Utah Education Network

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Utah State Office of Education ■ Utah System of Higher Education

UTAH EDUCATION NETWORK
STEERING COMMITTEE

AGENDA

AUGUST 16, 2002 – 9:00AM

9:00 am - 12:00pm

Business Steering Committee Meeting

Welcome and Introductions..... Bonnie Morgan

Tab 9

Next meeting - October 18, 2002 (Proposed)

Please place these materials in your Steering Committee Binder

TAB 1

STEERING COMMITTEE MEETING MINUTES

UTAH EDUCATION NETWORK STEERING COMMITTEE

June 14, 2002 - 9:00 am

Steering Committee Meeting

Present: Douglas Abrams, Bruce Christensen, Vicky Dahn, Clif Drew, Reed Eborn, Stephen Hess, Pat Lambrose, Wayne Peay, Michael Petersen, Kirk Sitterud, Glen Taylor, Ray Walker, Barbara White, Phil Windley, Gary Wixom, Andrew Howlett, Lynn Bills, Vernile Prince, Rick Cline, Karen Krier, Victoria Rasmussen, Race Davies, George Miller, Lisa Kuhn, Laura Hunter, Jim Stewart, Bruce Todd, Sheralyn Stevens, Rich Finlinson, Bill Kucera, Cory Stokes, Charice Black, Rick Gaisford, Jon Crawford, Louise Tonin, Sheryl Hulmston, Claire Gardner, Nancy Granducci, Joe Granducci, Phil Titus, Bruce Larson, Joan Lee, Daniel Patterson, Cory Stokes, Nancy Gibbs, Kevin Taylor, Glen Burr, Mina Kang, Colleen Nordberg, and George Brown.

Douglas Abrams attended for Amy Owen.

Lynn Bills attended for Coy Ison.

Jonathan Ball attended via EDNET from the Capitol.

Mark Spencer has left the Utah Valley State College and is now the Associate Commissioner for Finance and Planning at the Utah System of Higher Education. It has been recommended that Ray Walker take his place. That formal appointment is currently being processed.

I. Welcome and Introductions - Gary Wixom

Due to uncertainties in the budget situation and strategic planing, a decision was made to hold the Steering Committee meeting as a committee of the whole instead of following the usual format.

II. Review and Approval of Minutes - March 22nd, 2002 (Information/ Action)

Pat Lambrose asked for the status of the policy on page 1-4. George clarified the policy, stating that it is a file sharing policy that is in progress. It was felt that the policy needed to go to the Technical Services Subcommittee first before bringing it to the Steering Committee.

Motion: It was moved and seconded that the members of the Utah Education Network Steering Committee approve the minutes of the Friday, March 22nd Executive Meeting. After a brief discussion, THE MOTION PASSED WITH ALL VOTING IN FAVOR.

After some discussion of an item on page 2-4, it was agreed that the wording would be changed to reflect that though there is only one priority, Pioneer, there was also consensus that an RFP could be issued to determine what the cost of the video streaming project might be.

Motion: It was moved and seconded that the members of the Utah Education Network Steering Committee approve the amended business meeting minutes of March 22nd. THE MOTION PASSED WITH ALL VOTING IN FAVOR.

III. Honoring of Nancy and Joe Granducci for their Service to education in Utah - Sheryl Hulmston and Mike Petersen presented.

Sheryl Hulmston introduced Joe and Nancy Granducci. Joe and Nancy Granducci are from Ogden H.S. They have been involved with EDNET since it was SETOC. Nancy is the Latin teacher there, and Joe provided technical support. Their dedication to the students and their dedication and commitment to furthering education has been inspirational. They've been involved heavily with allied health sciences program and have provided Latin instruction that exists nowhere else in the state of Utah. They have been teaching for 23 years. Their love, dedication and respect for each other exemplify the kind of partnership that marriage can bring.

Mike Peterson then presented a plaque from UEN to Joe and Nancy, which read, *"In honor of your outstanding service to distance education, presented to Joe and Nancy Granducci, Ogden High School. For years of commitment, compassion, service, support and contributions to distance learning in Utah."*

The presentation was followed by a few words from Joe and Nancy Granducci. Joe thanked the UEN Steering Committee and George Miller. Joe also mentioned the value of money available for training teachers to use technology. He felt that one of the problems today in education is training. Teacher qualification within their certificated field is really a key issue at this point. Nancy also spoke a few words and both thanked the committee warmly.

IV. <u>Tentative FY 2003 Strategic Plan 3-1</u> - George Brown presented.

Before George Brown began his presentation, Gary Wixom and Steve Hess spoke about the current circumstances. Gary commented that the state budget dilemma creates an uncertainty which affects the budget and the strategic plan for UEN. As the budget uncertainty impacts the strategic plan, he suggested first discussing the budget, then the strategic plan, and then making recommendations as to how to proceed regarding the budget.

Steve Hess concurred, reiterating the importance of having some general direction in the strategic plan. The increase in the budget shortfall and the resultant increase in cuts to higher education would result in significant overall reductions in service, and possibly in personnel. He does expect UEN to be able to move forward and accomplish some goals this summer, despite the financial shortfall.

Before George Brown began his presentation, he pointed out a correction on the inside of the cover page, down by the caveat. The special note related to the legislature's need to make budget reductions says that it is 4.28 percent, however, it should be 4.75. George then explained the difference in format of the Plan from previous formats.

The format of the plan this year is different than it has been in the past. The excellent executive summary in the first 4 or 5 pages describes what UEN is about and what its goals are. This is followed by a color stack, which identifies each project for this coming year. Updates will be made and will be provided at least quarterly, as progress is evaluated. The scheduled completion date is on the left hand column, and this correlates directly with the project plans in appendix A. Project plans need to be prioritized. George requested that each of the managers discuss their project plans in brief terms.

UEN Technical - Jim Stewart presented

Jim Stewart stated that the summer projects should have enough money to be completed if the UEN budget cuts are not deeper than about $700,000. He discussed the first two bars in the color stack, which contains most of the projects planned for the summer, and gave an overview of the projects the UEN Technical Services Department had planned for the summer (see strategic plan).

TouchAmerica transport would increase UEN's capacity by an additional 150 mbs of Internet traffic this fall. That will be needed, based on traffic statistics at the end of the school year this year.

There will be a purchase of about $140,000 of equipment to complete the GigE core ring project between SLCC, UVSC, and EBC.

In the Southeast, we are increasing the capacity between Price and Blanding. Upon its completion, UEN will have the ability to deliver up to 6 video paths and still have about 20 megabits capability for data and internet traffic.

<u>Motion:</u> It was moved and seconded that the Technical Services projects previously prioritized by the Technical Services Subcommittee be

approved for completion this summer and be the first priorities of this budget. THE MOTION PASSED WITH ALL VOTING IN FAVOR.

Instructional Services – Laura Hunter presented

George Brown pointed out that the four areas of instructional services are on the top of the color stack: On-line resources, KULC programming, workforce development and professional development. These reflect areas closer to the customer.

Most of the IS projects don't have a large capital outlay. The expenses come mainly in the form of personnel to do on-going projects such as web development, curriculum alignment, etc. Some grant funds are anticipated for this summer - about $50-60,000. Other anticipated capital outlay are on-going subscriptions. The Pioneer committee has been reviewing and prioritizing all the current contracts. If we face a second wave of budget cuts, there would be Pioneer products that are affected. Lower priority subscriptions will have their costs evaluated. The streaming RFP is currently open. No decisions are anticipated until August when the instructional services committee meets again. A new lesson plan tool, a new adjustment tool, a rubric analysis tool and some website changes will be rolled out about a week after the Steering Committee meeting. There will be a new schedule in fall programming. There are no Instructional Service project goals that need to be approved this summer.

Pat Lambrose expressed concern that our limited resources are not being appropriately allocated. The Elementary Secondary Education Act (ESEA) states “no child left behind.” She asuggested the Steering Committee should clarify UEN's role in the "no child left behind” legislation, including teacher quality, teacher training, and professional development. She also asked if new resources need to be created, or if there are ones that already exist. Then she recommended that UEN look at the levels of technology integration which the Jordan District is using in its electronic portfolio.

Laura Hunter noted the alignment of on-line resources to the core curriculum, a new lesson plan tool developed through collaboration with USOE, and a request from UEN’s Higher Ed constituents for the electronic portfolios.

George Brown pointed out that this plan has not been to either of the subcommittees yet, but will go to the subcommittees at the next meeting, when they can be reviewed in specific detail.

Motion: It was moved and seconded to approve budget for Instructional Services on-going contracts, Pioneer and similar subscriptions. Further decisions can be made once items have been reviewed by the subcommittees. MOTION APPROVED WITH ALL VOTING IN FAVOR.

Mike Petersen briefly referred to instructional delivery projects. Goals address the EDNET system, evaluation and piloting of new delivery technologies, enhancing the satellite system, and developing a comprehensive strategic plan for the satellite system.

Clif Drew was concerned about effectively communicating with colleges about teacher education. Mike Petersen pointed out that on page 28, teacher training is addressed and the role that colleges and public school officials will play in that particular area is recognized. He agreed that UEN does need to be sensitive in getting to the right programs within the institutions to be developed.

Wayne Peay emphasized that budget constraints may lead to different strategies for UEN. UEN must target its investments carefully. Perhaps the mission of UEN may be altered due to the changes the budget cuts have brought about.

Pat Lambrose recommended that format of the steering committee be discussed at the next meeting.

It was agreed that further discussion and approval of the plan would occur at the August meeting.

V. <u>FY 2003 Budget Recommendations 4-1</u> – Mike Petersen Presented

Mike Petersen noted that on page 4.3, the second bullet, it is not actually the case that the budget reflects possible 4.75 % holdback. The budget that begins on page 4-4 through 4-8 is actually based on the state appropriation. If there were an additional 4.75 percent cut, that would be an additional $712,000 in reduced state appropriations that's not incorporated into this budget plan. There have been some extensive discussions in the planning meeting this morning as to how to proceed with the budget. Mike Petersen suggested that the Steering Committee endorse the budget, recognizing that any decisions made today will be temporary. People need to be paid and projects need to be started. The approved temporary budget will be reviewed and adjustments made, once the additional cuts have been made.

There is a special legislative session on the 26th, and a two day special session planned for the 8th and 9th of July, where budget decisions are expected to be made.

Jonathan Ball confirmed the dates of the legislative sessions. The two weeks between the 26th and the 9th allows the legislature to hear public comment on proposed cuts. The 9th would be the end of the special session.

Race Davies pointed out that it was important to see reductions as on-going, rather than temporary.

Barbara White mentioned that at Utah State, they had looked at budget reductions at various levels. She was concerned, because reducing programs would affect staff, and vice versa, and the impact of the strategic plan and the plans at other institutions on each other. The satellite system was of particular concern.

Motion: It was moved and seconded that the budget be approved on a tentative basis as it is outlined with the knowledge that after July 9th the Steering Committee will reconvene to finalize its approval. MOTION PASSED WITH ALL VOTING IN FAVOR.

VI. A Formative Evaluation Instrument and Process for EDNET Videoconferencing 5-1 - George Miller presented

The EDNET Evaluation Process was initiated last November. About two years ago, the Public Education Curriculum Coordination Committee (PECCC) recommended that we find a way to streamline and enhance the course approval process for EDNET classes. Today the public education/instructional content committee serves that role. They review all of the EDNET classes and programs. That process has a number of different facets that involve UEN and USOE staff. Evaluating teachers has a twofold purpose: 1) It's an ongoing formative evaluation that provides teachers with needed feedback on their instructional delivery, and 2) It serves as a student evaluation of the class and provides a ready assessment of the quality of the class to the course approval committee. The key conclusion of the evaluation are: (1) Most students are satisfied with the quality of instruction that they're receiving, and especially the opportunity to get it. So educational access really seems to be appreciated all over the state. (2) Teachers must be well trained. Curriculum and their pedagogy, their teaching style, really has to be reworked if it's going to work within EDNET. (3) Minor technical problems do interfere with EDNET teaching, but those can easily be resolved, usually within a matter of hours, if not minutes. (4) Distance learning teaching in Utah is as good as traditional face-to-face instruction. EDNET technology really bridges geography to bring our students, our teachers, and our communities together.

VII. Professional Development Report - Victoria Rasmussen presented

Laura Hunter introduced Victoria Rasmussen, who is the manager of the professional development program. Victoria has been with UEN since September, but has always been out conducting training during the Steering Committee meetings. She provided an excellent report (see tab 6 in the agenda.

Victoria Rasmussen solicited input from the Steering Committee as to the direction of UEN Professional Development.

VIII. Other

- Steve Hess felt that the entire UEN Steering Committee should reconvene to review goals and directions once the budget cuts have been determined some time after July 8th or 9th. He Steve also offered words of encouragement, thanking people for shouldering additional burdens and responsibilities. Though cuts may be on-going, he believes there was reason to be cautiously optimistic, seeing this as an opportunity for UEN to refocus and prioritize
- Gary Wixom thanked everyone for their participation.

The meeting adjourned at 11:00 a.m. with a duration of 2 hours 5 minutes.

The next meeting is scheduled for August 16, 2002 - 9:00a.m. at the Dolores Doré Eccles Broadcast Center

TAB 2

EXECUTIVE COMMITTEE ACTIONS

August 8, 2002

TO: UEN Steering Committee

FROM: Stephen Hess, Executive Director

Issue

Two actions taken by the UEN Executive Committee on July 22, 2002 require final action and approval by the Steering Committee. The committee approved in concept a UEN position paper on maximizing e-rate funding, and actions proposed to accommodate a budget cut of $83,200 in the FY2002-2003 budget. Detailed information on the two items follow in tabs IIA and IIB.

Background

The UEN Executive Committee met on July 22, 2002 at the Eccles Broadcast Center. In attendance were co-chair Gary Wixom, and members David Eisler, Vicky Dahn, and Ryan Thomas. UEN staff members present were Steve Hess, Mike Petersen, George Brown, Laura Hunter, Jim Stewart, Lisa Kuhn, and Randy Scott.

The Executive Committee agreed conceptually to support the objectives and activities outlined in the draft position paper on maximizing e-rate funding. Suggestions were made to refine the paper, with the understanding that it would then be reviewed and approved by the Steering Committee on August 16.

The Executive Committee approved the budget cut plan outlined in Tab IIB, contingent upon full review, discussion, and approval of the FY 2002-2003 budget by the Steering Committee. Detailed information regarding the full budget is provided in Tab III.

