Utah Education Network Steering Committee

February 26, 2010



UTAH EDUCATION NETWORK STEERING COMMITTEE

AGENDA

FEBRUARY 26, 2010

9:00 a.m.-12:00 Noon

Committee of the Whole / Business Meeting

Welcome and Introductions

Tab 3 UEN Legislative Update - Discussion
Tab 4 Desktop Video-Tandberg MOVI Pricing Structure - Action
Tab 5 COMMERCIAL VOIP TASK FORCE - DISCUSSION
Tab 6 SURIN Update - Discussion
Tab 7 E-RATE FUNDING - DISCUSSION
Tab 8 NTIA BTOP UPDATE - DISCUSSION
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UPCOMING MEETINGS

Steering Committee Meeting - April 23, 2010, 9:00 a.m. Instructional Services Subcommittee Meeting - April 23, 2010, 11:00 a.m. Technical Services Subcommittee Meeting - April 23, 2010, 11:00 a.m.

Please place these materials in your Steering Committee Binder.

UEN LEGISLATIVE **U**PDATE - **D**ISCUSSION

Issue

Preparations for the legislative session have been underway for months and now that we are in session, the results of all the planning and efforts are coming to fruition.

Background

Budget Actions

The following is a summary of key developments so far in the legislative session.

Early budget adjustments recommended by the Legislative Fiscal Office included a one-time 4% reduction of \$0.7 million for FY 2010, a 5% base reduction of nearly \$0.9 million for FY 2011 and a recommendation to not replace the \$1.5 million one-time economic stimulus ARRA funds approved for FY 2010. Because over half of the UEN budget is committed to long term circuit and Internet contracts, cuts of that magnitude would require significant staff reductions and other cuts that would hurt our ability to provide the services we perform for public and higher education.

Summaries of UEN budget proposals for FY 2010 and FY 2011 are shown in the following table:

Utah Education Network FY 2010 & 2011 Budget Adjustments			
	GOVERNOR RECOMMENDED	LFA RECOMMENDED	LEGISLATIVE ACTION TO DATE
Authorized FY 2010	\$18,949,200	\$18,949,200	\$18,949,200
One-time 4% Budget Reduction		(\$696,300)	
One-time 3% Adjustment (S.B. 3)	(\$231,600)		(\$231,600)
Net Amount	\$18,717,600	\$18,252,900	\$18,717,600
Authorized FY 2011	\$18,949,200	\$18,949,200	\$18,949,200
One-time 9% backfill not replaced	(\$1,540,700)	(\$1,540,700)	(\$1,540,700)
S.B. 1 (2% Reduction)			(\$348,200)
Adjusted Base	\$17,408,500	\$17,408,500	\$17,060,300
Additional Budget Changes			
for FY 2011	\$0	(\$870,400)	No Action
Health Insurance & Retirement	\$81,800	\$0	No Action
Adjusted Base Budget for FY 2011	\$17,490,300	\$16,538,100	\$17,060,300

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The Legislature recently adopted a Fiscal Year 2010 supplemental appropriation (S.B. 3) that reduces the UEN budget by \$231,600 (or a 3% 1-time cut from personnel services rather than the 4% cut on total State funds included in the LFA recommendation). The effect of the cut will be covered through a cost reduction in personnel from the recent reduction of one FTE employee plus the collection of additional E-rate funds anticipated in FY 2010.

The Legislature also passed S. B. 1 that appropriated 98% of UEN's adjusted base budget for FY 2011. Passage of this bill represents a cut in State funds of \$348,200. Although the Higher Education Appropriations Subcommittee has not developed budget priorities for FY 2011 during committee meetings held over the last several weeks, we are optimistic that UEN budget needs will be prioritized at a high level by the Legislative Executive Appropriation Committee.

Even though revised revenue estimates for FY 2011 are down \$49.6 million, the \$3.5 million matching requirement for the \$13.4 million NTIA BTOP grant is a compelling reason to minimize budget reductions proposed for FY 2011. It is UEN's proposal to the Legislature that \$2.4 million of the cuts proposed for FY 2011 be recommended for funding to help meet the matching requirements of the grant. We are also hopeful that the Legislature will consider the fixed nature of UEN budget being tied to multi-year circuit contracts with telephone companies when they calculate future across-the-board budget reductions.

Recommendation

This is an information item and requires no further action by the committee.

T A B 4

DESKTOP VIDEOTANDBERG MOVI PRICING STRUCTURE - ACTION

Issue

UEN Technical Services is currently piloting the Tandberg desktop video application MOVI and is preparing to distribute and support licensed seats of this application. A pricing structure that helps offset IVC infrastructure and support costs must be implemented.

Background

MOVI Desktop Conferencing by Tandberg is UEN's solution for a reliable and supportable desktop video conferencing application. As of this report UEN Technical Services is completing the production level testing of the MOVI application and is preparing to support and distribute the application to interested stakeholders. However, the number of available seats currently is not unlimited.

MOVI is a SIP based high definition capable video conferencing solution that can dial point-to-point to other MOVI users, h.323 end points and participate in bridged h.323 events as demonstrated in the December 2009 Steering Committee meeting. To accomplish this, MOVI utilizes and benefits from UEN's existing video infrastructure which in turn improves its reliability and enables UEN to provide a level of operational support to ensure users have a consistent and reliably positive experience. UEN's video infrastructure includes multipoint control units (MCU), gatekeepers, SIP translation and firewall traversal appliances. Due to the additional demands MOVI will place on this video infrastructure, UEN Technical Services has worked to develop a formula to anticipate the increased load MOVI will introduce as it scales and to help determine a partial funding mechanism to fund infrastructure improvements as needed.

The true cost of a MOVI seat is not the Tandberg per seat cost since the additional infrastructure mentioned above is necessary to operate it. While some estimates by Tandberg resellers estimate the actual price per seat can be as high as a traditional h.323 endpoint if the entire video infrastructure is not in place, UEN is recommending a pricing structure of a one-time charge of \$450 per seat and an annual charge of \$100 thereafter for maintenance and upgrades. To determine if this pricing structure is on track UEN will continue to monitor how the application is used by stakeholders as the number of licensed seats scales and so we may assess what level of oversubscription of video infrastructure resources is realistic.

Recommendation

UEN Technical Services recommends to the UEN Steering Committee the per seat license pricing for Tandberg MOVI of \$450 per seat one-time and an annual fee each following year of \$100 for maintenance and upgrades.

TAB 5

COMMERCIAL VOIP TASK FORCE - DISCUSSION

Issue

Commercial VoIP Task Force.

Background

The Commercial VoIP Task Force has been organized and has met twice.

The UEN staff took input from members of the task force in a December meeting and used that information to define five (5) VoIP service offerings. The document defining these services is provided as an attachment. These service offerings are summarized as follows:

- 1. Internet based port 80 VoIP
- 2. Intra-organization VoIP (Intra-District is likely the most common)
- 3. Toll bypass
- 4. Commercial PBX
- 5. SIP Trunking

Of these 5 services the first three are already being widely used by UEN stakeholders. Except for the basic network, UEN services are not required by network organizations or individuals to use these VoIP capabilities.

It is the view of UEN staff that SIP Trunking is outside of the UEN scope. Therefore, the only Commercial VoIP service of interest to UEN is number 4, Commercial PBX.

Commercial PBX services present several interesting challenges. First, any provider connecting to the UEN network or to a connected network of a UEN customer, will do so with an Internet circuit. In general this will not be a problem as long as the provider is competent and does not allow general Internet routing across this connection. However, the potential exists for Internet routing to take place across any such connection interfering with the operations of the network. Without knowledge and control, UEN cannot guarantee network reliability when these types of connections with Internet routing exist within the fabric of the UEN backbone and connected networks. UEN stakeholders may choose to purchase these offerings and bring them into the UEN network through their network without the knowledge of UEN technical staff.

There are also other considerations. Commercial service providers view the UEN network as a great resource for providing services. However, UEN stakeholders view the network as an important means of consolidating services and saving money. This has worked well for services that can occasionally be off-line. The UEN network is not engineered to the 5 nines reliability standards provided by common carriers.

