand that no one is being forced to use the state scheduling system but I don't want to see entities opting out of using the Renovo system and paying licensing fees but still standing in line to collect the incentive money from LB1208. We can't have it both ways. There at least needs to be some pricing distinction for placing courses in the clearinghouse but not being scheduled.

I realize that the video conferencing industry is introducing codec-less IP systems all the time but I don't see those as being used in a day-to-day class setup. The state may need to come up with some kind of distinction between simple desk top, point-to-point systems and the systems being used by our schools in delivery of day to day classes.

B.J. Peters Coordinator Western Nebraska Distance Learning Consortium Educational Service Unit #13 4215 Avenue I Scottsbluff, NE 69361

Phone: 308-635-3696 Fax: 308-635-2729 Cell: 308-631-3932

Web Page: http://dl.esu13.org/

From: Shirley Schall [sschall@esu15.org]
Sent: Monday, April 28, 2008 3:34 PM

To: Becker, Rick; Rolfes, Tom; Advisory Committee; Bob Uhing

Cc: Chris Petroff; John Stritt; B.J. Peters; Nigel Buss; Beth Kabes; Diane Wolfe; Charles Doyle

Subject: Re: Questions & Comments on Standard 7-403

I have just a couple counter-points:

It is my understanding that BNI has recently contacted Renovo about bringing the BNI equipment up-to-date with the scheduling standard. It would only be good business practice on Renovo's part not to work on the BNI upgrade unless they had a firm commitment that the software would be purchased and used on the BNI machines. With the exemption request by Tri-Valley--which could, if successful--then bring a request by Southeast, the company cannot know if one or one hundred and fifty codecs are in question.

If we are going to have a true, statewide network, then all members should participate. If you vote to allow the BNI sites not to participate in the statewide scheduler, then do we just forget the standards? BNI knew the day of the codec evaluations at UNK that they were out of the running if their equipment could not be scheduled through software yet to be determined at that time. Tom Rolfes made sure they understood that this was a criteria for selection, and their representatives acknowledged the fact. And as for the Zoo, Homestead, and other locations using BNI, that is because, as a Zoo employee stated last week at the NDLA convention, they are "a part of the Southeast Network." It is not because they evaluated the products from a lot of equipment vendors and chose the BNI system. Were they not given the equipment as part of a grant?

If we parcel out non-participating networks here and there, and allow everybody--compliant or not--to get incentive money, we had better come up with a name other than "Network Nebraska."

Shirley Schall, Director Southwest Nebraska Distance Education Network

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> Here are my questions and a comment.
>
> Questions:
> Will classes sent or received on BNI codec systems (assuming they
> scheduled) be ineligible for incentives even though they were
> purchased before LB 1208 was passed but are still used for distance learning?
> If BNI devices are now compliant with NITC standards but Renovo is
> unwilling to update the scheduling software so that BNI Systems can be
> scheduled and controlled, unless they (Renovo) are compensated, whose
> responsibility will it be to cover the costs to have Renovo update
> their software?
> At the time that RFP1683Z1 was issued wasn^1t it known that BNI systems
> were in use by a considerable number of schools, ESUs and other
> including: Henry Doorly Zoo, Homestead National Monument and the
> Joslyn Art Museum?
> Why wasn't RFP1683Z1 written with requirements that all BNI codec
> systems be able to be scheduled and controlled by the chosen
> scheduling and device control system, since it was known that there
> were a large number of BNI systems in use in the state and since it
> could have been anticipated that these systems would be able to be
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> updated if they didn't meet standards at the time the RFP was wrItcheical Panel - May 2, 2008
> Will software programs such as Polycom¹s PVX be required to be
> licensed and controlled by Renovo?
> Isn't it very likely that Polycom's PVX and other software codecs will
> continue to be improved and gain popularity but will not be able to be
> used for distance learning because NITC policy will prevent the use of
> these devices unless someone pays Renovo to write the code to schedule
> and control them?
> Are MCU Bridges considered to be codec devices and, if so, do they
> have to be licensed and controlled by Renovo if the entities that own
> them are members of Network Nebraska? If this is the case, isn^1t this
> placing a big financial burden on these entities?
> Will all codec devices owned by libraries, hospitals, colleges and the
> State have to be licensed and controlled by Renovo?
> Has the State licensed all of its codec devices and notified the
> Distance Education Council of these licenses?
> Does deciding not to license all codec devices also mean that the
> offending entity cannot be a member of Network Nebraska?
> Must schools and other entities that agree to have their codec devices
> licensed with Renovo also have those devices controlled by Renovo, or
> can they choose to use Renovo for clearinghouse services only and/or
> setup all their reservations as 3No Transmit2 conferences?
> Comment:
> It is considerations of these types that guided the DEC Advisory
> Committee to pass policies concerning the use of the scheduling
> system. The workgroup that wrote the policies were all distance
> learning coordinators that deal with distance learning issues on a
> daily basis. The policies that they wrote, and that both the Advisory
> Committee and the Distance Education Council approved, recognize the
> importance of scheduling and clearinghouse services but do not agree
> with a requirement that every device must be licensed and controlled
> by Renovo. I urge the NITC Tech Panel to amend its policy and work
> with the Distance Education Council Advisory Committee to arrive at a
> new policy that responds to the requirements of the legislation but
> does not stifle innovation and the use of new technology.
> Gordon Roethemeyer
> Distance Education Council
> --
> Gordon Roethemeyer
> Executive Director
> Distance Education Council
> Educational Service Unit #10
> PO BOX 850
> Kearney, NE 68845
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To: NITC Technical Panel