TAB 3

E-RATE POSITION PAPER - ACTION

August 8, 2002

TO: UEN Steering Committee

FROM: Stephen Hess, Executive Director

Issue

The attached UEN Position Paper on E-Rate Funding was approved conceptually by the Executive Committee on July 22, 2002, and requires final action by the Steering Committee. It identifies goals and outlines plans to significantly increase e-rate funding and expand support of the efforts of school districts to maximize their e-rate funding.

Background

The E-Rate program is now entering its fifth year. It reimburses public schools and libraries for certain telecommunications costs incurred to telecommunications service providers using revenues paid by phone customers into the Universal Service Fund (USF). Since the program's inception, UEN has successfully applied each year for reimbursement for circuit charges paid by UEN for telecommunications connectivity provided by telecommunications service providers to high schools, middle and junior high schools, and district offices. In addition, UEN has provided some support to local districts, who are also eligible to receive E-Rate funding.

Table I summarizes the E-Rate funding received by UEN during the first 4 years of the program, and the amount approved for reimbursement for year 5, which began July 1, 2002. Funding levels have remained fairly stable, although we should receive a substantial increase during the current fiscal year.

Table 1: E-Rate Funding in Utah, 1998-2002

	1998	1999	2000	2001	2002**
UEN	$1,090,326	$2,735,743	$2,085,763*	$2,031,872	$2,498,733
Utah, totall	$6,386,100	$5,739,385	$5,051,993	$5,712,267	$6,634,306

*Reduction in funding from 1999 to 2000 resulted from Network redesign that reduced circuit costs.

**As of end of July, 2002. Additional commitments are outstanding, including $1.2 million submitted by UEN and not yet approved.

Since the start of the E-Rate program, UEN has been successful in applying for reimbursement for all eligible circuit charges. However, for approximately the past two years, E-Rate eligible organizations in many states have been more aggressive than either UEN or most of the Utah school districts in expanding their funding. Two major developments have led to the sizeable growth of funding in some states.

1. End-to-end service contracts between service providers and schools have been authorized by the administrators of the E-Rate program. These contracts allow organizations to be reimbursed for equipment and maintenance costs that are included in the services provided by the vendor, instead of the cost of circuits only.
2. E-Rate programs have been coordinated on a state-wide basis, to assure that schools with high reimbursement rates are able to take full advantage of the program, and to design and coordinate technology planning throughout the state to maximize E-Rate funding.

Because there have been relatively few efforts in Utah to develop end-to-end service contracts and there has not been a systematic effort to provide statewide coordination, Utah ranked 39th out of the 56 states and territories in total E-Rate funding received in 2001. Utah residents paid significantly more into the Universal Service Fund than Utah schools and libraries received in E-Rate reimbursements: $8.4 million was paid into the USF by Utahns in 2001, while E-Rate reimbursements amounted to $5.7 million, a gap of $2.7 million.

In contrast to Utah, New Mexico, a neighboring state with a similar population of school children, received over $50 million in E-Rate funds last year. Although New Mexico has more schools in the highest need categories, this shows the benefit of statewide coordination and planning.

Tennessee was the first state to propose the use of end-to-end service contracts to allow for reimbursement of equipment and maintenance costs within service contracts with telecommunications providers. A Utah example is now available to demonstrate the increased funding resulting from end-to-end service contracts. Beginning last year, the Davis School District negotiated this type of contract with Qwest. Davis District E-Rate funding has grown from $435,000 in FY2000 to $1.35 million committed during the current program year. Not all of that growth has come from end-to-end service contracts, but it has been a major factor.

Policy Considerations

UEN must take a leading role in working with telecommunications service providers and with school districts to increase the amount of E-Rate funding returning to Utah. The key steps that we must take are:

1. Negotiate end-to-end service contracts with telecommunications providers.
2. Provide leadership and support to school districts that require help in maximizing their E-Rate funding.

Preliminary efforts to do this were started last winter, but the attached Position Paper outlines aggressive goals and strategies that should result in significant growth in E-Rate funding.

Recommendation

It is recommended that the Steering Committee review the attached UEN E-Rate Position Paper, and that it be approved as the basis for guiding UEN staff in their efforts to increase E-Rate funding and to support similar efforts by Utah public schools.

TAB 3 ATTACHMENT A

UEN E-RATE POSITION PAPER

August, 06 2002

UEN intends to significantly increase the E-Rate funding it receives, by more aggressively establishing end-to-end services contracts with Utah's telecommunications companies. In addition, UEN will assist local school districts to ensure they maximize E-Rate funding.

Major Objectives

- Double UEN's E-Rate funding commitments from FY 2003 to FY 2004 ($2.5M to $5M).
- Assist school districts and regions to maximize E-Rate funding.

Activities Planned to Achieve Objectives

- Acquire end-to-end services contracts with telecommunications providers. Providers will be asked to negotiate contracts that combine charges for circuits, equipment, and maintenance.
  - ◇ Coordinate with Qwest to identify existing elements that may be included in these services.
  - ◇ Coordinate with rural telecommunications providers and the Utah Rural Telecommunications Association (URTA), and public school regions and districts to identify existing elements that may be included in these services.
  - ◇ Where appropriate, facilitate partnerships between multiple telecommunications providers for end-to-end services.
  - ◇ Maintain status quo (e-rate discounts on circuits only) with rural telecommunications companies that are unable to offer end-to-end services.
- Identify schools eligible for 90% discount.
  - ◇ Equipment purchases will be eligible for E-Rate funding.
  - ◇ Coordinate with school districts in raising discount levels for all schools.
- Identify new services that may be included in end-to-end contracts to receive E-Rate support.
  - ◇ Potentially, H.323 IP video conferencing might be part of a "distance learning" service, or voice services may take advantage of Voice over IP.

Key Steps to Achieve Objectives

- Working with Qwest and rural telecommunications companies, UEN will seek to acquire end-to- end services contracts in most areas of the state for Year 6 (FY2004)
  - ◇ Circuits, equipment, and maintenance will be sought as end-to-end E-Rate eligible services next year.
  - ◇ New services (H.323, VOIP) will also be considered.

- Initial work has already begun by UEN staff to coordinate with state purchasing, Qwest, URTA, and local school districts, and regions.

- In the next several weeks, specific circuit and hardware requirements and services will be identified. Planning will be finalized regarding:
  - ◇ Router replacement
  - ◇ Circuit upgrades
  - ◇ Core migration (Ethernet services as stated in strategic plan)
  - ◇ Engineering/NOC/TOC requirements to integrate end-to-end services.
  - ◇ Network, hardware, and router replacement and enhancements required for new services, such as VOIP and video.

- All of these steps must be completed by Mid-November, so that appropriate E-Rate forms can be filed immediately after the filing window opens in late November.
  - ◇ UEN staff will aggressively increase outreach efforts to help maximize E-Rate funding by school districts. It is anticipated that the major payoff from these efforts will occur in FY2004. Major efforts will be directed at:
  - ◇ Rural schools, URSA board meetings, regional and district purchasing and technical staffs.
  - ◇ UEN will provide oversight statewide to maintain compliance with SLD rules in order to eliminate funding denials and reduce liability.

Policy Guidelines

1. With the E-Rate filing window approaching in November, it is imperative that all stakeholders and service providers understand the others' perspectives and that each entity consistently communicates needs and service offerings.
2. UEN will pursue contracts for services that are deemed necessary by our public education stakeholders, and attempt to qualify these contracts for E-Rate discounts.
3. UEN will coordinate with service providers, districts, regions, and, in some cases libraries, throughout the state to help identify end-to-end service scenarios that are acceptable to and benefit all parties.
4. From this effort, UEN will help the state achieve a significant increase in E-Rate funding commitments.

TAB 4

FISCAL YEAR 2003 BUDGET CUTS - ACTION

August 8, 2002

TO: UEN Steering Committee

FROM: Stephen Hess, Executive Director

Issue

The plan proposed to reduce the FY 2003 Budget by $83,200 was approved by the Executive Committee on July 22, 2002, contingent upon final review and approval of the full FY 2003 budget by the Steering Committee. The budget cut plan outlined in Attachment A requires final action by the Steering Committee.

Background

At its special session on July 8-9, the Utah Legislature adopted a plan to reduce FY 2003 state appropriations allocated to UEN by a total of $83,200. The cut was significantly smaller than initial estimates suggested (reductions of $700,000 to over $1.34 million had been indicated as necessary to achieve a balanced budget). The budget cut of 0.56 percent reflected a strong commitment by legislative leadership, Governor Leavitt, and the Higher Education Appropriations Subcommittee to minimize the impact of budget reductions on education, and specifically on the Utah Education Network.

Policy Considerations

The following key steps were recommended to the Executive Committee:

1. Out of state travel and professional development expenditures will be minimized during the year, and that budget line will be reduced by $74,115.
2. The CEU Distance Education line in the UEN budget was reduced by legislative action by $1,440.
3. The UEN Satellite System budget was reduced by legislative action by $7,645. The UENSS equipment and site installation budgets will be reduced by that amount to accommodate the cut.
4. Earlier plans to reduce budget support to regional service centers and regional hubs will not occur. Their budget support will remain at the same levels as in FY 2002.

5 Early plans to freeze all vacant positions at UEN can now be selectively modified. A limited number of vacancies in key positions in Engineering, the Network Operations Center, and the EDNET Technical Operations Center are now being posted. However, previous reductions of 10 FTE staff positions will not be restored.

Recommendation

It is recommended that the Steering Committee approve the actions of the Executive Committee and adopt the attached plan to reduce the FY 2003 budget by $83,200, contingent on its final approval of the UEN FY 2003 budget as recommended in Tab V.

TAB 4 ATTACHMENT A

DATE: July 19, 2002

Summary: UEN Budget

I. REVENUES	Budget FY 2002	Budget FY 2003	Change in Budgets	.56% Budget Reduction
State appropriations	18,269,444	14,904,100	(3,365,344)	(83,200)
Interest Income	150,000	75,000	(75,000)	
Community Service Grant	1,654,126	1,695,000	40,874	
Grant / Foundation Support	108,000	248,220	140,220	
E-rate	1,860,444	1,850,000	(10,444)	
Inner fund transfers	162,115	186,855	24,740	
Other	170,371	163,756	(6,615)	
Carry Forward				
KULC funds held for DTV	1,071,304	2,000,000	928,696	
Grants	170,979	101,531	(69,448)	
UEN operating cash	211,185	103,885	(107,300)	
TOTAL REVENUES	23,827,968	21,328,347	(2,499,621)	(83,200)

II. SUMMARY OF EXPENDITURES	Budget FY 2002	Budget FY 2003	Change in Budgets	.56% Budget Reduction
Personnel	5,862,115	5,578,624	(283,491)	
Supplies	208,200	195,950	(12,250)	
IT supplies	147,820	147,532	(288)	
Travel / professional development	257,736	189,290	(68,446)	(74,115)
Instate travel	140,800	117,779	(23,021)	
Capital equipment	57,800	85,300	27,500	
IT Capital equipment	406,801	183,300	(223,501)	
Circuit charges / Internet access	5,442,636	5,454,000	11,364	
Software and maintenance	808,677	740,874	(67,803)	
Pass through money	1,294,883	1,177,513	(117,370)	(1,440)
UENSS (Satellite System)	1,508,561	1,474,555	(34,006)	(7,645)
UEN direct building support	535,241	722,000	186,759	
UEN project account	-	899,288	899,288	
Building expansion	840,000	-	(840,000)	
Replacement routers	150,000	-	(150,000)	
UEN operating funds	718,297	609,432	(108,865)	
Projects	5,448,401	3,752,910	(1,695,491)	
TOTAL EXPENSES	23,827,968	21,328,347	(2,499,621)	(83,200)

TAB 5

FISCAL YEAR 2003 BUDGET - ACTION

August 8, 2002

TO: UEN Steering Committee

FROM: Stephen Hess, Executive Director

Issue

The FY 2003 budget was reviewed preliminarily by the Steering Committee at its June 2002 meeting. However, uncertainty over the impact of additional budget cuts prevented final action from being taken during that meeting. Final appropriations decisions have now been made by the State Legislature, so final review and approval of the FY 2003 UEN budget is now requested.

Background

The FY 2003 UEN budget reflects multiple challenges of minimal economic growth, higher unemployment, and reduced tax revenues for state government. Despite those challenges, we are confident that the financial plan reflected in the FY 2003 budget will allow UEN to maintain the statewide network with adequate capacity and reliability, deliver classes and programs through EDNET, UENSS, and KULC, and provide critical instructional support services to Utah teachers, faculty members, and students.

Detailed information about the FY 2003 budget is provided in the attachments following this memorandum. Attachment A summarizes revenue sources used to fund the budget, and expenditures by broad categories as well as programmatic areas. Attachment B provides an organizational context for assessing the budget and it provides general and more detailed organizational charts for UEN, and indicates personnel who serve in each organizational area.

Policy Considerations

Major FY 2003 policy considerations focus on (1) revenues that are available and restrictions that limit the uses of particular revenue sources, (2) major expenditure choices that are identified, and (3) priorities shown by the budget choices that are recommended.

1. Revenues

As summarized in Table 1, total state appropriations allocated to UEN are $3,365,344 less than in the 2001-2002 fiscal year.

Table 1
2002-2003 Reductions in State Appropriations to UEN

Item	Amount of Reduction
Loss of one-time money for Equipment/ Router Replacement	$1,000,000
KULC digital conversion one-time money	$1,715,444
On-going base budget reduction	$649,900
Total reduction in state funds	$3,365,344

In addition to state appropriations, UEN will receive revenues from grants and E-Rate reimbursement of telecommunications services, carry forward other revenues from last year, and budget revenues from other miscellaneous sources. Most of these revenues have restricted uses. For example, the Community Service Grant ($1,695,000) must be used to support KULC and related services and personnel, and E-Rate funds reimburse a portion of telecommunications services provided to public schools and paid for by UEN.

Significant efforts are being made to replace lower state appropriations by increasing other revenue sources:

1. E-Rate funds will be significantly higher during the current year than in FY 2002. Commitments have already been received that are $470,000 higher than last year, and approval is still awaited for an additional $1.2 million from E-Rate. Steps are underway to further increase E-Rate funding during FY 2004 by an additional $2.5 million. These actions will allow us to reduce our reliance on state appropriations to upgrade routers and other network equipment and provide ongoing equipment and software maintenance.
2. Grant funding is being aggressively pursued. Consequently, nearly half of all instructional services expenditures are from grants. A digital distribution grant has already been awarded to UEN to support the digital conversion of KULC, and the full cost of KULC operations is paid with Community Service Grant funds.