It is the current view of UEN staff that UEN should not provide Commercial PBX services on the UEN network. It is our intention to: (1) ensure that commercial services provided across the network meet the technical requirements of our stakeholders; (2) provide equitable access to the UEN network for all commercial VoIP service providers that meet technical requirements; and (3) ensure that VoIP traffic and services do not cause instability to other essential UEN mission critical network operations.

UEN will continue to work with the Commercial VoIP Task Force to identify and resolve issues and make recommendations to the steering committee.

Recommendation

It is our recommendation that the Steering Committee review the suggested approach toward commercial VoIP that are being considered in the task force. Committee members may consider further discussion and actions depending on input from task force members.

TAB 5 ATTACHMENT A VoIP Service Definitions

VOIP Service Definitions

- Port 80 VoIP Traffic This is type of traffic is at the very bottom of the VoIP sophistication model. This is your Magic Jack, Vonage, or Skype type user who is comfortable with a "best effort" voice connection. This traffic is delivered via commodity Internet service and is extremely difficult to block.
- 2. District WAN VoIP This is when a district installs a VoIP enabled PBX and connects all of their end sites back to the District Office. This is typically done to avoid the need of having separate data connections for voice and data between the District Office and the schools. Because most school districts in Utah do not span multiple rate centers this service is not generally used for toll avoidance, although in some cases this might be the case. This traffic does not typically traverse UEN's backbone, in that it is normally confined to the District WAN.
- 3. Toll Bypass VoIP A good example of this VoIP service is: Grand School District installs a VoIP enabled PBX and they establish business arrangement with Cache School District. Whereby, all of Grand's long distance calls to Northern Utah are directed to Cache School District's VoIP PBX and then out Cache's local trunks. Cache does the same thing with their long distance calls to the Eastern Utah and thus, the two district avoid intrastate long distance charges.. This traffic will traverse UEN's backbone.
- 4. Hosted VoIP Hosted VoIP or Hosted Interconnected VoIP is the act of providing not only voice IP traffic across the Internet but adds the data control elements associated with a VoIP enabled PBX , e.g. call set up/tear down/call transfer, etc. . In theory the Service Provider (SP) offers a full range of PBX features and services via a centrally located server that has been partioned to via IP connectivity. Connectivity to the SP can be a dedicated circuit or an Internet connection depending of the SP's design and the users preference. The impact on bandwidth is dependent on the following design criteria:
 - a. Number of handsets
 - b. Types of Features (especially voice mail or video)
 - c. Volume of Calling
 - d. Compression (G.711 or G.729)
 - e. Location of PSTN Gateway (this is huge because if the PSTN gateway is in the SP's cloud, all the PSTN traffic is then required to traverse the link between the SP and the user.
- 5. SIP is a protocol. However, it is also being used as a marketing term by several service providers e.g. SIP Trunks. For the purposes of this communication I am referring SIP as a product rather than a protocol, i.e. SIP Trunking. The major difference between SIP trunking and traditional PRI service is that there is no conversion from IP to TDM, thus the voice packets can move across IP facilities with greater efficiency, resulting in lower cost. The other advantage is that the access local loop from the Service Provider to the customer can be shared for both PSTN access and Internet access, again lowering the cost of doing business.

T A B 6

SURIN UPDATE - DISCUSSION

Issue

State of Utah Registry for Internet Numbering (SURIN) recent activities.

Background

The SURIN Board has met twice in recent months, on November 4, 2009 and again on January 14, 2010.

Two action items were developed from these meetings. First, UEN recently signed the American Registry for Internet Numbering (ARIN) Legacy Registry Service Agreement (Legacy RSA). The SURIN board was provided copies of the signed agreement. The board passed a resolution to make this signed Legacy RSA available to all SURIN members with encouragement for Legacy Registry Services holders (legacy holders) to consider entering into this agreement with ARIN. The board has not taken a position on whether or not legacy holders should sign this agreement, only that it should be considered and action taken based on the individual needs of the organization. A legacy holder is an organization receiving IP address space or other registry services prior to December 1997. ARIN was organized in December 1997 and any organization receiving Registry Services prior to this date is a legacy holder of registry services.

There are several thousand legacy holders and many of these are in the education community. Several hundred of these legacy holders have signed the Legacy RSA. ARIN had placed a deadline of December 31, 2009 for legacy holders to sign the Legacy RSA. The ARIN board has extended that deadline to June 30, 2010. UEN spent over 20 months negotiating with ARIN and University of Utah legal counsel to arrive at this final document. Additionally, Educause general counsel has reviewed the Legacy RSA and commented favorably.

The Legacy RSA may not be something that is necessary for all legacy holders. It was necessary for UEN to sign this agreement because we had a large block of IPv4 address space that was never acknowledge as being part of the UEN-1 address space. ARIN agreed to bring this block of addresses into the UEN space and made this action contingent on UEN signing the Legacy RSA.

UEN also has a large block of IPv6 space. Our ongoing relationship with ARIN in this area also made it necessary for us to sign the Legacy RSA. Legacy Holders who do not need any additional IPv4 space or who do not need to deal directly with ARIN for IPv6 space may not need to sign the Legacy RSA. UEN can provide all SURIN members with IPv6 space far into the future.

The second item addressed by the SURIN board deals with IPv6. Many SURIN members are anxious to implement IPv6. Also, ARIN is strongly pushing IPv6 adoption. The exhaustion of IPv4 address space continues to be of concern to this community and address space is being rapidly consumed.

Perhaps the greatest impediment to IPv6 adoption is that with all of the work required there are only a very small percentage (under 10%) of all addressable devices/institutions that are reachable via IPv6. This is a huge problem.

The SURIN board passed a resolution to encourage every SURIN member to make all public facing servers reachable with IPv6. This one simple action, if accomplished by all those providing public services, will make a huge difference in our ability to actually start using IPv6 address space. Although SURIN members represent a very small portion of public service providers, we should do our part to make IPv6 an effective alternative.

Recommendation

This is an information item. However, the UEN Steering Committee is the organizing authority for SURIN and should comment on support for these two issues and the actions taken by the SURIN board.

TAB 6 ATTACHMENT A

AMERICAN REGISTRY FOR INTERNET NUMBERING (ARIN) LEGACY REGISTRY SERVICE AGREEMENT (LEGACY RSA)

Legacy RSA Version 2.1 (01/07/2009) (UEN-1-Z)

AMERICAN REGISTRY FOR INTERNET NUMBERS, LTD. LEGACY REGISTRATION SERVICES AGREEMENT

This LEGACY REGISTRATION SERVICES AGREEMENT ("Legacy Agreement") is made by and between the AMERICAN REGISTRY FOR INTERNET NUMBERS, LTD. ("ARIN"), a Virginia nonprofit corporation, and the UNIVERSITY OF UTAH, FOR AND ON BEHALF OF UTAH EDUCATION NETWORK, ("Legacy Applicant"), which holds the following specifically enumerated number resources: 140,197.0.0/16, 204,113.0.0/16, 205,118.0.0/15, and 205,120.0.0/13 ("Included Number Resources"). This Legacy Agreement only covers the Included Number Resources; any other number resources held by the Legacy Applicant pursuant to an existing Registration Services Agreement ("RSA") or not described here are not covered by the terms of this Legacy Agreement.



1. INTRODUCTION

ARIN is a Regional Internet Registry serving Canada, many Caribbean and North Atlantic islands, and the United States, since 1997, and is responsible for the registration, administration, and stewardship of Internet number resources in these geographic areas. To complete the process for the regularization of the Included Number Resources and the provision of certain Services (as defined herein below), Legacy Applicant must comply with the provisions of this Legacy Agreement by submitting an application, an executed Legacy Agreement and provide any requested accompanying information to ARIN. For purposes of this Legacy Agreement, the term "Services" may include, without limitation, the inclusion of the legacy IP address space, and/or Autonomous System numbers ("ASNs") previously issued to Legacy Applicant in the ARIN "WHOIS" database, inverse addressing on network blocks, maintenance of resource records, and administration of IP address space related to Included Number Resources issued prior to ARIN's inception on December 22, 1997 in its service area. IP address space and ASNs shall be defined as "number resources."