From: Chris Petroff, CNDEC Director

Date: April 28, 2008

RE: ESU10 Exemption Request

It seems to me we have four separate issues:

- 1. Renovo's business model
- 2. NITC Standard 7-403
- 3. Technology and user preferences
- 4. Validation

Renovo's current business model is based on a licensing and maintenance fee for CODECs. While the scheduling standard lists these requirements, Hardware Control, Event Logging, Facilities Coordination, and People Coordination, I consider these to be an integral part of what I call scheduling/hardware control. Renovo currently offers two main services, scheduling/hardware control and a clearinghouse. Users may opt to use both of these services in an integrated fashion, or one without the other. Renovo licensing has one fee to include both services.

Based on the current Renovo business model, I would recommend that each K12 district be required to license their district based on the 3x1 CODEC pricing. This would provide a district license for the full mesh 3x1, or MCU CODECS, or up to three individual point to point CODECS, to utilize the clearinghouse and/or scheduling/hardware control. I would further recommend that those licensed districts can without any additional licensing, a) utilize Network Nebraska for other video conferencing CODECs that are not Renovo scheduling/hardware controlled, and, b) utilize the clearinghouse for all DL courses. But for any licensed district that desires hardware control of additional CODECs thru Renovo scheduling, an additional license would be required for each CODEC.

The management of such a licensing requirement would be fairly straight forward. All video conferencing districts requesting state funds and/or riding Network Nebraska would be licensed based on the 3x1 pricing. As a district requests hardware control of additional CODECs, a license fee would be applied based on the CODEC.

In review of NITC Standard 7-403, I concur with the goal of statewide inoperability. To that end, ensuring all equipment purchased with the NDE reimbursement monies meets that standard seems reasonable. I am not so sure that the requirement that all video conferencing CODECs on Network Nebraska be licensed, as I have stated above, and as such see the necessity to revise the standard. To date not all CODECs can be controlled, and technology innovations will far out reach the programmers' ability to meet the needs as they arise. In many cases the individual districts may prefer to not use the Renovo scheduler/hardware control, and should not be forced to do so. Now, if these are DL classes that are seeking NDE incentive monies or still validating equipment reimbursements, and no other provision is provided for such validation, the Renovo scheduler and licensing may be the only option.

In regards to the request by ESU#10 to be exempt from NITC Standard 7-403 and licensing for one or more years, if Renovo does not have a proven MCU hardware control solution, AND ESU #10 schools do not plan to use the Renovo Clearinghouse as well, then a temporary exemption should be granted. But if ESU #10 schools plan to use the Renovo Clearinghouse, then I do not think an exemption applies.

Related questions I have are: Can equipment not consistent with NITC Standard 7-403, that is, equipment that can not be controlled, be denied for purchase if NDE reimbursement is to be applied? Or will such equipment be allowed to be purchased, and NDE reimbursement will not apply if that is the case?

From: Ron Cone [rcone@esu10.org]

Sent: Monday, April 28, 2008 4:01 PM

To: Rolfes, Tom; Becker, Rick

Cc: John Stritt

Subject: Standard 7-403 Exemption Request

Others from ESU 10 have already commented on parts of the reasons for the exemption request, so I'll contribute some different thoughts and keep them short.

Standard 7-403 itself has many shortcomings itself as it applies to Renovo meeting the technical standard. I have not had the privilege of using an account on the system, but have talked with others about the features (or lack thereof).

For example:

Section 1.1 Hardware Control Components

- 1.1.1.6 Have a defined Quality of service
- --- has this been published by Renovo or the State and what does it mean (uptime, MTBF, or QoS tagging)?
- 1.1.1.11 Searching capabilities
- do we have these capabilities as defined in the standard?
- 1.1.1.12.3 Endpoint Encryption
- can Renovo turn on/off encryption?
- 1.1.1.15 Be capable of controlling all specific equipment used in the network (CODECs, routers, switcher, MCUs, firewalls systems, etc.)

If it can, why haven't we heard or seen anything about it doing these features. I'm sure the NNNC would be using them and talking about them.

1.1.1.16 Facilitate various types of events (broadcasts)

Again, I haven't heard anything about this, so I'm guessing that it's not available in Renovo (but I would like to be shown otherwise).