Attachment A shows how the various revenue sources will be assigned to expenditures.

2. Major Expenditure Choices

A number of key decisions have been made to reduce expenditures during the coming year, while at the same time protecting the viability of the network and the effectiveness of instructional delivery systems and instructional services.

1. A total of 10 FTE staff positions have been lost compared to the beginning of FY2002. These reductions include a senior administrative position, 2 instructional delivery staff positions, 2 instructional services positions, and 5 technical service staff members.
2. No salary increases will be given to UEN staff members this year. The benefit package, including the cost of monthly premiums for health insurance, will remain the same as last year.
3. Significant reductions in operating budgets are being implemented throughout the organization. For example, salary and benefit costs of personnel are nearly $290,000 lower than a year ago, administrative expenditures have been reduced by nearly $100,000, and out of state travel and professional development support budgets have been reduced by more than $68,000.
4. Despite the budget cuts, savings have been pooled from throughout the budget to create a technical service project account totaling $1,018,288 and an instructional service project account containing $206,000. These funds will pay for high priority projects based on recommendations of UEN staff and stakeholders to the Steering Committee.
5. A commitment has been made to maintain financial support to UEN-supported activities managed by regional service centers and regional hubs. Budget support to these areas will remain the same as in FY 2002.

3. Budget Priorities

A helpful way to show funding priorities in the FY 2003 budget is to examine the extent to which programmatic areas have received increased funding or budget reductions, from FY 2002 to FY 2003.

Table 2 demonstrates that a sizeable increase in funding is recommended in the technical services area, and that a slight increase in funding is also proposed for the instructional services area. Support to regional hubs and regional service centers will remain the same, while all other programmatic areas are recommended to receive budget cuts.

Table 2
Changes in Funding from FY 2002 to FY 2003, by Programmatic Area

Programmatic Area	Increase or Decrease in Funding
Technical Services	$310,357
Instructional Services	$26,568
Pass through to Hubs & Regional Service Centers	-$0
UENSS	-$44,006
Public Information	-$50,564
Administration	-$99,920
Other Pass through (CEU, USOE	-$107,370
Instructional Delivery	-$131,939
KULC	-$277,529
O & M, Contingency	-$415,218
Total Funding Change, FY 2002 to FY 2003	-$789,621

A second way to demonstrate the priority of particular programs is by indicating the percentage of available state appropriations that each will receive.

Table 3 ranks program areas according to the percentage of total state appropriations they receive. There is limited discretion on usage of most other revenue sources, so grants, E-Rate reimbursements, and other revenue sources are not reflected in the table.

Table 3
Percentage of State Appropriations Received by Program Areas, FY 2003

Program Area	State Appropriation	Percent of Total
Technical Services	$8,895,971	59.7%
UENSS	$1,474,555	9.9%
Instructional Services	$1,256,907	8.4%
O & M, Contingency	$956,432	6.4%
Hubs & Regional Service Center	$781,867	5.2%
Instructional Delivery	$612,194	4.1%
Administration	$515,528	3.5%
Other Pass through (CEU, USOE)	$395,646	2.7%
KULC	$15,000	0.1%
Public Information	$0	0.0%
Total State Appropriations	$14,904,100	

Recommendation

It is recommended that the Steering Committee approve the FY 2003 UEN budget.

DATE: August 16, 2002

Summary: UEN Budget

I.	REVENUES	Budget FY 2002	Budget FY 2003	Change in Budgets
	State appropriations	18,269,444	14,904,100	(3,365,344)
	Interest Income	150,000	75,000	(75,000)
	Community Service Grant	1,654,126	1,695,000	40,874
	Grant / Foundation Support	108,000	798,220	690,220
	E-rate	2,000,444	2,500,000	499,556
	Inner fund transfers	162,115	186,855	24,740
	Other	170,371	163,756	(6,615)
	Carry Forward			
	KULC funds held for DTV	1,071,304	2,000,000	928,696
	Grants	170,979	101,531	(69,448)
	UEN operating cash	211,185	753,885	542,700
	TOTAL REVENUES	23,967,968	23,178,347	(789,621)

II.	SUMMARY OF EXPENDITURES	Budget FY 2002	Budget FY 2003	Change in Budgets
	Personnel	5,862,115	5,578,624	(283,491)
	Supplies	208,200	195,950	(12,250)
	IT Supplies	147,820	147,532	(288)
	Travel / Professional Development	257,736	189,290	(68,446)
	Instate travel	140,800	117,779	(23,021)
	Capital Equipment	57,800	85,300	27,500
	IT Capital Equipment	406,801	183,300	(223,501)
	Circuit charges / Internet access	5,582,636	6,104,000	521,364
	Software and maintenance	808,677	740,874	(67,803)
	Pass through money	1,294,883	1,177,513	(117,370)
	UENSS (Satellite System)	1,508,561	1,474,555	(34,006)
	Shared building maintenance, computer support, etc.	535,241	722,000	186,759
	Technical services project account	-	1,018,288	1,018,288
	Instructional services project account	-	206,000	206,000
	Building Expansion	840,000	-	(840,000)
	Replacement Routers	150,000	-	(150,000)
	DTV Conversion, Grant Projects & Pioneer Software	5,448,401	4,302,910	(1,145,491)
	Contingency	718,297	934,432	216,135
	TOTAL EXPENSES	23,967,968	23,178,347	(789,621)

III. Budget Summary by Departments

Source of Funding

A.	TECHNICAL SERVICES	Budget FY 2002	Budget FY 2003	Balance	State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
	Personnel	3,254,846	3,252,952	(1,894)	3,156,097				96,855	3,252,952
	Circuit charges / Internet access	5,548,636	6,077,000	528,364	3,478,500			2,500,000	98,500	6,077,000
	IT Supplies	147,820	147,532	(288)	147,532					147,532
	Travel / Professional Development	167,736	110,165	(57,571)	110,165					110,165
	Instate Travel	85,000	74,100	(10,900)	74,100					74,100
	Capital Equipment	145,510	46,000	(99,510)	45,000				1,000	46,000
	Software and maintenance	808,677	740,874	(67,803)	740,874					740,874
	IT Capital Equipment	261,291	183,300	(77,991)	183,300					183,300
	Equipment -- Hub and End Site Development	329,657	165,000	(164,657)	165,000					165,000
	Replacement Routers	150,000	0	(150,000)	0					0
	Network reliability and capacity project (one-time money)	605,681	0	(605,681)	0					0
	Technical Services Project Account	-	1,018,288	1,018,288	795,403				222,885	1,018,288
	TOTAL	11,504,854	11,815,211	310,357	8,895,971	0	0	2,500,000	419,240	11,815,211

B.	INSTRUCTIONAL SERVICES	Budget FY 2002	Budget FY 2003	Balance	State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
	Personnel	1,000,398	931,203	(69,195)	435,610	453,593			42,000	931,203
	Supplies	22,100	23,000	900	23,000					23,000
	Travel / Professional Development	37,000	26,700	(10,300)	26,700					26,700
	Instate Travel	34,800	23,179	(11,621)	23,179					23,179
	Capital Equipment	6,800	6,800	-	6,800					6,800
	Pioneer Library	486,267	465,209	(21,058)	465,209					465,209
	Regional Training and Teacher Training Institute	66,800	143,356	76,556	7,769		83,831		51,756	143,356
	Partnerships : MarcoPolo / Intel / Teacher line / Gates	262,919	265,920	3,001			265,920			265,920
	Web Design , lesson plans and work shops	152,580	109,640	(42,940)	109,640					109,640
	KULC Programming	263,775	159,000	(104,775)	159,000					159,000
	Instructional Services Project Account	0	206,000	206,000					206,000	206,000
	TOTAL	2,333,439	2,360,007	26,568	1,256,907	453,593	349,751	0	299,756	2,360,007

C.

INSTRUCTIONAL DELIVERY	Budget FY 2002	Budget FY 2003	BALANCE
Personnel	672,033	537,819	(134,214)
Circuit charges / dial in/ Internet access	34,000	27,000	(7,000)
Supplies	8,100	14,950	6,850
Travel / Professional development	19,500	18,925	(575)
Instate Travel	16,000	16,000	-
Capital Equipment	6,500	9,500	3,000
TOTAL	756,133	624,194	(131,939)

State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
537,819					537,819
15,000				12,000	27,000
14,950					14,950
18,925					18,925
16,000					16,000
9,500					9,500
612,194	0	0	0	12,000	624,194

D.

UENSS (Satellite System)	Budget FY 2002	Budget FY 2003	Balance
Personnel	471,488	471,488	-
Supplies	111,793	66,098	(45,695)
Instate Travel	4,200	4,200	-
Space Segment	746,169	746,169	-
1-800 phone line / backhaul	98,000	98,000	-
IT Equipment	86,911	88,600	1,689
TOTAL	1,518,561	1,474,555	(44,006)

State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
471,488					471,488
66,098					66,098
4,200					4,200
746,169					746,169
98,000					98,000
88,600					88,600
1,474,555	0	0	0	0	1,474,555

E.

KULC	Budget FY 2002	Budget FY 2003	Balance	State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
Personnel	253,508	242,041	(11,467)		242,041				242,041
Travel / Professional development	6,500	6,500	-		6,500				6,500
Instate Travel	2,000	2,000	-		2,000				2,000
Capital Equipment	15,000	15,000	-	15,000					15,000
Broadcast Engineering									
Transmission and operation of KULC signal	246,974	253,660	6,686		253,660				253,660
DTV conversion	2,822,748	2,550,000	(272,748)			550,000		2,000,000	2,550,000
									0
TOTAL	3,346,730	3,069,201	(277,529)	15,000	504,201	550,000	0	2,000,000	3,069,201

F.

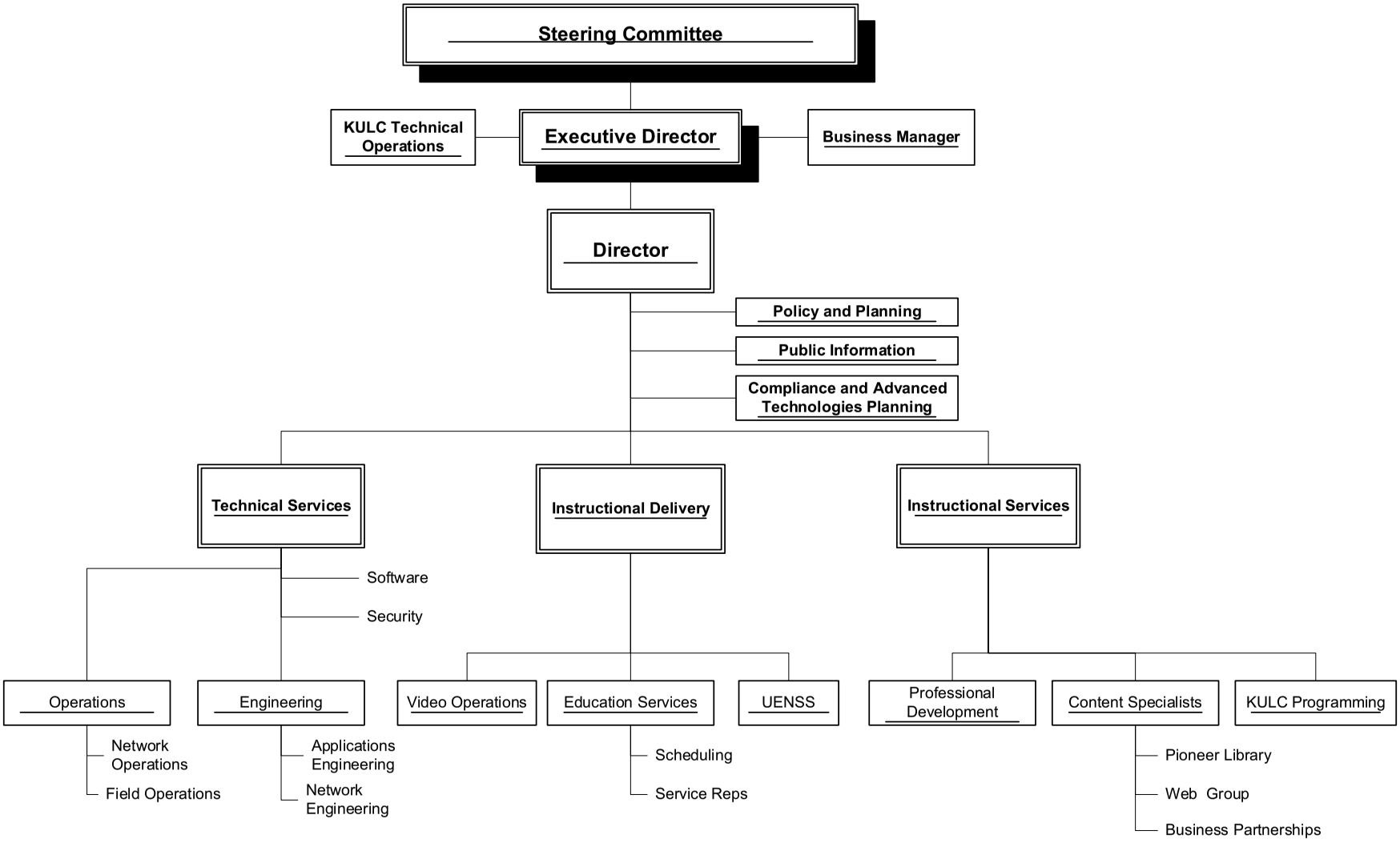
ADMINISTRATION	Budget FY 2002	Budget FY 2003	BALANCE	State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
									0
Personnel	507,769	467,237	(40,532)	122,028	345,209				467,237
Supplies	147,000	132,000	(15,000)	81,500	50,000			500	132,000
Travel / Professional development	17,500	14,500	(3,000)	4,500	10,000				14,500
Instate Travel	500	2,500	2,000	2,500					2,500
Capital Equipment	26,500	5,000	(21,500)	5,000					5,000
Office of Information Technology	321,888	300,000	(21,888)	300,000					0
									0
TOTAL	1,021,157	921,237	(99,920)	515,528	405,209	0	0	500	621,237

G. PUBLIC INFORMATION	Budget FY 2002	Budget FY 2003	BALANCE	State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
Personnel	173,561	147,372	(26,189)		147,372				147,372
Supplies	31,000	26,000	(5,000)		26,000				26,000
Travel / Professional development	9,500	12,500	3,000		12,500				12,500
Instate Travel	2,500		(2,500)						
Capital Equipment	3,000	3,000	-		3,000				3,000
Projects									
ITV Guide	69,000	48,000	(21,000)		24,000			24,000	48,000
Public relations	142,000	143,125	1,125		119,125			24,000	143,125
TOTAL	430,561	379,997	(50,564)	0	331,997	0	0	48,000	379,997