2. APPLICATION

Legacy Applicant must complete a legacy application found on ARIN's website, located at "http://www.arin.net" (the "Website"). Legacy Applicant must: (a) provide ARIN with accurate, up-to-date and complete application information, (b) promptly notify ARIN if any of its information changes during the term of this Legacy Agreement, and (c) promptly, accurately, and completely respond to any inquiry made to Legacy Applicant by ARIN or its designee during the term of this Legacy Agreement. Legacy Applicant agrees that in applying to receive or use the Services and in using the Services, it must comply with ARIN's Number Resource Policy Manual, Certification Practice Statement, Guidelines, and Procedures ("Policies"), as published on the Website, as long as the terms of the Policies are not inconsistent with this Legacy Agreement. In the event of any inconsistency between the Policies and this Legacy Agreement, the terms of this Legacy Agreement will prevail, including but not limited to those Policies adopted after this Legacy Agreement is executed. If Legacy Agreement and refuse to provide the Services to Legacy Applicant.

3. EVALUATION AND ACCEPTANCE

Following Legacy Applicant's completion of the online application process, ARIN will promptly evaluate Legacy Applicant's request for the Services. Evaluation may require Legacy Applicant's submission of additional documentation to support its application such as, but not limited to, state registration, Dun & Bradstreet and/or taxpayer information, and/or registration under the province or country in which the entity is registered for verification purposes. If ARIN, in its sole, exclusive, and reasonable discretion, applying its published Policies and internal verification process, determines that it can provide the Services to Legacy Applicant, ARIN shall provide written notice to Legacy Applicant of its willingness to do so, and ARIN will promptly commence providing the Services to Legacy Applicant in accordance with the terms and conditions of this Legacy Agreement. If ARIN, in its sole, exclusive, and

reasonable discretion, applying its published Policies and internal verification process, determines that it cannot provide the Services, it will provide written notice to Legacy Applicant of its decision.

4. CONDITIONS OF SERVICE

- (a) Provision. Subject to ARIN's agreement to provide the Services in accordance with Section 3 and Legacy Applicant's ongoing compliance with its obligations under this Legacy Agreement, including, without limitation, the payment of the Fees (as defined below), ARIN shall provide the Services to Legacy Applicant in accordance with this Legacy Agreement and the Policies.
- (b) Change Request, If, subsequent to signing this Legacy Agreement, Legacy Applicant desires to change the Services that it receives from ARIN, it must provide ARIN with written notice (a "Change Request"). ARIN will evaluate Legacy Applicant's Change Request. If ARIN, In its sole, exclusive, and reasonable discretion, determines that it can provide the Services to Legacy Applicant as set forth in the Change Request, ARIN will commence providing the Services as modified to Legacy Applicant in accordance with the terms and conditions of this Legacy Agreement. If ARIN, in its sole, exclusive, and reasonable discretion, determines that it cannot provide the Services as requested by Legacy Applicant to be modified, it will provide written notice to Legacy Applicant that it cannot provide Services in accordance with the Change Request, and describe the reasons therefore. ARIN's inability to provide the Services in accordance with the Change Request may be subject to the provisions of Section 15(I) of this Agreement regarding Dispute Resolution.
- (c) Cooperation. During the term of this Legacy Agreement, Legacy Applicant shall provide ARIN complete, up-to-date, and accurate information, assistance, and cooperation that ARIN requests in ARIN's provision of the Services to Legacy Applicant, including, without limitation, during any review of Legacy Applicant's utilization of allocated Included Number Resources. If Legacy Applicant does not provide ARIN with required information, assistance, or cooperation that ARIN requests, ARIN may: (i) take such failure into account in determining Legacy Applicant's future allocation/assignment of additional number resources, and/or (ii) terminate this Legacy Agreement pursuant to Section 14 hereof.
- (d) Prohibited Conduct. In using the Services, Legacy Applicant shall not; (i) disrupt or interfere with the security or use of the Services; (ii) violate any applicable laws, statutes or regulations, as established by a definitive ruling of a court or government agency; or (iii) assist any third party in engaging in any activity prohibited by this Legacy Agreement. ARIN will cooperate with all government or judicial inquiries utilizing legally appropriate methods for obtaining information from ARIN regarding allegations of prohibited conduct.
- (e) Content Control. Legacy Applicant acknowledges that content transmitted over the Internet occurs in real time. Accordingly, ARIN does not have the ability to control content accessible through or facilitated by those who receive number resources, directly or indirectly, from ARIN,

5. USE OF THE ARIN DATABASE

(a) Authorization. To obtain a digital dertificate, Legacy Applicant must meet the requirements and follow the procedures as outlined in ARIN's Certification Practice Statement ("CPS"), which is available at http://www.arin.net/CA/. The Administrative Point of Contact ("POC") will be the principal point of contact between Legacy Applicant and the ARIN database, and have the sole right to designate other qualifying POCs of Legacy Applicant with authority to modify the ARIN database ("Authority"). The Administrative POC will also facilitate Legacy Applicant's compliance with the terms and conditions of this Section 5. Legacy Applicant will provide ARIN with any documentation and information regarding the Administrative POC that ARIN reasonably requests. Legacy Applicant must notify ARIN immediately if: (i) an employee with Authority has or will terminate its relationship with Legacy Applicant; (ii) an employee with Authority will have that Authority revoked; (iii) Legacy Applicant has reason to believe that an employee with Authority has granted or will grant a third party unauthorized access to the ARIN database; (iv) Legacy Applicant has any reason to believe that an

employee with Authority should not be trusted; or (v) if Legacy Applicant wants to designate another Administrative POC. Notices to ARIN under this Section must be given by e-mail to hostmaster@arin.net, and will be effective when acknowledged as received by ARIN.

- (b) Legacy Applicant is responsible for the timely and accurate maintenance of directory services data (WHOIS) as well as any organization to which it further sub-delegates number resources.
- (c) Liability for Unauthorized Access. Legacy Applicant is solely and exclusively responsible for all acts and omissions undertaken by any of its POCs and/or employees with Authority, whether or not authorized in law or in fact. Legacy Applicant is solely and exclusively responsible for the security of its access to and use of number resources in the ARIN database, and any loss or damage that Legacy Applicant suffers based on any unauthorized access thereto.

6. FEES; PAYMENTS

- (a) ARIN's Standard Posted Fee Schedule Does Not Apply to the Legacy Resources Covered by This Agreement. ARIN hereby agrees that the fees it usually charges for Services will <u>not</u> apply to Legacy Applicants. ARIN's Fee Schedule, which is available at http://www.arin.net/billing/fee_schedule.html, does not apply to this Legacy Agreement, and a Legacy Fee Schedule will apply. For example, Legacy Applicants do not have to pay ARIN any "registration fee," typically set forth in the Fee Schedule.
- (b) Annual Maintenance Fees Paid By Legacy Applicants For Resources Covered By This Agreement. Legacy Applicant shall only be required to pay ARIN the currently applicable "Annual Legacy Maintenance Fee" as set forth in the ARIN Legacy Fee Schedule. This fee shall be \$100 per year until the year 2013. ARIN will send an invoice to prompt such payment before the due date. This fee will be waived through 2013 if the Legacy Applicant returns one-fourth or more of the Included Number Resources, ARIN will accept the return of any IPv4 address block with a prefix size of a /24 or shorter. After 2013, ARIN, by vote of ARIN's Board, may annually increase the Legacy Fee by no more than (1) the amount charged non-Legacy holders for this maintenance service, and (2) no increase per year greater than \$25. If Legacy Applicant does not pay the Annual Legacy Maintenance Fee or other fees that may be owed ARIN hereunder, ARIN shall provide written notification to the Legacy Applicant approximately thirty (30) days following the date on which the payment is not made. If Legacy Applicant fails to make payment in response to the notice of delinquency, ARIN shall provide Legacy Applicant with an additional written notice, by certified or registered mail, return receipt requested, (as appropriate in each country), and, when possible, by e-mail and telephone. If the Legacy Applicant has not made payment within 12 months of the due date and/or ARIN is unable to contact the Legacy Applicant during those 12 months, ARIN has the right to: (i) stop providing Services, or (ii) terminate this Legacy Agreement and revoke the Included Number Resources. Any Legacy Applicant whose Services were stopped pursuant to 6(b)(i) may have the Services restored if it brings its account current before revocation. Any Included Number Resources revoked pursuant to 6(b)(ii) shall be held by ARIN for an additional 12 month period from the date of revocation before they are reissued. Any Legacy Applicant whose Included Number Resources have not been reissued by ARIN may restore the Services related to these Included Number Resources and have the revocation nullified if it contacts ARIN, brings its account current, and signs a revised Legacy Agreement.
- (c) No Refunds. All fees paid by Legacy Applicant to ARIN are nonrefundable.