I could go on with other parts of the standard, but since this is the focus of the debate and request, I'll end here and ask for clarification and specific examples of how Renovo can do all these things now.

Sincerely,

Ron Cone

Mid-Plains Community College Response to Educational Service Unit 10/11's Request for Waiver of NITC Standard 7-403

Mid-Plains Community College (MPCC) supports LB 1208 Legislation to develop a statewide education video delivery system using Internet Protocol (IP) based technology. We recognize and appreciate the position of ESU 10/11's request and agree that there are yet "future questions that need to be answered related to the policy and current service." We hope and expect that these and other questions will be resolved in a timely manner and that Nebraska will enjoy a comprehensive statewide delivery system equitable and beneficial to all.

Impact on Mid-Plains Community College

Under current circumstances should ESU 10/11 and the schools they represent continue with the equipment installations they are recommending and do not participate in the Renovo scheduling system MPCC course offerings will be negatively impacted in the following manner:

1. While ESU 10/11's equipment is capable of connecting to any other IP system throughout the state, should one of MPCC classrooms connect with one of the ESU 10/11 classrooms only the MPCC room and the ESU 10/11 classroom can fully interact. None of the other students in the other locations who are simultaneously connected to MPCC will be able to interact with the ESU 10/11 classroom. This prohibits direct student to student interactivity, and student questions must then be rephrased by the faculty member so that everyone can hear them.

While this will not impact a large number of High Schools in MPCC's State designated area, it will affect a few.

In addition, even now we have a request from a HS in the Tri-Valley area for a course because (in this subject matter area) Central Community College offerings are completely full. Connecting to this High School can technically be accomplished, but the limitations to student interactivity may be a deterrent to effectively offering this course.

<u>Impact on other High Schools</u>

Possibly more significant then the impact on MPCC is the potential impact that ESU 10/11's non-compliance would have on other High School to High School interactivity.

If the waiver is denied, ESU 10/11 would be termed non-compliant with the NITC standards and their involvement with any future course sharing with other

Network Nebraska schools would (could) prohibit those schools from receiving course credits eligible for the LB 1208 incentives. Hence this position threatens the use of the statewide network.

Conclusion

Mid-Plains would agree with NITC's Technical Panel Option # 4 which states:

4. Grant a temporary (2008-2009) partial waiver of only the hardware control component to ESU 10 and ESU 11 area schools.

Implications: All ESU 10 and ESU 11 area schools would be required to utilize the four components of the Renovo Software...Event Logging; Facilities Coordination; People Coordination; Event Clearinghouse for the 2008-2009 year, with the exception of the Hardware Control. Other entities would be able to see the classes offered by the ESU's...schools in the Clearinghouse; the ESU 10/11 schools just wouldn't have their codecs controlled by the Renovo software. In July 2009, the ESU 10 and 11 area schools would be required to comply with the hardware control component.....

This position gives ESU 10/11 an additional year to test the compatibility of their Lifesize equipment with the Renovo software, allow time for clarification of the questions about licensing devices, while not penalizing other High Schools who may have the opportunity to send or receive a course from ESU 10/11.

----Original Message----

From: bkabes@esu7.org [mailto:bkabes@esu7.org]

Sent: Monday, April 28, 2008 5:08 PM

To: Rolfes, Tom

Cc: nbuss@esu8.org; sschall@esu15.org; dmwolfe@esu2.org

Subject: Re: Seeking input: NITC Scheduling Standard for Synchronous Distance Learning and

Videoconferencing

Comments about waiver request below:

In a statewide system such as Network Nebraska, all stakeholders must participate in an equal and same fashion. My understanding of the waiver request is to forgo using such a system and wait to determine the best situation for said applicant. I can agree with a request in that situation.

However, I do not agree that if the waiver should be given, the applicant will be able to share in the receipt of incentives for schools currently dedicated to the statewide system and support this system.

Another concern is for those schools currently agreeing to the parameters of the legislative bill. If the schools currently using the system, by paying for the maintenance and paying for the fees for Network Nebraska, participate with a school that is not complying with the parameters of the law, will complying school lose possible incentive receipts? Or perhaps jeopardize their good standing with Network Nebraska and the office of the CIO?

For this system to operate as a statewide system and to be fair for all of those that are participating within the guidelines of the law, the cost of all of the system should be shared equally by all users. Each school building participating in the project should be paying the same share are the rest of the buildings. That cost includes the maintenance of the scheduling upkeep and the participation fee for Network Nebraska.

Beth Kabes

From: John Fiene [mailto:jfiene@mail.unomaha.edu]

Sent: Tuesday, April 29, 2008 11:19 AM

To: Rolfes, Tom

Subject: Re: [neheit] Seeking input: NITC Scheduling Standard for Synchronous Distance Learning and

Videoconferencing

Tom, I have no problem with a temporary waiver, but the issues raised in the request would seem to warrant further discussion of the tech panel and council.

Cheers! John