H. PASS THROUGH	Budget FY 2002	Budget FY 2003	BALANCE	State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
CEU System Support	280,300	267,260	(13,040)	267,260					267,260
EDNET Site Support									
SUU, DATC, USU, CEU, UVSC, SLCC, UBATC	305,000	305,000	-	305,000					305,000
Regional Help Desk Support									
NUES, CUES, SESC, SEDC	219,779	219,779	-	219,779					219,779
Regional Training Specialist									
NUES, CUES, SESC, SEDC	257,088	257,088	-	257,088					257,088
State Office of Education	222,716	128,386	(94,330)	128,386					128,386
TOTAL	1,284,883	1,177,513	(107,370)	1,177,513	0	0	0	0	1,177,513

I. Operations , Maintenance and Contingency	Budget FY 2002	Budget FY 2003	BALANCE	State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
Building Expansion	840,000	-	(840,000)						
Contingency	718,297	934,432	216,135	609,432				325,000	934,432
Univ. of Utah Building Maintenance	-	250,000	250,000	175,000				75,000	250,000
Building Maintenance	101,723	86,000	(15,723)	86,000					86,000
EBC Computer Support	111,630	86,000	(25,630)	86,000					86,000
TOTAL	1,771,650	1,356,432	(415,218)	956,432	0	0	0	400,000	1,356,432