7. CURRENT AND FUTURE POLICIES

As set forth in Section 2, to the extent of any conflict between the provisions of this Legacy Agreement and the Policies, the terms of this Legacy Agreement shall prevail. Notwithstanding the foregoing, pursuant to ARIN's Policy Development Process ("PDP"), ARIN maintains the Policies and may at any time in its sole, absolute, and reasonable discretion amend the Policies, implement new policies (which once implemented, will be considered Policies), or make certain Policies obsolete. Such amendments or new Policies shall be binding upon Legacy Applicant immediately after they are

posted on the Website, unless the Legacy Applicant can affirmatively indicate the amended or revised policy materially conflicts with a specific Utah Statute. If such a material conflict exists, the Legacy Applicant shall provide written notice of the issue and the amended or revised policy will not apply to the Legacy Applicant. Legacy Applicant acknowledges and agrees it has read, understands, and agrees to be bound by and comply with the Policies, as amended, except to the extent those Policies may conflict with the rights and duties provided Legacy Applicant in this Legacy Agreement.

8. REVIEW OF LEGACY APPLICANT'S NUMBER RESOURCES

ARIN may, no more other than annually, or whenever a transfer or additional IP address space is requested, review Legacy Applicant's utilization of previously allocated or assigned number resources and/or other Services received from ARIN to determine if Legacy Applicant is complying with this Legacy Agreement and the Policies.

9. NO PROPERTY RIGHTS

Legacy Applicant acknowledges and agrees that the Included Number Resources are not property (real, personal, or intellectual) and that Legacy Applicant does not have any property rights in or to the Included Number Resources, including but not limited by this Legacy Agreement or the prior issuance of these resources to it. Legacy Applicant further agrees that it will not attempt, directly or indirectly, to obtain or assert any trademark, service mark, copyright, or any other form of property rights in any Included Number Resources in the United States or any other country.

10. VOLUNTARY RETURN OF INCLUDED NUMBER RESOURCES

- (a) ARIN requests that Legacy Applicant conform to RFC 2050 and RFC 2008 and voluntarily return to ARIN the portion of all Included Number Resources that it is unlikely to need over the next 10 years. A Legacy Applicant that returns no less than 25% of the Included Number Resources will be eligible for a series of benefits, including partial or permanent reduction in ARIN fees, membership and meeting costs as the Board of Trustees may from time-to-time prescribe. These benefits will increase as the percentage of Included Number Resources returned increases to 50% and again at 75%. ARIN will accept the return of any IPv4 address block with a prefix size of a /24 or shorter.
- (b) ARIN will take no action to reduce the services provided for Included Number Resources that are not currently being utilized by the Legacy Applicant.

11. REPRESENTATIONS AND WARRANTIES

- (a) By Each Party. Each party represents and warrants to the other party that: (i) it has the full power and authority to enter into and perform its obligations under this Legacy Agreement, (ii) the assent to and performance by it of its obligations under this Legacy Agreement do not constitute a breach of or conflict with any other agreement or arrangement by which it is bound, or any applicable laws, regulations, or rules, and (iii) this Legacy Agreement constitutes a legal, valid, binding, and an executory obligation of the parties executing or assenting to this Legacy Agreement, enforceable in accordance with its terms and conditions.
- (b) By Legacy Applicant. Legacy Applicant hereby represents and warrants to ARIN that during the term of this Legacy Agreement: that Legacy Applicant will comply with all applicable laws, rules, and regulations in its use of the Services, including this Legacy Agreement and the Policies.

12. BANKRUPTCY

If Legacy Applicant: (a) files any petition under any chapter of the Bankruptcy Code or other insolvency or bankruptcy law; or (b) has a petition filed against it under any insolvency or bankruptcy law; or (c) makes a general assignment for the benefit of creditors, has a receiver appointed for it, or a

trustee takes possession of all or substantially all of Legacy Applicant's assets; or (d) ceases or intends to cease its normal business operations, ARIN may intervene in any such bankruptcy or insolvency proceeding or take other appropriate, lawful action to preserve its rights under this Legacy Agreement, including, but not limited to, Paragraph 9. Legacy Applicant agrees to consent to ARIN's intervening in any such bankruptcy court proceeding so that ARIN can protect its rights under this Legacy Agreement, including, but not limited to, Paragraph 9. Legacy Applicant acknowledges and agrees that this Legacy Agreement is executory.

13. DISCLAIMERS, EXCLUSIONS, INDEMNITY AND LIMITATIONS

- (a) DISCLAIMER OF WARRANTIES. ARIN PROVIDES THE SERVICES ON AN "AS-IS" BASIS. ARIN DOES NOT REPRESENT OR WARRANT THAT THE SERVICES OR THEIR USE: (i) WILL BE UNINTERRUPTED, (ii) WILL BE FREE OF DEFECTS, INACCURACIES, OR ERRORS, (iii) WILL MEET LEGACY APPLICANT'S REQUIREMENTS, OR (iv) WILL OPERATE IN THE CONFIGURATION OR WITH OTHER HARDWARE OR SOFTWARE LEGACY APPLICANT USES. ARIN MAKES NO WARRANTIES OTHER THAN THOSE MADE EXPRESSLY IN THIS LEGACY AGREEMENT, AND HEREBY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, AND/OR NON-INFRINGEMENT.
- (b) EXCLUSION OF DAMAGES. NEITHER PARTY WILL NOT BE LIABLE TO THE OTHER PARTY OR ANY THIRD PARTY FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, PUNITIVE, OR SPECIAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES RELATING TO LOST PROFITS, LOST DATA, OR LOSS OF GOODWILL) ARISING OUT OF, RELATING TO, OR CONNECTED WITH THIS AGREEMENT OR THE SERVICES, BASED ON ANY CAUSE OF ACTION, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Each party (the "Indemnitor") shall defend, indemnify, and hold harmless the other party (the "Indemnitee") from and against any and all losses, damages, judgments, liabilities, costs and expenses, including reasonable attorney and other legal fees, incurred or related to the settlement or defense of any claim or action asserted by any third party arising out of any allegedly negligent or reckless act or omission or willful misconduct by Indemnitor in the course of performance of this Agreement or any breach of or inaccuracy in the covenants, representations, and warranties made under the Legacy Agreement.
- (c) LIMITATION OF LIABILITY. EXCEPT IN THE EVENT OF A MATERIAL BREACH OF ARIN'S REPRESENTATIONS AND WARRANTIES UNDER THIS LEGACY AGREEMENT, AND EXCEPT FOR ARIN'S INDEMNIFICATION OBLIGATIONS HEREIN, IN NO EVENT WILL ARIN'S LIABILITY TO LEGACY APPLICANT OR ANY THIRD PARTY EXCEED THE GREATER OF (i) THE AMOUNT PAID BY LEGACY APPLICANT TO ARIN DURING THE SIX MONTHS IMMEDIATELY PRECEDING THE EVENT THAT GIVES RISE TO SUCH LIABILITY OR (ii) \$100.