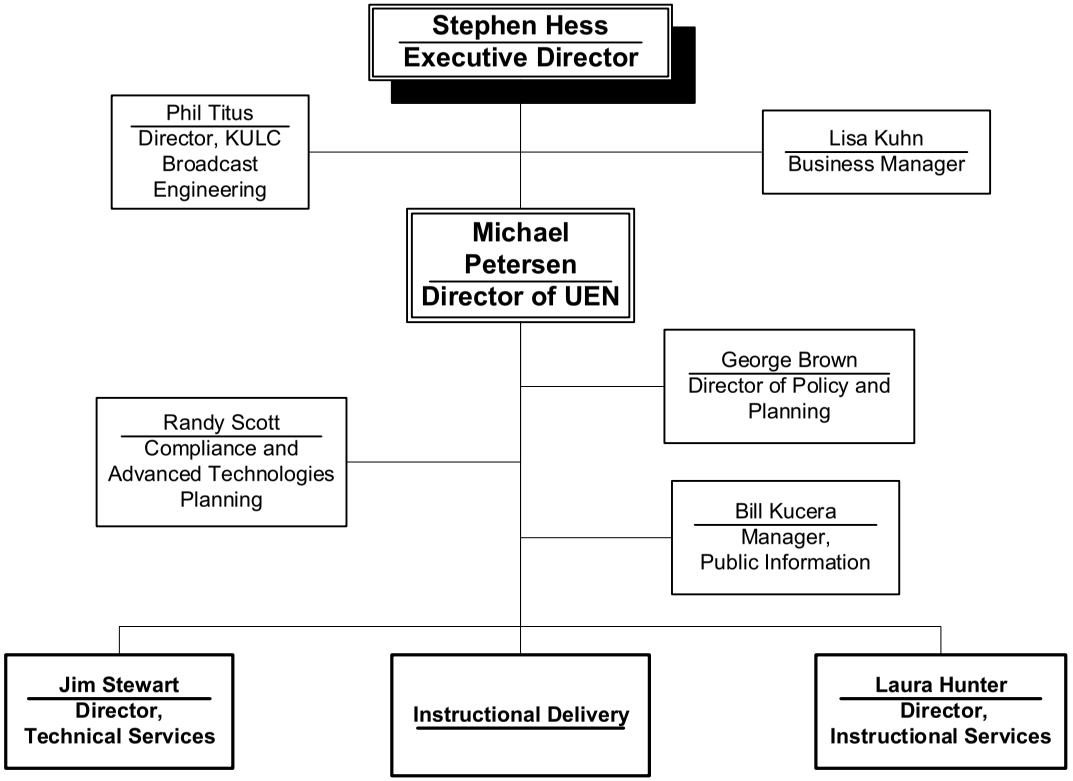
Utah Education Network



TAB 5 ATTACHEMENT B

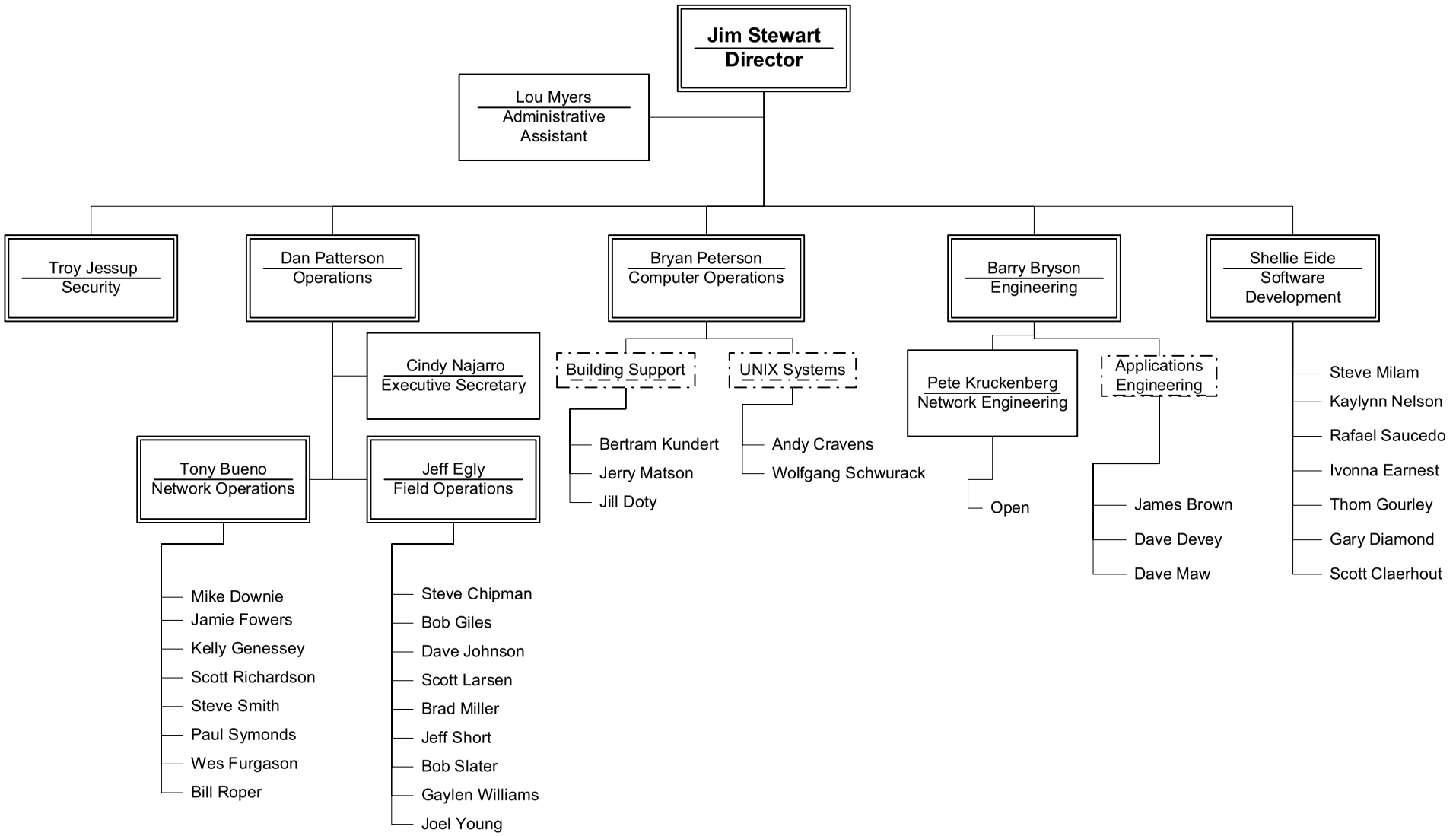
Utah Education Network

Administration



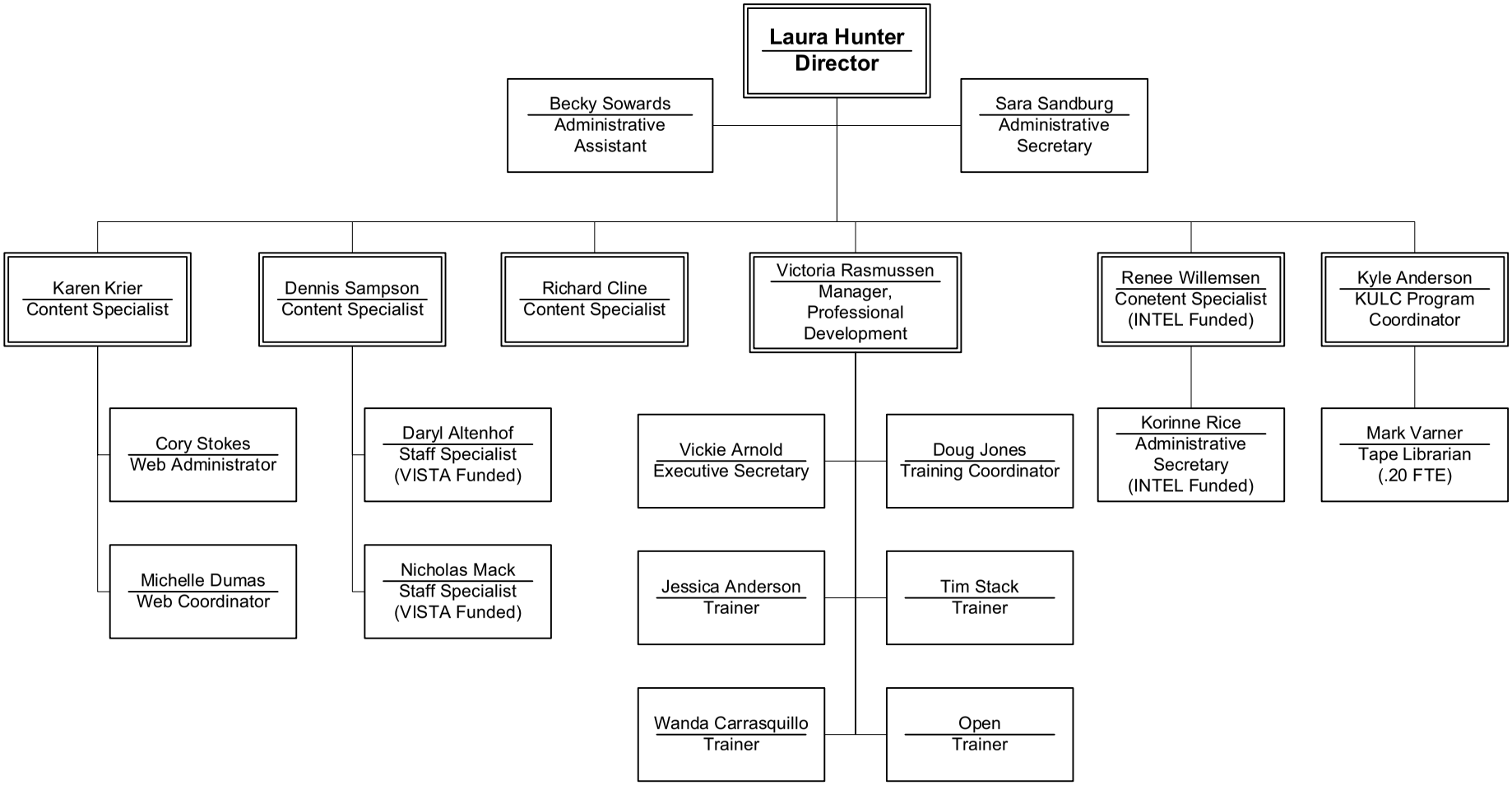
Utah Education Network

Technical Services



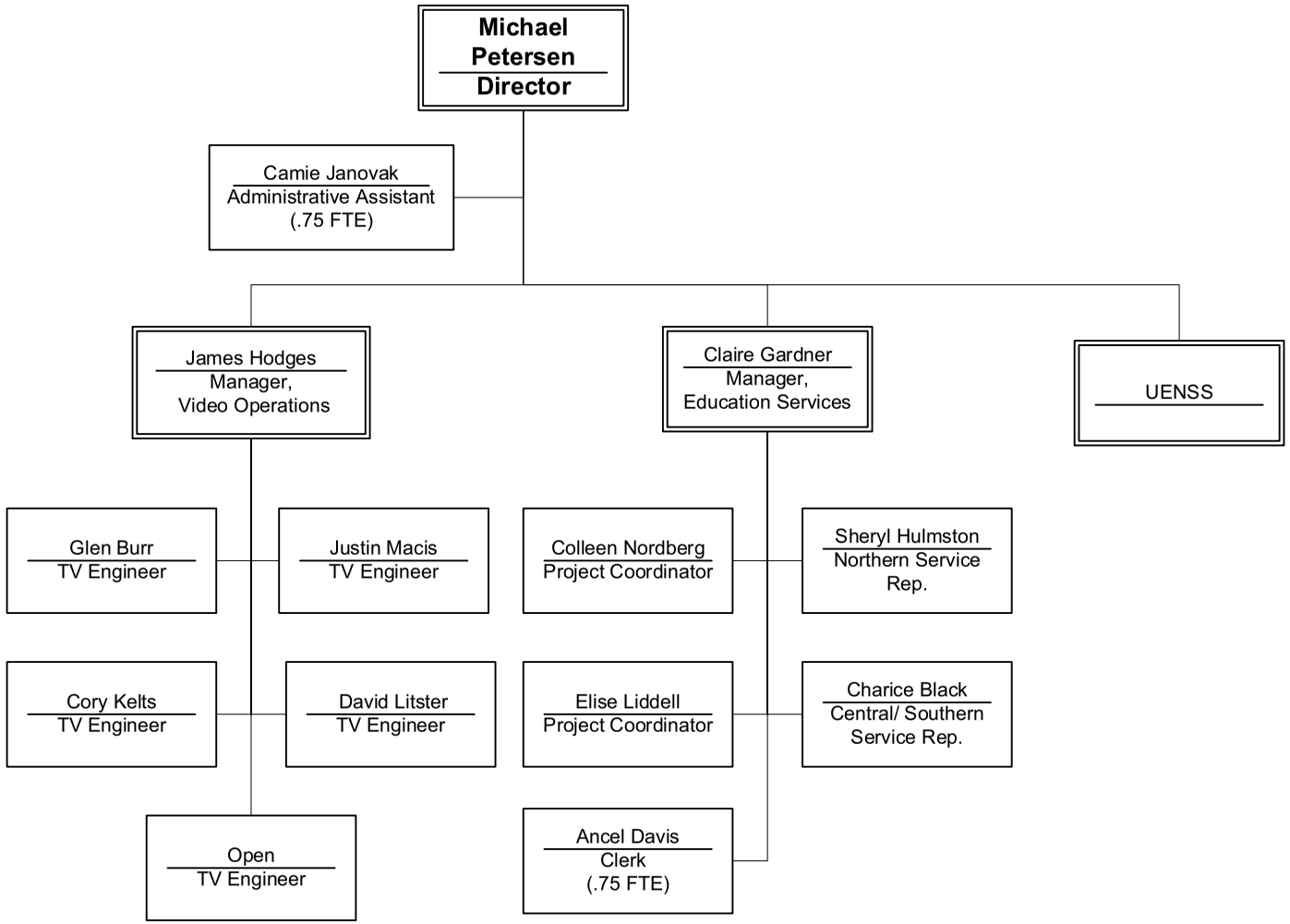
Utah Education Network

Instructional Services



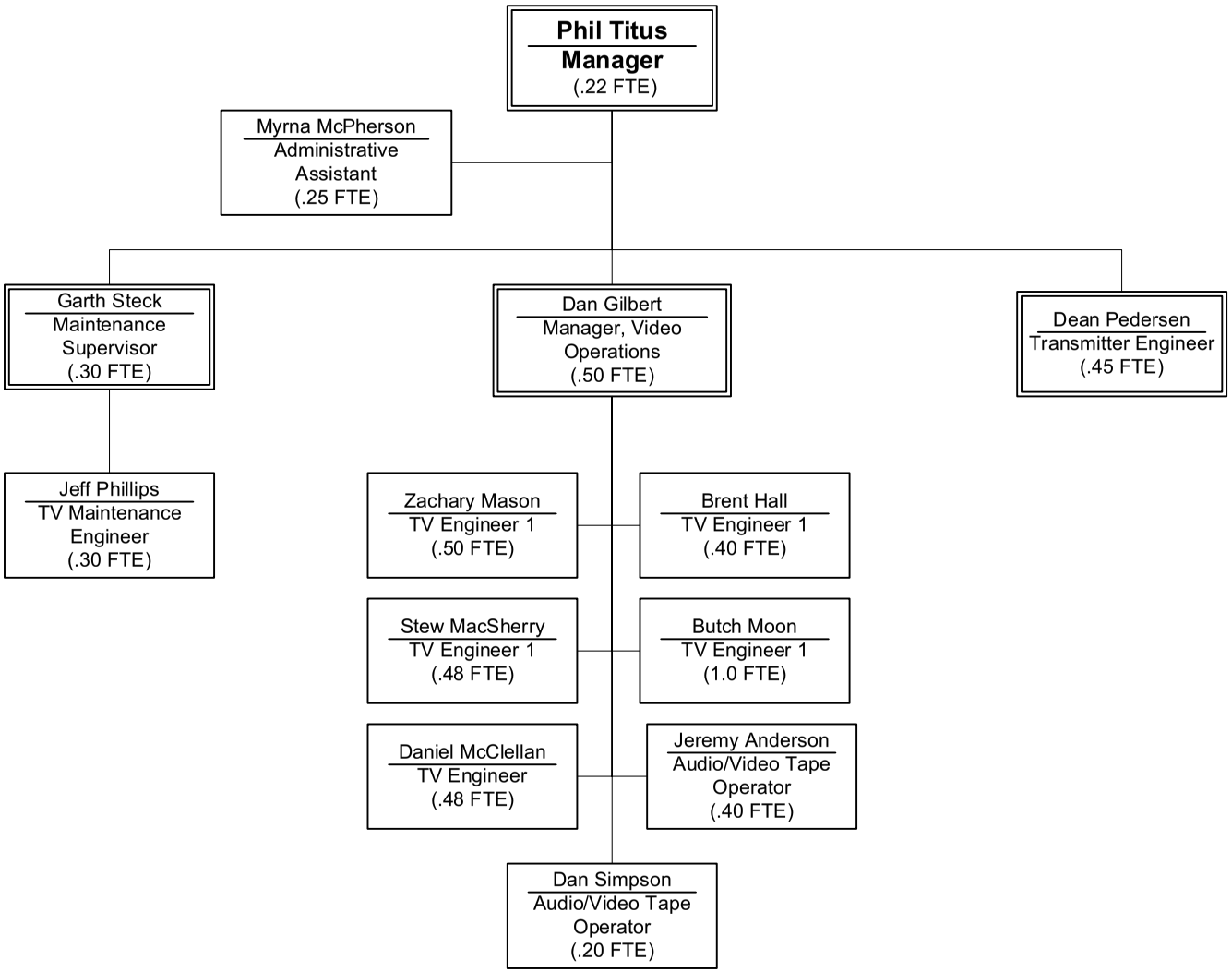
Utah Education Network

Instructional Delivery



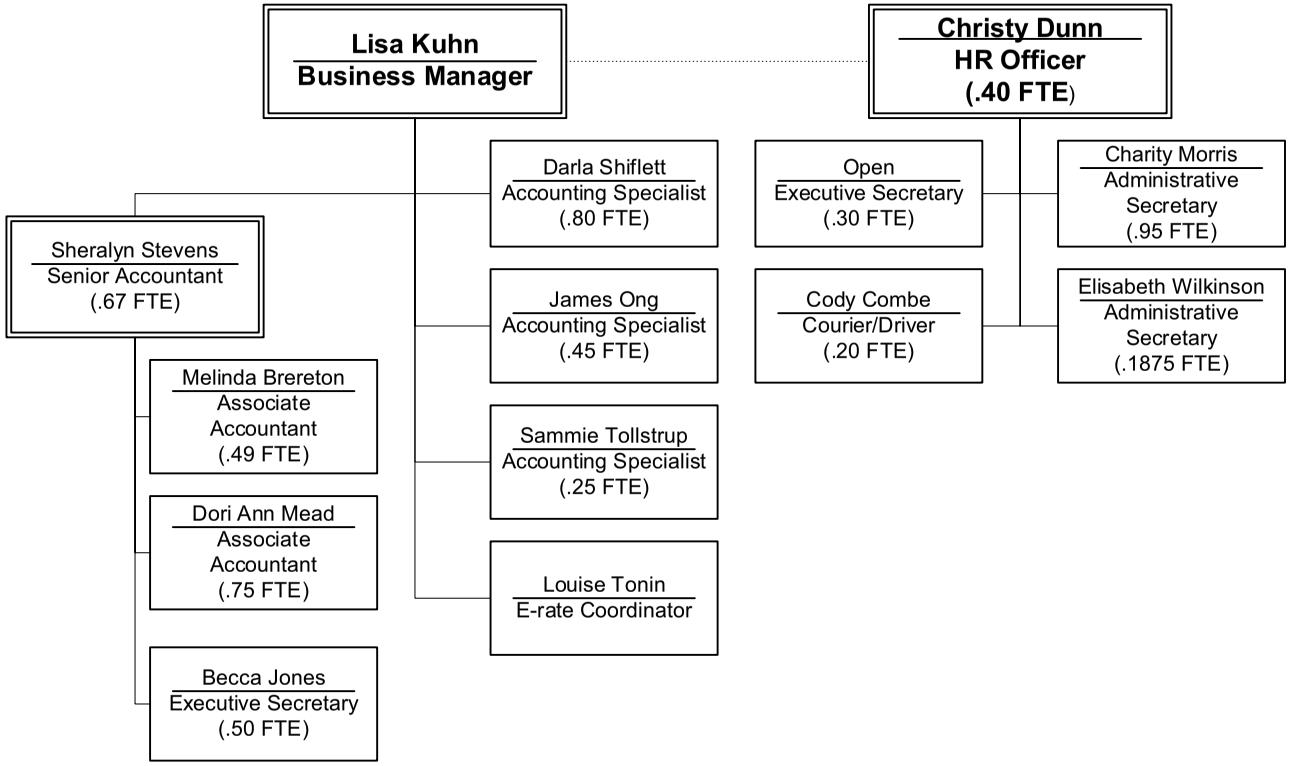
Utah Education Network

Broadcast Engineering
KULC Technical Services



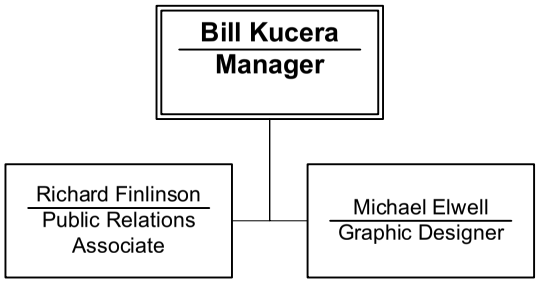
Utah Education Network

Finance and Personnel



Utah Education Network

Public Information



TAB 6

TECHNICAL SERVICES FY 2003 STRATEGIC PLAN - ACTION

August 8, 2002

TO: UEN Steering Committee

FROM: Stephen Hess, Executive Director

Issue

The Technical Services FY 2003 Strategic Plan has been updated to reflect revised goals and FY 2003 budget information that was not available in May. It is requested that the Plan and associated budget priorities be reviewed, discussed and approved.

Background

Three attachments are provided for your consideration. These are as follows:

1. Attachment A: Regional Priorities Spreadsheet

This spreadsheet was developed from the March Technical Services Retreat and was originally submitted to the Steering Committee at the March Meeting. This version of the spreadsheet has been updated to reflect the progress that has been made since that time.

Three columns have been added and one has been deleted. The first new column is a status line to reflect the current status of each project. The second new column is a yes/no comparison of the project and the Technical Services FY 2003 Goals and Objectives. This comparison has allowed us to refine our goals and help ensure that the regional priorities and UEN goals are coordinated together.

The third new column identifies the specific FY 2003 goal that is associated with the regional priority. This column is filled with one of three types of entry. If a goal exists for FY 2003 then that goal is designated. If the goal was accomplished in FY 2002 that project is designated “DONE”, and if further clarification is required prior to setting a goal that project is designated “CLAR”.

The “Total” column, a budgetary guess made in March, has been eliminated.

2. Attachment B: Items for Further Clarification

This document is developed from the third new column of the Regional Priorities document. Each project needing further discussion has been addressed. Only items that did not have a FY 2003 goal or objective are mentioned here.

3. Attachment C: Goals and Objectives Document

This document was originally developed to support the Color Stack in the UEN FY 2003 Strategic Plan. New goals have been added for consideration as a result of work done on the second new column of the Regional Priorities Document. Additionally, budget numbers have been assigned to the items in this document. No attempt has been made to assign priorities to these goals and objective.

Policy Considerations

For the Technical Services Subcommittee to determine whether the plans, goals, and budget priorities outlined in the attachments are appropriate, the following steps are suggested.

1. Review and discuss the Regional Priorities document in its updated form.
2. Provide time for the Subcommittee members to review and discuss the items presented for clarification.
3. 3Review the FY 2003 Goals and Objectives Document.
4. Discuss prioritization of the Technical Services Goals and outline the budget priorities for FY 2003.

Recommendation

It is recommended that the Technical Services Subcommittee carefully review the attached materials which update the Technical Services portion of the FY 2003 Strategic Plan, and provide additional materials elaborating goals, objectives, and budget priorities. If satisfied, it is requested that approval be granted to proceed to implement the recommended plans and priorities as outlined in the FY 2003 Technical Services Strategic Plan.

TAB 6 ATTACHMENT A

Project	Region	Status	Goals (Y or N)	Goal Identity	Initial Connectivity	Reliability Equipment	Reliability Alternate Path	Increased Capacity	Planned Equipment Replacement	Security	Training	Optimize Network Resources
Involvement in online testing plans	Statewide	Ops Review	Y	III.3								
Security Resources	Statewide	IDS installation	Y	XIII.1						X		
QoS Pilot and implementation	Statewide	Eng Planning	Y	I.8								X
Mutlicast enable the UEN network	Statewide	Eng Planning	Y	VII.5								X
VoIP Plan	Statewide	Director	Y	VII.1								X
Video Master Plan	Statewide	Director	Y	IV								X
CVDS replacement	Statewide	Eng/Ops Planning	Y	I.5		X						
H.323 Video	Statewide	Installed	Y	VII.2								X
Audio bridge upgrade	Statewide	Installed	Y	VII.3		X						
Spares, (Routers, Switches, Microwave radios)	Statewide	HOLD	Y	I.6		X						
Completion of Core ring	UVSC	Director	Y	I.1		X						
Move Internet OC-3 Connection to UVSC	UVSC	On Hold	Y	I.1			X					
Redundant equipment and location at UVSC	UVSC	Pending Core Ring	Y	I.1		X						
CommIX point of presence at UVSC	UVSC	Eng. Planning	Y	XII.3				X				
Community Network links at Provo, Alpine and Nebo districts.	UVSC	In Process	Y	XII.4				X				
Routers for firewall implementation	UVSC	HOLD	Y	IV.1		X						
LAN/WAN performance diagnostic tools	UVSC	HOLD	Y	III.5		X						
Technical Training and cross training for hub support	UVSC	Ongoing	Y	XV.1		X						
Alternate Routes into the region	CUES	Eng Planning	Y	I.2			X					
Spares	CUES	HOLD	Y	I.6		X						
Router replacement	CUES	HOLD	Y	IV.1					X			
The List	CUES	Completed	N	DONE		X						
Security, Firewall implementation	CUES	HOLD	N	CLAR						X		
Technical Training	CUES	Ongoing	Y	XV.1		X					X	
CUES connectivity to Snow South	CUES	Completed	Y	DONE								X
Diagnostic access to the routers (view Access Lists)	CUES	Completed	Y	CLAR								X
Hub equipment redundancy at Snow South (SPARES)	CUES	HOLD	N	I.6		X						
Dutch John Elementary connectivity	NUES	HOLD	N	CLAR	X							
NUES DS-3	NUES	In Process	Y	II.13				X				
NUES router upgrade	NUES	Completed	Y	DONE		X						
Tri-School Fiber Project	NUES	In Process	Y	II.2				X				
GigE circuits for Vernal and Roosevelt	NUES	In Process	Y	II.2				X				
Redundant Connectivity	NUES	HOLD	Y	I.2			X					
Upgrade Ethernet card at NUES Office from 10 to 100 Meg.	NUES	Completed	Y	DONE				X				
Repoint Morgan to NUES	NUES	Ordered Pending Qwest	Y	XI.1								X
Reengineer CEU Hub	SESC	Completed	Y	DONE		X						
Router Upgrades throughout the region	SESC	In Process	Y	IV.1					X			
DS-3 Upgrade and bandwidth management	SESC	Completed	Y	II.4				X				
IP Telephony Project	SESC	HOLD	N	II.9								X
Clay Hills Microwave Site	SESC	HOLD	Y	V.1; II.3								X
CEU New Building and Hub Move	SESC	HOLD	N	II.10	X							
Data T-1 relocation at Granite, Salt Lake City and Jordan Districts	SLCC	In Process	Y	XI.1		X						
Alternate paths from Granite, Murray, Salt Lake City and Jordan Districts	SLCC	Eng. Planning	Y	I.7			X					
Router Replacement	SLCC	HOLD	Y	IV.1					X			
Moving frontline router responsibility to districts	SLCC	In Process	Y	III.1								X
Fiber/high speed links to SLCC satellite sites.	SLCC	HOLD	N	CLAR								X
VoIP gateway	SLCC	In Process	Y	VII.1								X
I2 Participation	SLCC	In Process	N	VIII.2								
MGX equipment replacement	SLCC	In Process	Y	X.1		X						
Harden power at SLCC (Dave Devey).	SLCC	Completed	N	DONE		X						
Eskdale Connection	SEDC	In Process	Y	II.1	X							
Millard DO Capacity Expansion	SEDC	Ops Planning	Y	II.6				X				
Spares	SEDC	HOLD	Y	I.6		X						
Training	SEDC	Ongoing	Y	XV.1							X	
Additional Personnel	SEDC	HOLD	N	CLAR								X
Ethernet WAN	SEDC	In Process	Y	II.11								X
Data Warehousing	SEDC	HOLD	N	CLAR								X
Backbone Redundancy	SEDC	HOLD	Y	I.2			X					
Elementary Schools	SEDC	HOLD	N	CLAR								X
Tools	SEDC	HOLD	Y	III.5								X
Layer Three Switches	SEDC	HOLD	N	CLAR				X				
LSR	SEDC	HOLD	N	CLAR								X
Migration to GigE connection with UEN	U of U	Completed	Y	DONE				X				
Implement a split node with diverse termination on the lower campus	U of U	HOLD	Y	I.7			X					
Fix redundancy into WSU	DATC	Eng Planning	Y	I.3			X					
Internet Capacity	DATC	HOLD	N	I.2; I.3				X				
Router replacements	DATC	Completed DSD	Y	IV.1					X			
Davis Ethernet Connections and Video Redesign	DATC	Completed	Y	DONE				X				
Re-engineer Weber District traffic.	DATC	Completed	N	DONE								X
Davis Elementary router migration	DATC	In Process	N	DONE					X			
Redundant link (Alternate path)	USU	Director	Y	I.2			X					
Router replacements	USU	Director	Y	IV.1					X			
Capacity in the future (what should we do beyond 2 DS-3 links).	USU	Director	N	I.2					X			
More training needed from UEN.	USU	In Process	Y	XV.1							X	
Box Elder Mini-hub	USU	In Process	Y	II.12		X						

Items Submitted for Steering Committee Discussion and Clarification

August 6, 2002

Move Internet OC-3 Connection to UVSC

- This move has been postponed to Summer 2003 due to budgetary constraints.
- Diversifying Internet Access points is a major goal for UEN. The cost of moving one OC-3 to UVSC would be between $50,000 and $60,000 annually. That is the additional mileage cost associated with hauling a circuit from Orem to the Salt Lake Point of Presence of the Internet provider.
- Clarification of the priority of this project is needed before proceeding.

Routers for Firewall Implementation (UVSC)

Layer 3 Switches (SEDC)

- While this is addressed by the Districts in the UVSC region, this request applies to all districts. UEN Technical Services needs clarification on the role of UEN in supporting firewall implementations. What is the UEN responsibility to provide the second router for establishing a firewall?

Dutch John Elementary Connectivity

- This is an Elementary school, not in UEN stewardship

Fiber/high speed links to SLCC satellite sites

- There must be further discussion and clarification of this point. The SLCC goals and the specific requirements are unclear.

Additional Personnel (SEDC)

LSR (SEDC)

- UEN Technical Services will refer these items to UEN Leadership.

Data Warehousing (SEDC)

Elementary Schools (SEDC)

- UEN Technical Services considers these areas to be outside our roles and responsibilities.

TAB 6 ATTACHMENT C

Goal I. Network Speed, Reliability, and Capacity

Objectives Funding, Lead Responsibility	Tasks	Status	Completion Date
1. Finish Core Ring (Phase One) UVSC, SLCC, EBC Funded: yes Budget: $210,000 Project Leader: Pete Kruckenberg, Dan Patterson	1. Determine hardware vendor 2. Install Circuits 3. Install Hardware 4. Test Traffic 5. Go Live 6. Diverse Locations at UVSC	Circuits have been ordered and installed. Hardware analysis and award is pending MirCom report. This project is funded and on schedule.	1. Summer, 2002 2. Summer, 2002 3. Summer, 2002 4. Summer, 2002 5. Summer, 2002
2. Plan and communicate Phase 2 of Core Ring Project. USU, DATC, SUU, Snow, Snow South, CEU, Dixie, UBATC Funded: no Budget: N/A Project Leader: Barry Bryson	1. Barry to lead 2. Develop draft plan		1. Spring, 2002
3. Assist Weber State University in planning and implementation of a campus alternate path and Davis Campus connectivity. Funded: no Budget: Project Leader: Pete Kruckenberg	1. Vendor walkthrough and bidding process 2. SHARPS implementation 3. Installation of alternate path		1. Summer, 2002 2. Summer, 2002 3. Fall, 2002
4. Assist Utah State University in pursuing alternate path options to Cache Valley. Funded: no Budget: Project Leader: Barry Bryson	1. Conduct talks with ATT BNS 2. Participate in Cache Valley initiative; Barry 3. Pursue opportunities with ITS		1. Summer, 2002 2. Ongoing 3. Summer, 2002
5. Identify all elements of CVDS replacement. Funded: no Budget Project Leader: Pete Kruckenberg	1. Cost Analysis 2. Applications 3. Components 4. Scheduling 5. Time Lines		1. Analysis Complete by Fall 2002. 2. Project complete by Summer 2005.

Goal I. Network Speed, Reliability, and Capacity Continued

6. Provide regionalized spares for critical network hardware. Funded: No Budget: 150,000 Project Leader: Dan Patterson	1. Create list 2. Seek Funding	List of spares requirements has been submitted and is currently awaiting approval.	
7. Add diverse paths to Granite, Murray, Jordan and Salt Lake City Districts. Funded: No Budget: Project Lead: Barry Bryson			
7.Assist UofU in establishing a "split node" architecture Funded: No Budget: $80,000 (post E-Rate) Project Lead: Pete Kruckenberg			
7.Design, Test and Implement QOS into backbone . Funded: No Budget: Project Lead: Pete Kruckenberg			

Goal II. Increased Rural Capacity

Objectives **Funding, Lead Responsibility**	**Tasks**	**Status**	**Completion Date**
1. Complete Eskdale Connectivity Funded: Yes Budget: $150,000 Actual Cost: $80,000	1. Establish microwave path 2. Use microwave radios decommissioned from SE 3. Install and test equipment for use by Fall Term 2002	Radios for T1 connectivity have been removed from Southeast Path and are being re-tuned for installation on Frisco Peak. Monopole installation is	1. Summer, 2002 2. Summer, 2002 3. Summer, 2002

Project Leader: Jeff Egly	Term 2002	underway in Eskdale. Project is funded and currently running 15 days behind schedule. Expect completion 8/30/02.	
2. Implement GigE Circuits in Uintah Basin Funded: Yes Budget: $70,000 Project Leader: Jeff Egly	1. Sign Contract 2. Upgrade Routers 3. Install Circuits 4. Connectivity Testing 5. Go Live	Contracts have been signed with UBTA . Routers have been ordered. Conduit projects to install fiber are underway. This project is funded and on schedule.	1. May, 2002 2. Summer, 2002 3. Summer & Fall, 2002 4. Fall, 2002 5. Fall, 2002
3. Make decisions about move from Mossback to Clay Hills site Funded: No Budget: $75,000 Project Leader: Jeff Egly	1. Determine costs 2. Make recommendations to Steering Committee	This decision is dependent on replacing analog radios with digital. Funding does not currently exist. This project is not funded and will not be completed on schedule.	1. Summer, 2002 2. Summer, 2002
4. SE Bandwidth and video project Funded: Yes Budget: $20,000 Project Leader: Jeff Egly	1. Increase bandwidth from Moab to Blanding 2. Increase bandwidth from Price to Moab 3. Replace Nortel Equipment and upgrade routers in the southeast	Nortel equipment has been replaced with Miranda MGEG2 hardware, providing two additional video paths and approximately 15Mb/s additional bandwidth for V-bricks and data. Project is complete and considered a huge success.	1. Summer, 2002 2. Summer, 2002 3. Summer, 2002
5. Find a home for the OC-3 microwave radios Funded: Yes Budget: $42,000	1. List options 2. Make recommendations to Steering Committee 3. Install	This project has been approved and is currently being engineered. Anticipated completion date is Fall 2002.	1. Summer, 2002 2. Summer, 2002 3. Fall, 2002

Project Leader: Jim Stewart			
6. Increase capacity in Millard County Funded: Yes Budget: $12,000 Project Leader: Jeff Egly	1. Add T-1 circuits to the DO in Delta	Order has been place and is waiting for Frontier Communications to complete OC-12 to Fillmore. Project not likely to be completed prior to Winter of 2002.	1. Summer, 2002
7. Increase capacity in Emery County Funded: No Budget: Project Leader: Jeff Egly	1. Add T-1 circuits at Green River HS and Castledale		1. Dependent on E-rate funding
8. Assist Grand county in reorganizing and improving access Funded: Yes Budget: $6,000 Project Leader: Tony Bueno	1. Tony working with Jeremy Winder to determine timeframe and steps	Complete.	1. Summer, 2002
9. Assist Carbon County with VOIP development and implementation Funded: No Budget: $32,000 Project Lead: Tony Bueno	1. Secure funding for layer 2 and 3 switches ($32,000)	Request has been submitted to UEN Admin and Committee for review and approval.	
10. Work with CEU in designing and implementing plans for new building Funded: N/A Project Lead: Jeff Egly	1.Provide CEU with UEN requirements. 2. Assist CEU in review of Construction plans.		Summer, 2004
11. Assist SEDC Region in developing Ethernet WAN Funded: No Budget: Unknown Project Lead: Dan Patterson	1.Meet with Service Providers to determine feasibility 2. Investigate E-Rate strategies. 3. Identify Funding potential		
12. Assist Box Elder in the design			

and development of a “mini hub” Funded: Yes Budget: Project Lead: Barry Bryson			
13. Design and implement increased capacity to NUES (DS3) Funded: Yes Budget: $18,500 Project Lead: Tony Bueno	1. LSS circuit has been ordered.	Pending conduit at NUES.	

Goal III. Formalize Stakeholder Relationships

Objectives Funding, Lead Responsibility	Tasks	Status	Completion Date
1. Fully implement NOA, SLA and Network Connection agreements Funding: N/A Project Leader: Jim Stewart	1. UBATC, NUES and nine districts; Tony 2. SLCC, Granite, Jordan, Murray and SLC; Jim 3. UVSC, Nebo, Alpine and Provo; Mike/Pete 4. SEDC and 6 Districts; Dan 5. SESC, Grand, Carbon, Emery, San Juan and CEU; Jim 6. USU, Box Elder, Cache and Logan; Barry 7. WSU, DATC, Davis, Weber and Ogden; Barry 8. CUES, Snow, Snow South and Districts; Dan	NOA’s have been signed in CUES and SEDC.	1. August, 2002 2. August, 2002 3. August, 2002 4. August, 2002 5. August, 2002 6. July, 2002 7. August, 2002 8. August, 2002
2. Provide the NOA/SLA/Connection agreements online	1. Shellie, Dan and Jim to coordinate		1. TBD

Funded: N/A Budget: Project Leader: Jim Stewart			
3. Provide an effective Scorecard and publish this regularly Funded: No Budget: $20,000 Project Leader: Dan Patterson	1. Dan establishing prototype 2. Develop subset of districts to beta 3. Full implementation to all districts	Initial prototype and Web presence has been created. Currently working with in-house reporting tools to export data (graphs, etc). This project is funded and on schedule.	1. Summer, 2002 2. Fall, 2002 3. Spring, 2003
4. Develop methods to track UEN performance on the NOA/SLA Funded: Yes Budget: $0.00 Project Leader: Dan Patterson	1. Dan and Tony to determine steps	I-View Network Reporting tool has been selected as the tool to track SLA's on NOC services. Presently working on means to populate I-View with data received from NOA's.	1. Summer, 2002; ongoing
5. Provide training for the use of Network Management Tools Funded: Yes Budget: $5,000 Project Leader: Dan Patterson	1. Regional T-Forum meetings 2. Individual and districts	Training as been provided at T-Forums and in special one-on-one sessions as requested. This project is on track.	1. As requested 2. As requested
6. Regular T-Forum Meetings Funded: N/A Project Leader: Jim Stewart	1. Determined by regional co-chairs, supported by the advocates		1. Ongoing
7. Develop process to effectively use the Remedy Help Desk software Funded: N/A Project Leader: Dan Patterson	1. Dan and Tony to determine steps 2. Coordinate with TS Management 3. Communicate to Stakeholders	Remedy Help Desk has been installed and is functional. Remedy is currently being used to track Point of Contact database, intra-departmental service requests and will soon assist in	1. Ongoing 2. Ongoing 3. Ongoing

		inventory management.	
8. Determine UEN's role in assisting USOE in On-line Testing. Funded: No Budget: Unknown Project Lead: Dan Patterson	1. Work with Barbara Lawrence and staff to identify space in UEN's machine room to house testing servers.		Fall 2002

Goal IV. Update Routers and Switches

Objectives Funding, Lead Responsibility	Tasks	Tasks	Completion Date
1. Develop Replacement Priorities list. Funded: No Budget: $150,000 - $200,000 Project Leader: Jim Stewart	1. Work with Regional Leaders 2. Publish list on Web site 3. Determine cost and develop plan		1. Ongoing 2. Ongoing 3. Ongoing
2. Support increased E-rate reimbursement Funded: N/A Project Leader: Jim Stewart	1. Louise Tonin to regularly attend Tech Services Management Meeting 2. Advocates to discuss support with region contacts		1. Every 2 weeks 2. Summer 2002; Ongoing

Goal V. Maintain Microwave Assets

Objectives Funding, Lead Responsibility	Tasks	Status	Completion Date
1. Make decisions about move from Mossback to Clay Hills site Funding: No Budget: $75,000 Project Leader: Jeff Egly	1. Determine costs 2. Make recommendations to Steering Committee	This project is awaiting decision to migrate to digital radios. Additional information will need to collected and analyzed.	1. Summer, 2002 2. Summer, 2002
2. Find a home for the OC-3 microwave radios	1. List options 2. Make recommendations to Steering		1. Summer, 2002 2. Summer, 2002

Funded: Yes Budget: $42,000 Project Leader: Jim Stewart	Committee		2002
3. Develop a replacement plan Funded: No Budget: Unknown Project Leader: Jim Stewart	1. Inventory all assets 2. Determine spare equipment needs/costs 3. Write and distribute replacement plan		1. Summer, 2002 2. Summer, 2002 3. Fall, 2002

Goal VI. Develop Relay Site Agreements

Objectives **Funding, Lead Responsibility**	**Tasks**	**Status**	**Completion Date**
1. Establish Written Agreements Funded: N/A Project Leader: Ed Ridges, Jeff Egly	1. Ed Ridges to define scope and tasks 2. Identifiy all site components. 3. Determine site ownership 4. Develop access policy 5. Complete written agreement for each site 6. Begin with sites co-located with ITS 7. Complete balance of microwave sites. 8. Complete translator sites. 9. Identify sites for which formal agreements will not be adequate		1. June 2002 2. Ongoing 3. 4. 5. 6. June - July, 2002 7. Fall 2002 8. July 2002 - June 2003 9.