14. TERM AND TERMINATION.

- (a) Term. The term of this Legacy Agreement shall commence on the date Legacy Applicant first receives the Services (the "Effective Date") and shall continue for one year thereafter. This Legacy Agreement shall renew automatically on the anniversary date of the Effective Date for unlimited one-year terms, unless earlier terminated in accordance with the termination provisions of this Legacy Agreement or if the Legacy Applicant gives written notice to ARIN of its desire not to renew this Legacy Agreement at least thirty (30) days prior to the expiration of the then-current term.
- (b) Termination for Cause by ARIN. ARIN shall have the right to terminate this Legacy Agreement for cause in accordance with Section 15(j): (i) immediately upon written notice for the reasons as set forth in Sections 2, 4(c), 4(d), 6(b), 11, or if Legacy Applicant breaches any provision of Section 5; or (ii) upon written notice if Legacy Applicant breaches any other provision of this Legacy Agreement and such breach remains uncured in ARIN's reasonable determination for ninety (90) days following ARIN's written notice to Legacy Applicant.

- (c) Termination for Cause by Legacy Applicant. Legacy Applicant shall have the right to seek to terminate this Legacy Agreement for cause upon written notice if ARIN materially breaches this Legacy Agreement and such breach remains uncured for ninety (90) days after ARIN's receipt of written notice of the breach from Legacy Applicant. If ARIN believes any claim of breach is not correct or has been cured, it shall respond in writing. If the Legacy Applicant still seeks to terminate for cause, it must bring action pursuant to paragraph 15(I). If such a cause for termination is found by the Court or the Arbitrator against ARIN, the Legacy Agreement will be terminated and the Included Number Resources will resume the status they had prior to the Legacy Agreement.
- (d) Termination by Legacy Applicant Through Return of Included Number Resources. Legacy Applicant shall have the right to terminate this Legacy Agreement at any time if it returns, without limitation, all Included Number Resources. If Legacy Applicant wishes to terminate this Legacy Agreement in accordance with this Section 14(d), the Legacy Applicant must submit thirty (30) days prior written notice to ARIN of its intent to return, in total, the Included Number Resources, and must return the resources within thirty (30) days of ARIN's receipt of written notice of the Legacy Applicant's intent. This Legacy Agreement remains binding until the Legacy Applicant has returned all Legacy Included Number Resources described in this Legacy Agreement to ARIN.
- (e) Effect of Termination. If this Legacy Agreement expires or is terminated except as described in paragraph 14(c) and 15(k): (i) ARIN will immediately revoke the Included Number Resources and otherwise cease providing the Services and will have no liability for doing so, and (ii) Legacy Applicant must immediately pay ARIN any outstanding fees that Legacy Applicant owes.
- (f) Survival. The following Sections will survive termination or expiration of this Legacy Agreement: 4(e), 5(b), 5(c), 6(b), 9, 12, 13, 14(d), 14(e), and 15.

15. GENERAL PROVISIONS.

- (a) Assignment or Transfer.
 - (i) Legacy Applicant is permitted to assign this Legacy Agreement or any of its rights or obligations under it, with ARIN's written permission, which may not be unreasonably withheld if such assignment and/or transfer is consistent with ARIN's Transfer Policies.
 - (ii) If Legacy Applicant attempts to assign this Legacy Agreement or any rights or obligations under it, including, without limitation, by involuntary assignment to Legacy Applicant's creditors, such assignment will be of no force or effect, unless the Legacy Agreement is executory to those creditors.
 - (iii) The event of any transaction (whether a merger, acquisition, or sale) in which Legacy Applicant's controlling managerial and/or voting interest changes during the term of this Legacy Agreement shall be considered an assignment, so long as the Legacy Applicant provides ARIN with written notification within thirty (30) days of such assignment.
 - (iv) ARIN shall have the right to freely assign this Legacy Agreement upon written notice to Legacy Applicant if ARIN is changing its corporate organization to permit a successor organization to provide the Services contemplated by this Legacy Agreement.
- (b) Pursuant to Policies, Legacy Applicant consents to assume responsibility for ensuring information involving assignments and allocations from within its allocated or assigned Included Number Resources in this Legacy Agreement is correct and provided to ARIN in a timely manner.
- (c) Relationship of Parties. The relationship between the parties is and will be that of independent contractors. No joint venture, partnership, employment, agency, or similar arrangement is created

between the parties. Neither party has the right or power to act for or on behalf of the other or to bind the other in any respect other than as expressly provided for in this Legacy Agreement.

- (d) Entire Legacy Agreement. This Legacy Agreement (and the Policies which are hereby incorporated by reference to the extent they do not conflict with this Legacy Agreement) constitutes the entire understanding between the parties and replaces and supersedes any and all prior and contemporaneous agreements and understandings, whether oral or written, express or implied, between the parties with respect to the Included Number Resources which are the subject matter of this Legacy Agreement. All other RSAs for number resources from ARIN, if any, remain unchanged by this Legacy Agreement.
- (e) Waiver. No waiver of any provision or consent to any action under this Legacy Agreement will constitute a waiver of any other provisions or consent to any other action, nor will such waiver or consent constitute a continuing waiver or consent or commit any party to provide past or future a waiver or consent.
- (f) Severability. If any provision of this Legacy Agreement is determined to be illegal, invalid, or otherwise unenforceable by a court or tribunal of competent jurisdiction, then to the extent necessary to make such provision and/or this Legacy Agreement legal, valid, or otherwise enforceable, such provision will be limited, construed, or severed and deleted from this Legacy Agreement, and the remaining portion of such provision and the remaining other provisions hereof will survive, remain in full force and effect, and continue to be binding, and will be interpreted to give effect to the intention of the parties insofar as possible.
- (g) Successors and Assigns. This Legacy Agreement will be binding upon and inure to the benefit of the parties and with respect to ARIN, its successors and permitted assigns, and with respect to Legacy Applicant, its permitted successors and assigns.
- (h) No Third-Party Rights. This Legacy Agreement is made solely for the benefit of the parties and does not, and will not, be construed to grant any rights or remedies to any other person or entity other than as expressly provided for in this Legacy Agreement.
- (i) Construction. This Legacy Agreement will be construed as if it was jointly drafted by both parties and may not be construed against either one.
- (j) Written Notice. All "written notice" required or permitted to be given under this Legacy Agreement will be delivered to the other party by any of the following methods: (i) hand delivery, (ii) certified U.S. mail, return receipt requested, postage prepaid, (iii) overnight courier, or (iv) electronic mail. If Legacy Applicant gives notice to ARIN, it must use ARIN's current address, which is currently: ARIN, Attention: Financial and Legal Services Department, 3635 Concorde Parkway, Suite 200, Chantilly, VA 20151, or the following e-mail address: billing@arin.net. If ARIN provides notice to Legacy Applicant, ARIN must use the contact information provided by Legacy Applicant to ARIN during the application process or other contact information provided by Legacy Applicant in accordance with the terms of this Section. All notices will be deemed received and effective as follows: (i) if by hand-delivery, on the date of delivery, (ii) if by delivery via U.S. mail, on the date of receipt appearing on a return receipt card, (iii) if by overnight courier, on the date receipt is confirmed by such courier service, or (iv) if by electronic mail, 24 hours after the message was sent, if no "system error" or other notice of non-delivery is generated.
- (k) Force Majeure. Neither party shall not be deemed in default hereunder, nor shall either party be responsible for any cessation, interruption, or delay in the performance of its obligations under this Legacy Agreement where such failure of performance is the result of any force majeure event, including, but not limited to, earthquake, flood, fire, storm, natural disaster, act of God, civil disturbances, war, terrorism, armed conflict, riots, failure of contractors or subcontractors to perform, labor strike, lockout, boycott, or acts of governmental authorities. In the event a force majeure event extends for a period in excess of thirty (30) days in the aggregate and prevents a party from

performing its obligations under this Legacy Agreement, such party may, in addition to its other rights under this Agreement, in its discretion, terminate this Legacy Agreement immediately upon written notice to the other party. If, pursuant to this force majeure provision, a party terminates this Legacy Agreement, the Included Number Resources will resume the status they had prior to this Legacy Agreement.

(I) Dispute Resolution. Except for the right of either party to apply to a court of competent jurisdiction for a temporary restraining order, a preliminary injunction, or other equitable relief to preserve the status quo or prevent irreparable harm, any and all claims, disputes or controversies arising under, out of, or in connection with the Agreement which the parties shall be unable to resolve within thirty (30) days shall be mediated in good faith. The party raising such dispute(s) shall promptly advise the other party of such claim, dispute, or controversy in a writing which describes in detail the nature of such dispute(s). By not later than fifteen (15) business days after recipient has received such notice of dispute(s), each party shall have selected for itself a representative who shall have the authority to bind such party, and shall additionally have advised the other party in writing of the name and title of such representative. By not later than thirty (30) business days after such notice of dispute(s), the party against whom the dispute(s) shall be raised shall select a mediation firm and such representatives shall schedule a date with such firm for a non-binding mediation hearing. The parties shall enter into good faith mediation and shall share the costs equally. If the representatives of the parties have not been able to resolve the dispute(s) within thirty (30) business days after such mediation hearing, the parties agree to litigate any dispute(s) before the appropriate state or federal court of competent jurisdiction or, with mutual approval of the parties, to arbitrate any dispute, which arbitration shall be held in accordance with the rules of the American Arbitration Association ("AAA") then in effect.

(m) If any subsequent version(s) of the Legacy Registration Services Agreement is authorized by ARIN, any prior signatory of any version of the Legacy Registration Services Agreement may choose to substitute a signed copy of the then-extant subsequent version, with all its terms, instead of the Legacy Agreement they previously signed, and the Included Number Resources will then be governed by the subsequent version. The consideration for such change is the original agreement and the agreement to abide by the revised terms. There is no requirement for a Legacy Applicant who has signed this Legacy Agreement to engage in any subsequent version.

(n) Notwithstanding any other provision in this Legacy Agreement, the parties agree that the Utah Governmental Immunity Act of the Utah Code, Section 63G-7-101 et seq. 1953 (as amended) (hereinafter, the "Act"), or any statutes that may amend or replace the Act, shall apply to any disputes hereunder implicating sovereign immunity.

TAB TE-RATE FUNDING - DISCUSSION

Issue

February 19, 2010, was the deadline for filing applications for E-Rate funding for Fiscal Year 2011, which runs from July 1, 2010 through June 30, 2011. UEN E-Rate staff and the School Districts have been very busy filing their respective applications.

Background

Many activities lead up to the February 19, 2010 filing deadline:

- The E-Rate window was extended from February 11 to February 19, 2010.
- UEN held multiple training workshops in the fall and winter months in preparation for the filing window. UEN also did extensive outreach to Schools, Libraries and Head-Start Administrators to explain the E-Rate Program and how it could benefit their entities and bring more E-Rate funds to the State of Utah.
- UEN provided support for District, Library, and Head Start E-Rate filings –
 and when requested to do so filed all applications for some of those entities.
- UEN's E-Rate Statewide filings for Fiscal Year 2011 used the state discount of 70%.
 The increase in the Statewide E-Rate discount from 68% to 70% is due to the economic downturn which is apparently driving increased applications for Free or Reduced Lunch, resulting in an additional increase in the statewide discount of 2%.
- UEN filed E-Rate Applications for 15 newly signed contracts; these contracts include service to Head Starts, Elementary and Charter schools. The contracts are with Qwest, Beehive Wireless, Allwest, Carbon/Emery, Centracom Interactive, Emery, Frontier, Manti, South Central, Conterra, UTOPIA, Strata Networks, and Integra.
- UEN completed the Master E-Rate Application data that includes all schools throughout the State of Utah along with their Free and Reduced Lunch statistics (needed to calculate E-Rate discount levels). This complete data is posted on the UEN E-Rate website, and used by all school districts throughout the state.
- Attached is the summary master entity list showing the school districts' discount rates.

In summary, UEN filed 44 applications for approximately \$18 million net E-Rate dollars for Fiscal Year 2011.

Recommendation

This is an information item and requires no further action by the committee.

TAB 7 ATTACHMENT A SUMMARY MASTER ENTITY LIST

SCHOOL DISTRICT	NUMBER OF ENTITIES	TOTAL STUDENTS	TOTAL F&R	DISCOUNT PERCENTAGE
SCHOOL				
ALPINE	84	69512	18262	50%
BEAVER	7	1592	747	75%
BOX ELDER	28	11239	4218	67%
CACHE	28	16103	4924	62%
CARBON	13	4171	1866	72%
DAGGETT	5	158	42	58%
DAVIS	97	70459	18058	50%
DUCHESNE	18	4516	1693	66%
EMERY	12	2381	1093	72%
GARFIELD	11	991	465	72%
GRAND	8	1598	773	77%
GRANITE	106	73837	34990	67%
IRON	21	9516	4206	70%
JORDAN	57	52764	11918	45%
JUAB	7	2242	823	66%
KANE	9	1167	510	69%
LOGAN	14	6677	3352	74%
MILLARD	14	3687	1899	76%
MORGAN	6	2288	398	53%
MURRAY	12	6508	2022	53%
NEBO	50	32616	11151	56%
NORTH SANPETE	10	2207	1175	76%
NORTH SUMMIT	5	917	259	63%
OGDEN CITY	32	14262	9834	78%
PARK CITY	10	4585	881	55%
PIUTE	6	388	260	82%
PROVO CITY	28	14500	6899	65%
RICH	6	461	219	72%
SALT LAKE CITY	56	27505	16605	75%
SAN JUAN	15	3033	2023	81%
SEVIER	15	4536	2182	74%
SOUTH SANPETE	10	2910	1516	77%
SOUTH SUMMIT	5	1442	318	57%
TINTIC	7	229	136	80%
			5200	
TOOELE	15	14578 6390	2484	62%
WASATCH		5221	1743	
	11			64%
WASHINGTON	52	26760	10718	73%
WAYNE	6	608 29998	10001	73%
WEBER	48		10001	55%
CANYONS	54	35361	8525	49%
HEADSTART	7	202	202	000/
CENTRO HD	7	382	382	90%
DAVIS HD	27	421	421	90%
MOUNTAINLAND HD	14	817	817	90%
OGDEN-WEBER HD	8	737	737	90%
RURAL UTAH HD	17	434	434	90%
SLC ACTION HD	35	1974	1974	90%
SUU HD	15	464	464	90%
UTE TRIBE HD	7	193	193	90%

TAB 8

NTIA BTOP UPDATE - DISCUSSION

Issue

Update on NTIA BTOP grant application.

Background

UEN submitted two applications to the National Telecommunications and Information Administration (NTIA) for the Broadband Technology Opportunities Program (BTOP) grant as part of the federal American Recovery and Reinvestment Act (ARRA) Broadband stimulus legislation passed by Congress in February 2009.

Requested NTIA funds in our proposal come to \$13.4 million. We were notified that we passed the first tier criteria and the "Due Diligence" requirements of the grant evolution process. At this writing, UEN is currently awaiting final funding notification from the National Telecommunications and Information Administration.

Recommendation

This is an information item and requires no further action by the committee.

Т А В

CHEESE SCIENCE PROJECT UPDATE - DISCUSSION

Issue

UEN is continuing STEM education efforts as reported in the December 19 Steering Committee meeting. Cheese Science is a new partnership that launched January 25, 2010. Lisa Cohne, the project manager, will provide an update. Additional information is available on the website at www.uen.org/tv/cheese/

Background

In addition to STEM distance education services, online courses, and teacher professional development, UEN has also engaged in recent outreach and community partnership activities to bring broader awareness of STEM education and access to STEM resources for K-20 learners.

With statewide reach, UEN is uniquely positioned to effect public recognition that STEM is a national priority and motivate further STEM revitalization. Cheese Science builds on the same premise that helped UEN SciFi Friday receive a national community impact award: using popular culture as a bridge to science.

Cheese is accessible science. UEN licensed a 21-part program that features different cheeses of the world, history, geography, and culture. It's a fun program, and everyone loves cheese. But if it was just for fun, then UEN wouldn't be doing this project. UEN is doing this project because we believe we can use our broadcasting and web resources to bring science to a broader audience, elevate the conversation around science, inspire middle and high school students to build an academic record of core courses that make them college-ready, and influence a new pipeline of students to enter science careers.

According to the U.S. Department of Labor, employment of agricultural and food scientists is expected to grow by 16 percent between 2008 and 2018, faster than the average for all occupations. Utah is a good location for food science careers, and UEN is doing its part to ready the pipeline of students.