Goal VII. Develop Video Streaming Infrastructure

Objectives **Funding, Lead Responsibility**	**Tasks**		**Completion Date**
1. Develop VoIP plan Funded: No Budget: $10,000 Project Leader: Jim Stewart	1. QoS model and implementation 2. Cooperative Trunking 3. Call Management development		1. Summer 2002 2. Summer 2002 3. January 2003
2. Complete the H.323 pilot project Funded: Yes Budget: Unknown Project Leader: Dave Maw/ Jeff Egly	1. Evaluate the training project in the SESC region and develop a written report 2. Install, test and use the MCU 3. Install a new Audio conference bridge 4. Install, test and demonstrate an analog gateway to H.323 EDNET capability 5. Assist Rural Regions in adding matching funds to successful grant applications	Polycom H.3232 hardware has been distributed and in use in the Southeast region.	1. Winter 2003 2. Summer 2002 3. Summer/Fall 2002 4. Fall 2002 5. Fall 2002
3. Implement and Test Video Bridge Funded: Budget: Project Leader: Dave Devey			1. Summer 2002
4. Implement Audio Bridge Funded: Budget: Project Leader: Dave Devey			1. Fall 2002
5. Configure Router for Multicast Funded: N/A			1. Fall 2002

Project Leader: Mike Downie			
6. Develop Analog to H.323 Gateway Funded: Budget: Project Leader:			1. Fall 2002

Goal VIII. Diversity Internet Access Points

Objectives Funding, Lead Responsibility	Tasks	Status	Completion Date
1. Complete the Internet Peering and Bandwidth expansion Project Funded: Budget: Project Leader: Pete Kruckenberg	1. Core Ring dependent 2. Establish GigE connection from UVSC to EBC 3. Install Touch America transit OC-3 at UVSC 4. Install Touch America peering circuit PAIX to EBC 5. Disconnect Qwest Internet OC-3 6. Work with Davis District for minimal impact of Qwest circuit deletion		1. 2. Summer 2002 3. Summer 2002 4. Summer 2002 5. July 1, 2002 6. Summer 2002
2.Provide Internet 2 connectivity to K-12. Funded: N/A Project Lead: Barry Bryson			

Goal IX. Develop/Implement Video Master Plan

Objectives Funding, Lead Responsibility	Tasks	Tasks	Completion Date
1. Develop the elements of the Technical Services Tactical and video master plans Funded:	1. IMA Removal 2. Microwave upgrade and maintenance 3. Resources 4. Digital Video 5. New Endsite		1. Summer 2002 2. Ongoing 3. Ongoing 4. Ongoing 5. Ongoing 6. Ongoing

Budget: Project Leader: Jim Stewart	upgrade and maintenance 6. Public Communication and continuation 7. QoS pilot and implementation		7. Ongoing

Goal X. Increase Digital Video Stability

Objectives Funding, Lead Responsibility	Tasks	Status	Completion Date
1. Finish MGX out project Funded: Yes Budget: $80,000 Actual Cost: $80,000 Project Leader: Mike Downie	1. USU 2. DATC 3. SLCC	This project has been extremely successful. All MGX's except SLCC (8/13/02) have been removed. As a result, bandwidth and reliability have increased exponentially. This project was completed on time and on budget.	1. Summer 2002 2. Summer 2002 3. Summer 2002
2. Plan and Communicate the ATM out project Funded: Budget: $80,000 Project Leader: Jim Stewart	1. Jim to lead 2. Develop draft plan		1. January 2002 2.

Goal XI. Complete District T-1 Re-points

Objectives Funding, Lead Responsibility	Tasks	Tasks	Completion Date
1. Complete District T-1 Re-points Funded: N/A Project Leader: Jim Stewart	1. Davis District 2. Salt Lake City District 3. Granite District 4. Jordan District 5. Logan District 6. Cache District 7. Weber District 8. Ogden District	Repoints in Salt Lake,	1. Summer 2002 2. Summer 2002 3. Summer 2002 4. Summer 2002 5. Summer

	9. Others		2002 6. Summer 2002 7. Summer 2002 8. Summer 2002 9. TBD

Goal XII. Complete Statewide Peering Project

Objectives Funding, Lead Responsibility	Tasks	Status	Completion Date
1. Cooperate with State CIO and Smart Utah CEO to develop understanding of Community Networks Funded: N/A Project Leader: Jim Stewart	1. Pete and Jim to determine tasks		1. Ongoing
2. Complete the Internet Peering and Bandwidth expansion Project Funded: Partial Budget: $250,000 Project Leader: Pete Kruckenberg	1. Core Ring dependent 2. Establish GigE connection from UVSC to EBC 3. Install Touch America transit OC-3 at UVSC 4. Install Touch America peering circuit PAIX to EBC 5. Disconnect Qwest Internet OC-3 6. Work with Davis District for minimal impact of Qwest circuit deletion		1. 2. Summer 2002 3. Summer 2002 4. Summer 2002 5. July 1, 2002 6. Summer 2002
3. Assist the Utah Valley Community Network group in establishing a Community Network exchange Funded: N/A Project Leader: Pete Kruckenberg	1. Pete to work with UVSC and Utah Valley communities to determine steps		1. Ongoing 4.
4.Work with Utah Valley Community Network to install high speed network circuits to UEN sites			

Funded: Yes (NEBO only) Budget: $20,000 Project Lead: Pete Kruckenberg			

Goal XIII. Implement Intrusion Detection System

Objectives Funding, Lead Responsibility	Tasks	Status	Completion Date
1. Install IDS Software Funded: Budget: $ Project Leader: Troy Jessup	1. EBC Installation 2. Analyze Data 3. Demonstrate utilization 4. Plan Hub Implementation 5. Implement Software at Hubs 6. Analyze Core and Hub Data		1. Summer 2002 2. Summer 2002 3. Summer 2002 4. Summer 2002 5. Fall 2002/Winter 2003 6. Ongoing

Goal XIV. Assist with Firewall Planning and Implementation

Objectives Funding, Lead Responsibility	Tasks	Status	Completion Date
1. Regional Firewall Training and Implementation Funded: N/A Project Leader: Troy Jessup	1. Emery implementation 2. Communicate with regions 3. As requested by the regions		1. Summer 2002 2. Summer 2002 meetings 3. Ongoing
2. Fully implement Firewall for UEN.ORG and UEN.NET Funded: Budget: $ Project Leader: Bryan Peterson	1. Bryan and Troy to determine steps		1. Ongoing

Goal XV. Provide Security Leadership and Training

Objectives Funding, Lead Responsibility	Tasks	Status	Completion Date
1. Statewide Technical/Security	1. Operations		1. October

Summit Funded: Yes Budget: $5,000 Project Leader: Troy Jessup / Dan Patterson	developing October conference 2. Engineering developing March conference		2. March

TAB 7

UTAH EDUCATION NETWORK CONNECTION POLICY - ACTION

August 8, 2002

TO: UEN Steering Committee

FROM: Stephen Hess, Executive Director

Issue

This proposed Network Connection Policy was presented to the Technical Services Sub-Committed several months ago, and recommendations for modifications were suggested and incorporated into its provisions. Final approval of the policy is now requested.

Background

The statewide education network backbone, managed by the Utah Education Network, is designed and managed to impose minimal restrictions to its users while maintaining adequate levels of control thereby ensuring quality of service and security. The Network Connection Policy provides formal guidelines establishing clear expectations for both the users and managers of the Network.

Policy Considerations

Two basic assumptions underlie the Policy:

1. Users are expected to assume a critical role in providing adequate environmental accommodations for network hardware.
2. Users of the network are expected to assume the responsibility to maintain adequate point of contact information with the UEN NOC.

Recommendations

It is recommended that the Steering Committee review the attached Network Connection Policy, raise any questions, and if satisfied, approve the Policy for implementation.

TAB 7 ATTACHMENT A

Network Connection Policy
for the
Utah Education Network

January 27, 2002

I. PURPOSE

The statewide educational network, heretofore referred to as the UEN Backbone, managed by a public and higher education consortium heretofore referred to as the Utah Education Network (UEN) has developed out of a highly distributed and autonomous environment. As a result, certain policies and procedures, as stated within this document and other supporting references, are being suggested as the basis for an agreement between UEN and network users to assure the quality and security of state-wide inter-network communications. The purpose of this document is to describe possible policies for Regions or Districts regarding connection to the UEN Backbone and the management of this resource. This policy addresses:

- UEN Backbone Network Connection Procedures
- Protocols Supported on Network Backbone
- Supported Backbone Connection Methodology and Technology
- Management of Backbone Network Services
- Network and Computer Security
- Assignment of Network Segments
- Management of Routing Information
- Creation of sub-uen.org level domains
- Delegation of Authority for sub-uen.org level domains

II. REFERENCES

- 18 U.S.C. § 2510: Electronic Communications Privacy Act
- Utah Code Ann. § 76-6-703: Utah Computer Crimes Act
- Network Operating Agreement (UEN document)
- UEN Network Security Guidelines

III. DEFINITIONS

A UEN Backbone – The physical, electronic, and management of the network infrastructure, allowing for inter-network communications between District and

Regional Local Area Networks (LANs) including access to Internet and advanced research networks.

B Region, District – Refers to a school district or region within the state of Utah.

C Inter-network Communications – Communications that must traverse areas of network operations that are not under the immediate control of the local network administrator.

D Intra-network Communications – Communications that remain local to the network under the control of the local Institution, Region or District.

E d-marc – The point of demarcation, either physical or logical that separates the Inter-network (UEN) from the Intra-network (Institution, District or Region)

F UEN Partners – This term includes Institutions, Districts, Regions, Libraries, State Agencies and other authorized entities that are connected to the UEN Backbone.

G CERT® - The CERT® Coordination Center (CERT/CC) is a center of Internet security expertise, at the Software Engineering Institute, a federally funded research and development center operated by Carnegie Mellon University.

H UEN Partners "Partners" – Reference to any user of the UEN Network that is compliance with this and other policies respectively.

I Device – A "device" refers to a piece of hardware that is connected to the UEN Backbone and is under the control of the UEN Technical Services Network Operations Center (NOC).

IV. SCOPE

This policy applies to all devices utilizing UEN's IP space and all users of such devices, and governs all connections to the UEN Backbone network, network assignment, registration in the Domain Name System, and services provided over the UEN Network Backbone to UEN Partners. Any agreements between UEN and a specific Partner will be covered by a Network Operating Agreement.

V. Association with the Utah Education Network (UEN)

A All public education institutions, applied technology centers, institutions of higher education, public libraries and authorized state agencies are eligible for connection to the UEN backbone.

B Institutions of Higher Education and schools serving levels 7 through 12 are connected to the UEN Backbone through UEN-provided facilities (circuits, radio and hardware).

VI. Connectivity

A Types of Media

- UEN Owned Media – UEN owned facilities may include radio/microwave, copper or fiber optic facilities either placed or leased by UEN.
- Institution/District/Regional Owned Media – Institution, District, Regional owned facilities may include radio, microwave, copper or fiber optic facilities either placed or leased by an Institution/District or Region.

B Physical Demarcation of the Utah Education Network

- Physical connectivity/demarcation of facilities for institutions of higher education and institutions enrolling levels 7 through 12 education, including District Offices and Regional Centers are the responsibility of UEN. UEN will be accountable for the physical integrity of the circuits as well as the hardware device (router) that establishes the physical d-marc.
- Physical connectivity/demarcation for institutions providing educational services to the level of kindergarten through grade 6 are the responsibility of the School District. UEN agrees to provide extended services to these institutions with the understanding that the District responsible for that school ensures compliancy with expectations set forth in this document.

C Global Naming & Addressing (Identifiers)

- UEN is responsible to provide a consistent forum for the allocation of network services such as IP addressing and domain name services. UEN shall monitor the network to help insure such services are properly adhered to.

D E. Security

- In connecting to the UEN Backbone, a District or Region agrees to abide by this Network Connection Agreement and the Utah Education Network Security Guidelines document. Any network security incidents will be handled though a Point of Contact in the originating department or will be administered through the department's network connection to the backbone.

1 Local Responsibilities

UEN Partners are responsible for the security requirements of all their resources including; space, hardware, software, and data. In addition, Partners are responsible for ensuring that their resources are utilized in a way that does not pose a security threat to other entities attached to the backbone, including the Internet. The network d-marc space should have controlled access to ensure physical security of hardware. The space must be made available to UEN technical personnel either through code or key assignment or through an access list of personnel that are available on a 24x7 basis.