Results

Perhaps the clearest marker of success to date is that UEN generated enthusiastic participation in this project in mere weeks. Starting in October 2009, we assembled our advisory board, raised more than \$10,000 to fund video production and prizes for the Farm to Fork video contest (see attached), and recruited 15 local scientists to appear on camera. To launch the program publicly, we hosted a Cheese Party at which more than 80 community members enjoyed locally produced (donated) cheeses while

viewing the first episodes of Cheese Slices and Cheese Cubed. Afterward, several of our scientists fielded more cheese-related questions from the crowd. In addition to creating 21 new educational videos, we aggregated numerous resources for the website and organized them into intuitive categories such as Ask a Cheese Scientist, Cheese Careers, Cheese Science Basics, Cheese around the World, and Lesson Plans.

Within the first six weeks, the Cheese Science website received more than 700 visits; within 12 hours of sending press kits, we were highly praised by Salt Lake City Weekly. From this and other positive feedback we're receiving, we expect interest to rise as we broadcast new episodes of Cheese Slices and Cheese Cubed and continue to promote the program.

Recommendation

A press release about the project and the Farm to Fork Video Contest for students is attached. Committee members are asked to help communicate this information to members of their community. No further action is required at this time.

TAB 9 ATTACHMENT A

CHEESE SCIENCE PROJECT PRESS RELEASE AND FARM TO FORK VIDEO CONTEST ANNOUNCEMENT

UCAN UTAH EDUCATION NETWORK

Contact: Lisa Cohne 801.581.5176

lcohne@uen.org

PRESS RELEASE

"CHEESE SCIENCE" PROJECT PROVES SCIENCE IS DELICIOUS!

UEN-TV brings together community, Higher Ed for multi-faceted program

Salt Lake City, UT—The Utah Education Network (UEN) has launched *Cheese Science*, an innovative program that combines broadcast television with online resources and community events. The aim is to raise awareness about the role science plays in our everyday lives and call attention to the great opportunities for Food Science education and careers in Utah.

"With programs such as this, we're heeding President Obama's call to support Science, Technology, Engineering and Math literacy in our community," says UEN Content Specialist Jenn Gibbs. "Who hasn't wondered why Swiss cheese has holes or what gives different cheeses their unique characteristics? *Cheese Science* taps into our natural curiosity about a common food to show us a world that's far more fascinating and complex than most of us realize—the world of Food Science."

Viewers can feast or simply snack on the variety of cheese knowledge offered by the multi-faceted program. The broadcast component begins each Monday at 8 p.m. on UEN-TV Channel 9 with a 30-minute episode of *Cheese Slices*, a 21- part series that takes viewers to different countries to discover the culture, geography and history of different cheeses. Immediately following, viewers can catch a more local, science-specific take on cheese with a 3 – 5 minute episode of UEN's original series, *CHEESE³* (*Cheese Cubed*). This bite-sized show features Utah microbiologists, chemists, engineers, and more answering common questions about the science behind the popular food.

The program's online component (at uen.org/tv/cheese/) includes cheese facts, links to Food Science career information, lesson plans for teachers, and free interactives such as "Feta Invaders" and "The Cow Bop Game." Visitors can also view their favorite *CHEESE* episodes and learn more about upcoming community events, such as the *Cheese Science* "Farm to Fork" category of the Utah Multimedia Arts Festival's 2010 Beyond Imagination video contest for high school students.

UEN's *Cheese Science* is sponsored by Cache Valley Cheese, DSM, Gossner Foods, Schreiber Foods and the Western Dairy Center. The project's Advisory Board includes Beehive Cheese Company, the Utah Dairy Council, Utah State Office of Education, Utah State University and Utah State University Extension.

#

For more information about Cheese Science, contact Lisa Cohne at 801.581.5176 and visit uen.org/tv/cheese.







2010 Farm to Fork Contest Utah Multimedia Arts Festival 2010 Beyond Imagination

As part of the Utah Multimedia Arts Festival all Utah High School Students are encouraged to enter The Farm to Fork Video Contest.

Purpose:

The purpose of the Farm to Fork Film Category is a video competition that hopes to broaden student awarness of Utah's local cheese industry and science connected to cheese. The students may choose to create a video that must include a S.T.E.M (Science, Technology, Engineering or Mathematics) component connected to cheese and how food gets from Farm to Fork. Each video will be evaluated based on its quality research and ability to connect the Farm to Fork idea, creativity and educational value for a Utah audince. All students who enter this category will be recognized for their participation in this endeavor.

Eligibligy:

The Farm to Fork Contest is a sub-category of the Utah Multimedia Arts Festival 2010, but this category is open to all high school students currently enrolled in a Utah high school. All rules for entering the Utah Mulitmedia Arts Festival apply to the Farm to Fork Film Contest. All entries must follow rules located at https://umaf.wikispaces.com/2010+Submission+Forms

Deadline for Video Submission: April 9^{th} , 2010

Judging and Awards:

The sponsors will provide judges to choose the top threee videos in each category. Winners will be announced as part of the annual Utah Multimedia Arts Festival. The Grand Prize winner in the Farm to Fork category will receive a \$300 cash prize, 2nd place will receive a \$150 cash prize and 3rd place will receive a \$50 cash prize all winners will receive prizes from Utah Cheese Sponsors.

Reference Websites:

Utah Multimedia Arts Festival umaf.wikispaces.com/2010+Submission+Forms Utah Education Network Cheese Science uen.org/tv/cheese Utah Dairy Council www.utahdairycouncil.com

TAB 10

MY. UEN WEB STATISTICS - DISCUSSION

Issue

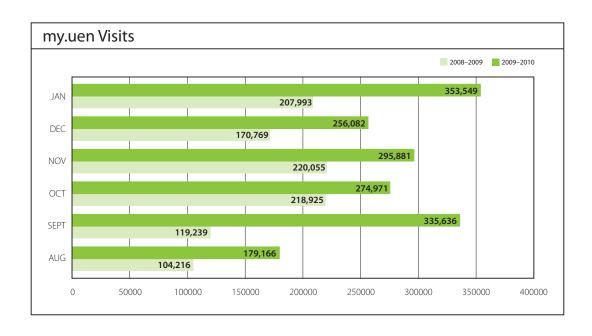
my.uen continues to experience a significant growth in usage.

Background

my.uen is the online service that educators use to register with UEN, to access UEN tools, and to build a public web page. Web statistics and feedback from educators indicate that many are finding my.uen to be the perfect tool to communicate with students, parents and colleagues.

In addition to posting announcements, documents, and bookmarks, premium educators now have a Blogging Tool. We have found that most educators are not using the Blogs portlets in the traditional way – sharing daily thoughts and insights – but rather they are using it to keep a daily record of what happened in their class or as authentic writing activities. Educators post writing prompts on their blog and their students use the comments feature to post a response to the prompt.

The chart below compares my uen visitors in August 2008 through January 2010.



The increase in usage was definitely having a negative impact on performance, but the my.uen upgrade that was completed in November 2009 upgrade resolved those issues. my.uen is performing well and educators will be pleased to know that we have plans to increase the document storage for Premium users to 1 gigabyte very soon.

Recommendation

This is an information item and requires no further action by the committee.

TAB 11

UEN NETWORK PERFORMANCE AND IVC METRICS REPORTS - DISCUSSION

Issue

The UEN Network Operations Center continues to monitor and manage the health and utilization of the network. This report provides the latest statistics regarding network performance. Additionally, UEN Technical Services and the UtahSAINT continue to focus on security related training and awareness.

Services Metrics collected from our UEN Interactive Video conferencing application, Tandberg Management system are reported for the start of spring semester ending January 31st.

Background

Network Performance Metrics for Jan 1 through Feb 17

Network Backbone Availability

Month to date	99.995%
Quarter to date	99.996%
Year to date	99.992%

Network Backbone Utilization**

North Ring	.50%
Central Ring	14%
South Ring	34%

Internet Bandwidth Summary

Available Bandwidth	12Gbps
Peak Utilization	4.65Gbps

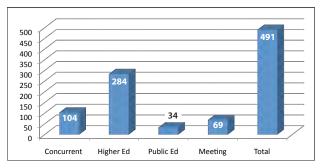
^{**}A slight drop overall of utilization is due to the completion of the 3B project and routing of internet traffic being distributed over the entire network instead of the majority of traffic returning to EBC for internet routing.

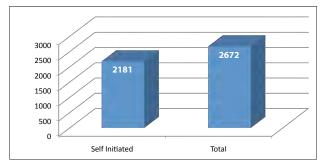
IVC Metrics for the month of January

UEN IVC offered the following unique education events during January: 34 public education (high school credit only), 104 concurrent enrollment, 284 higher education and 108 administrative meetings supporting various academic and government programs. There were also 2,181 self initiated events by stake holders. These classes and meetings combined for a total of 4,336 recurrences over the IVC system during January.

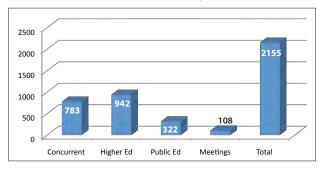
UEN Technical Services Quick Ticket metrics for the month of January are as follows; A total of 992 unique tickets were opened. The breakdown is TSSC Tier 1 873, TSSC Tier 2 19, Field Operations 11, Network Operations 35, Logistics 22, Regional Service Group 15, and other groups 17.

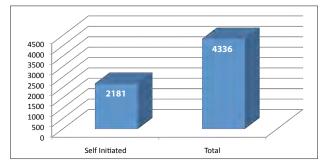
Total Unique Classes for January





Total Event Recurrences for January





Recommendation

This is an information item and requires no further action by the committee.

TAB 12

Steering Committee Meeting Minutes

UTAH EDUCATION NETWORK STEERING COMMITTEE December 18, 2009 – 9:00 a.m.

<u>Members Present:</u> Kenning Arlitsch, Steve Corbató, Jon Crawford, Steve Fletcher, Rick Gaisford, Stephen Hess, M. K. Jeppesen, Gary Koeven, Pat Lambrose, Cheryl Mansen for Donna Jones Morris, Eric Mantz, Ronda Menlove, Gail Niklason, Mike Petersen, Kim Roper, Kirk Sitterud, Glen Taylor, Barry Walker, Ray Walker.

Others Present: Charice Black, Melinda Brereton for Lisa Kuhn, Paul Crawford, Jeff Egly, Rich Finlinson, Boyd Garriott, Thom Gourley, Eric Hawley, Laura Hunter, Doug Jones, Karen Krier, Don Mahaffey, Steve Mecham, Casey Moore, Bryan Peterson, Joni Robertson, Dennis Sampson, Larry Smith, Jim Stewart, Louie Valles.

Welcome and Introductions

Ray Walker welcomed everyone to the December Steering Committee meeting. Glen Taylor and Charice Black joined remotely.

Committee of the Whole

Tab 23 - UEN Steering Committee 2010 Meeting Schedule

Mike Petersen reviewed proposed dates for the 2010 Steering Committee meetings. He noted that the February, April and October meetings had been rescheduled to the fourth Friday to avoid other state education meetings. The June meeting is scheduled for the second Friday. The February date is a concern because it conflicts with the annual UCET conference. Executive Members of the Steering Committee planned to discuss alternative dates for the February meeting. A motion was made and seconded to approve the 2010 dates as submitted, except for February 26, 2010. THE MOTION CARRIED.

Tab 24 - UEN Professional Development Policies

Laura Hunter reported that increased demand for UEN Professional Development services necessitates revision of policies for eligibility, registration and confirmation, attendance, record-keeping, assignments and awarding of credit. The policies were discussed with the Instructional Services Subcommittee during their October meeting. Additional input has been received through the Content Forum and other stakeholder groups. All have agreed the policies should be implemented. For a complete detailed version of the proposed UEN Professional Development Policies, please see Tab 23 Attachment A. A motion was made and seconded to accept the proposed UEN Professional Development Policies. THE MOTION CARRIED.

<u>Tab 25 – UEN Network Operations and UtahSAINT Conference</u>

Jim Stewart reported on network metrics for the last two months of the year. Jim also thanked everyone who organized and participated in the Utah SAINT Conference. It was a great success with a lot of positive feedback.

Tab 26 - IVC Services Metrics and DTS/Legislative Support Update

Louie Valles reported on recent activities of the Technical Services Support Center using metrics about the UEN IVC system from the Tandberg Management Suite (TMS). UEN IVC offered hundreds of unique education events during fall 2009. UEN Technical Services also supports other UEN services with a new trouble ticketing system called QuickTicket. This was developed in-house and allows UEN TS to immediately support issues related to the IVC system and other technical services. To see a detailed report on the number and kind of unique events, please see Tab 26 page 12 and 13.

Louie also reported that a memorandum of understanding has been signed between DTS and UEN under which UEN will provide IVC services for state agencies. It is important to UEN and DTS to define standards and determine what is required to provide a seamless, quality experience to users.

<u>Tab 27 – Commercial VOIP Services Task Force Update</u>

In a followup from the last Technical Services Subcommitee meeting, Jim Stewart reported that stakeholders, commercial Telco's and other commercial service providers hold strong opinions for and against UEN supporting commercial VOIP services. It was agreed that a Task Force comprised of urban and rural services providers, commercial VOIP providers, UEN stakeholders, UEN Steering Committee members and UEN staff be organized. Jim said that the group is just beginning the phase of fact finding and will work to develop policy guidelines. Once these guidelines are developed they will be bringing them back to the Steering Committee for discussion and suggested changes.

Tab 28 - E-Rate Update

Speaking on behalf of Lisa Kuhn, Melinda Brereton reported that the E-Rate filing window for Fiscal Year 2011 opened up on December 3rd and will close on February 11. UEN has posted 470's for nine separate published bids or RFP's including the BTOP procurement. Melinda also noted that UEN has received funding commitments for \$12.6 million with ten applications under review.

Tab 29 - NTIA BTOP and Gates Foundation Grants Update

Dennis Sampson explained that UEN was notified in early December that our application was selected to move to the "Due Diligence" Phase (Step 2) process in the grant competition. UEN has been given approximately 30 days to follow up on the supplemental information requested by NTIA. In December the State Libraries Division was notified that UEN had been selected by the Gates Foundation to receive a matching grant of \$660,000 to apply towards the 20% matching requirement of BTOP for public libraries that UEN will apply for in Round 2 of BTOP. Kudos to Utah as numerous states were vying for this funding! Hopefully by the next Steering Committee Meeting in February we will have heard back on the NTIA BTOP Grant application.

<u>Tab 30 – UEN Campus Visits</u>

Doug Jones reported that Dixie State College was the first stop in a statewide effort to create better awareness of UEN resources among faculty. Doug worked with Becky Smith to schedule the visit on Dixie State College Career Day so public education administration, staff, teachers and students could also participate. UEN also reached out to public and academic librarians in the area. Outreach efforts included print, email and a special invitation. Of the 40 participants, they reported that their visit resulted in more awareness of UEN resources. While UEN staff agree that this initial campus visit met expectations, it was suggested that greater impact could be made with handson opportunities for the participants, better use of venue, better use of people, etc. In order to see a complete list of the recommendations, please see Tab 30.

Tab 31 - Stem Projects and Internet Safety

Laura Hunter reported that STEM (science, technology, engineering, and mathematics) education is an important goal of Utah leaders and citizens. STEM education is a fundamental goal of the USTAR program implemented by the Utah Legislature. UEN has also engaged in recent outreach and community partnership activities to bring broader awareness of STEM education and access to STEM resources for K-20 learners. To see a detailed list of the projects designed to meet the goal of statewide reach, please refer to Tab 31.

<u>Tab 1 – Steering Committee Meeting Minutes</u>

A motion was made and seconded to approve the minutes with corrections on attendance. THE MOTION CARRIED.

Tab 2 – Other

The next Steering Committee meeting will be held on February 26, 2010 at 9:00 a.m. at the Dolores Doré Eccles Broadcast Center.

COMMITTEE OF THE WHOLE

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