2 Utah Education Network Responsibilities

As administrators of the UEN Backbone, UEN will serve as the CERT® advisory for the UEN backbone and is responsible for ensuring that all security polices and practices are strictly adhered to. UEN will assist the Partners in meeting their security needs, including but not limited to; security scans, advisories, and where necessary isolation of network that pose a threat to other Partners connected to the backbone.

3 Internet Connection

Internet access points, managed by UEN, are a natural location to place filters for the benefit of security. UEN has done this. For security reasons,

these filters will not be placed in an easily accessible location such as a web site. Any Partner can call UEN to receive a copy of these filters to be considered in the UEN's security equation.

4 Utah Education Network Security Office (UENSO)

All suspected security violations or suspicious network activity must be reported to the UENSO's Computer Security Response Team (www@abuse.uen.org). Appropriate measures will be taken to stop/prevent this activity.

E Environmental

- The physical environment of the network d-marc is the responsibility of the Partner. The space should:

1 Have dedicated 110v/20amp electrical service for network hardware.

2 A controlled climate that is capable of maintaining a temperature range of 70 to 90 degrees Fahrenheit.

F Point of Contact (POC)

- Contact information is required for all resources connected to the network. It is the responsibility of each Partner who has a device connected to the network to maintain current POC information with the Network Operations Center (NOC). Interfaces or hardware identified as lacking POC information may be disconnected from the inter-network.

  The NOC at UEN maintains a Point of Contact database for each device connected to the network. Twice a year the NOC will verify the accuracy of this list with each Partner. If a device does not have a designated point of contact for network related issues and the traffic originating from that device is suspect of adversely affecting other network devices, that device is at risk of being disconnected without being notified. In such cases, UEN will make efforts to notify District or Regional personnel of the impending disconnection.

G Remote Access

- While a personally-owned device is remotely connected to the Utah Education Network, all UEN policy applies.

VII. Authority

A The policies this document embodies are under the authority and oversight of the UEN Steering Committee. The Network Connection Agreement is intended to provide central coordination of the UEN Backbone with local control for intra-nets connected to the backbone.

B Technical review of this document is under the direction and authority of the UEN Technical Services Committee.

C The UEN Backbone and its active components are administered, maintained and controlled by UEN's Network Operations Center (NOC).

D UEN's Partners are responsible for providing current Point of Contact information to the Network Operation Center within UEN, and to be aware of and comply with the governing policies and procedures as set forth in this document.

VIII. Procedures

A Network Operation Center (NOC)

Through the NOC, UEN will monitor the UEN Backbone 24 hours a day, 7 days a week. All network failures and/or excess utilization will be reported to a technical staff for problem resolution or design enhancement. Trouble calls can be placed via the UEN Network Operation Center at 801-585-7440.

B Disconnect Authorization

As administrators of the UEN Backbone, UEN Technical Services has the responsibility to isolate any network device from the Network whose traffic violates practices set forth in this policy or any network related policy that governs network activities. In the event of a situation where the normal flow of traffic is severely degradated by a Partner's machine or network, UEN will endeavor to remedy the problem in a manner that will have the least adverse impact to the other members of that network. If a Partner's device is disconnected for reasons other than security, e.g., lack of or inaccurate POC information, UEN will call the department Network Administrator or department head before removal. If the device is disconnected, UEN will provide to the owner of the disconnected device the conditions that must be met to be reconnected. UENSO will review the situation at their next scheduled meeting and make recommendations to UEN Technical Services accordingly.

C Enforcement

UEN Network Operations Center (NOC), in cooperation with the UEN Security Office will periodically scan the UEN Backbone network and DNS data space for provisos set forth in the Network Connection Agreement. Failure to comply could ultimately result in discontinuance, and/or, in the case of delegated sub-uen.org DNS authority, assumption of that authority.

D Grievance Policy

In the event a device is removed from the UEN Backbone/IP Space/DNS and the owner or manager of that device wishes to contest that action or to dispute the conditions set forth for reconnection the following steps shall be taken:

Step One (Reconnection) – If for some reason the Partner and NOC do not agree on the necessary procedures to reconnect a device that has been removed from the UEN Backbone, the Director of UEN Technical Services should be contacted for resolution. The Director will consult with UEN, Regional and/or District technical personnel and management to resolve the issue. The Director will respond with his/her opinion within 24 hours of being contacted by the NOC or Partner.

Step Two (Appeal) – If the Director of Technical Services is unable to resolve the reconnect request within the time allotted, the request will be forwarded to the Associate Director of UEN for resolution. The Associate Director will work with Regional or District Management and with the Executive Director

of UEN to bring immediate resolution to the matter. The Associate Director will respond to this request within 24 hours of receipt.

Step Three (Appeal or Grievance) – The UEN Steering Committee will serve as the final line of authority for all appeals and/or grievances that may arise from any action as a result of this policy.

TAB 8

FILE SHARING AND MISAPPROPRIATION OF NETWORK RESOURCES POLICY - ACTION

August 8, 2002

TO: UEN Steering Committee

FROM: Stephen Hess, Executive Director

Issue

This attached File Sharing Policy has been previous reviewed and discussed by the Technical Services Subcommittee. Final review and approval by the Subcommittee and the full Steering Committee are now requested.

Background

Based on suggestions made when this policy was initially discussed in the Technical Services Subcommittee, the Technical Services staff has worked with George Brown, to develop a policy regarding the management of peer-to-peer file sharing.

Implementation of many key elements of the policy will be the responsibility of staff at the schools and colleges and university, and other responsibilities will be assigned to UEN Technical staff. Further clarification and direction from the subcommittee will be essential as we move forward with this important issue.

Policy Considerations

The File Sharing Policy must adequately and appropriately address:

1. Roles and responsibilities of the schools and institutions served by UEN
2. Roles and responsibilities of UEN Technical Services staff members
3. Communication of policy decisions

Recommendation

It is requested that the Technical Services Subcommittee, and members of the Steering Committee, carefully review the attached File Sharing Policy. If satisfied that the Policy appropriately addresses the responsibilities of both Network users and UEN staff in this important area, it is recommended that the File Sharing Policy be approved by the Steering Committee.

Utah Education Network
File Sharing
and
Misappropriation of Network Resources
Policy

August 6, 2002

Background

As the utilization of networks and network technologies continues to increase exponentially, there are some very difficult challenges associated with such an ubiquitous, robust, and powerful resource. Abuses are common and can run the gamut from innocuous nuisances to very serious violations of copyright, privacy, and misappropriation of services, resources, and/or funds.

One notable example of network usage that has now reached a point of significant concern is what is classified as 'recreational/personal use'. Because virtually any information or data that can be digitized is available via the Internet, enterprising individuals have found ways to access the data and download it to their computers. Most of them use software that is grouped into the category of 'file sharing'. Among the file sharing software options is a set known as 'peer-to-peer' (p2p) software. This software allows an individual to download information from any other computer any where in the world which is also running p2p software; and permits anyone else any where in the world to download any information from that individual's computer as well.

Although there are very legitimate reasons to share data and information using a p2p environment, most of the information that is being shared using p2p facilities is ***'recreational/personal'***. The problem is, as this network of users grows and the amount of bandwidth that is being used expands, network facilities which are intended for other more important and legitimate uses become 'clogged'. Participation by all entities with the provisions and intent of this policy will help ensure that network's facilities will not suffer degradation resulting from inappropriate activities associated with the uses specified above.

Issues and Considerations

There are several considerations which must be addressed in examining this problem and potential solutions:

- The Utah Education's Network's (Network) resources are funded by the Legislature for the purpose of providing support to the educational process.
- The Legislature may not be able to provide sufficient funds to continue to meet the escalating need for additional capacity as was the case in FY 2003.
- Much of the recreational use of the network is apparently related to, or involves copyright violations.
- Traffic volumes associated with recreational use of the network have reached the level where it is necessary to address reasonable, equitable, responsible, and acceptable solutions.
- Acceptable Use Policies must be the foundation for any long-term solution to be viable.
- Public and higher education have somewhat different issues related to network use and standards.
- There are at least four different network traffic types: Mission Critical, Educational/Informational, Research and Development, and Recreational/ Personal. It may become necessary to prioritize network traffic according to these categories.
- As noted, there are legitimate file sharing applications, however, a survey of all academic and administrative leadership on the University of Utah campus failed to identify a single valid or legitimate use of peer-to-peer file sharing software.
- The implication is that peer-to-peer file sharing facilities within the network service only recreational/personal uses.
- Under the Digital Millennium Copyright Act (DMCA) and Electronic Theft Act, network providers can be judged as complicit if they knowingly permit copyright violations to be facilitated by their network resources.

Additionally, it is important to note that the Network has an Acceptable Use Policy (AUP) related to public education, and that each of the school districts also have adopted an AUP which governs the use of the network by their students, teachers, administrators, and staff.

However, this is not the case with higher education. Because institutions of higher education value a significant level of academic freedom, there is a substantial level of reticence for those institutions to adopt stringent policies restricting the access to or use of information. However, most of the institutions do have policies related to the violation of copyright provisions in the law; and the excessive use of facilities for activities not associated with the mission of the institution and/or the relatively direct pursuit of an education.

Solution Strategies

As noted, technical solutions can be implemented to restrict traffic via specific channels or ports that are most commonly used by present file sharing software. This is a very temporary solution at best because the channel/port designation can

be easily modified as a 'work-around'. There are other technical options which permit the 'rationing' or 'limiting' of bandwidth to particular entities or locales (e.g., dorms, etc.).

However, it is far more reasonable to adopt a policy encouraging and supporting the principles of 'acceptable use' as well as identifying potential traffic priorities which might result in certain types of traffic receiving priority. Additionally, the policy probably needs to address what might be done in the event that, in spite of all of our best efforts, the problem continues to persist. This might well involve the disabling of the port or channel presently serving the most common or prevalent p2p software. Finally, a goal of this process should be a statement of cooperation, and that, only in the most egregious circumstances would the UEN ever act independently to resolve this problem.

Policy Statement

It is the policy of the Utah Education Network that:

- Each institution and school district/regional service center, as well as other entities which utilize the Network's publicly funded resources should:

  1 adopt provisions within their institutional Acceptable Use Policy standards which:

    1 identify misappropriation of resources (i.e., excessive recreational, personal or commercial uses) as uses not consistent with those purposes identified as 'acceptable use',

    2 specify as 'unacceptable use' the use of file sharing software for the purpose of acquiring or sharing copyrighted material(s) in violation of the copyright owner's rights and privileges;

2 monitor, wherein possible, the portions of the network for which they have direct responsibility for traffic types (e.g., file sharing wherein copyright violations are evident, excessive recreational/personal, etc.) and volumes which would directly impinge upon appropriate and legitimate traffic;

3 take appropriate action to resolve problems identified above. These actions should include, but not necessarily be limited to:

  1 notification to users violating copyright provisions or who are using excessive network resources;

    a where continued abuses or copyright violations persist, network access should be disabled;

    b in some instances, it may be necessary to 'rate-limit' the traffic volumes to groups of users (e.g., dorms, etc.) where substantial violations are occurring;

    c identify/register server sites for which legitimate peer-to-peer file sharing has been recognized.

  4 UEN will monitor the backbone traffic for security violations and for high volume uses which might imply excessive and inappropriate consumption of network resources, and will notify the institution and/or agency responsible for the user from which the traffic is originating;

5 UEN will monitor the network's backbone for 'excessive' file sharing traffic and will provide notification to the institution and/or agency responsible for the users from which the traffic is originating;

6 UEN will work cooperatively with the Network's institutional users to assure that network resources are utilized for the purposes for which they have been funded, and will assist institutions, and/or school district/regional service centers in implementing reasonable, equitable, responsible, and acceptable courses of action wherein persistent and/or egregious uses are identified. These courses of action may include, but are not limited to those defined in I-C above;

7 In order to preserve network reliability, security, viability, and/or stability, the Utah Education Network may be required to take certain actions (e.g., blocking of specific servers, routers, or the IP addresses of specific user machines). These actions will be taken as a 'last resort' and only after sufficient notification to the offending user. Additionally, any action will also be in accordance with the Network Connection Policy and Network Operating Agreements; and , wherein necessary, as an official action of the Executive Committee of the Steering Committee. These actions will only impact the excessive recreational/personal uses and/or instances where copyright violations have been clearly identified. These actions will not in any way impinge upon nor impact the mission critical traffic of any institution.

TAB 9

REVIEW OF STEERING COMMITTEE MEETING FORMAT - ACTION

August 8, 2002

TO: UEN Steering Committee

FROM: Stephen Hess, Executive Director

Issue

The guidance, direction, and input from the Steering Committee are critical to the success of the Utah Education Network in fulfilling its mission of providing telecommunications services, facilities, and training to public and higher education, public libraries, and state governmental entities. Since the network is a consortium and has a diverse set of constituencies and users, each of which has varying and often widely different needs, it would not be possible to service those needs without a process of building consensus and identifying how to best serve all of the partners associated with the network. The need is to insure that these are accomplished in the most efficient and effective manner and especially that the time and resources provided by Steering Committee members are judiciously used.

Background

In an attempt to maximize the effectiveness and of the Steering Committee and to assure that the very valuable time of Steering Committee members is used most effectively and efficiently, a new meeting format was introduced several months ago. Subcommittees were organized in which much of the detail and substance of the work of the Steering Committee could be accomplished. Meetings were scheduled bi-monthly and extended in length to accommodate the more detailed subcommittee agendas. However, it has become apparent that there are some challenges associated with that format. It has been suggested that the meeting format be reviewed again to determine if there are some modifications and/or refinements that might be instituted to address these issues.

Some of the challenges which have been noted include: 1) the inability of subcommittee agendas to be completed in the allotted time; 2) members of one subcommittee may have significant interest in or would like to provide input about or participate in the discussion on an agenda item on the other subcommittee's agenda; 3) the present format excessively 'draws out the day'; and 4) a lack of time

to fully discuss subcommittee reports in the full Steering Committee meeting which results in a insufficient amount of information among members; etc.

A survey was conducted among Steering Committee members and the results are reported in the attachment (Tab 9 - Attachment A). As noted the results are almost evenly divided between Option I and Option II. The dilemma appears to be the how to balance the need to be very efficient yet effective, coupled with the need of many Steering Committee members to be informed at the level with which they feel comfortable.

Policy Considerations

The requirement is to find a process so that the leadership provided by the UEN Steering Committee can be adequately focused upon the needs of the many Network users in such a way as to assure that the Network is meeting its mission and goals.

1. Steering Committee members are appointed to represent various constituencies as well as to represent the needs of all of education in Utah. There will always exist a challenge as the normal tension between competing issues draws upon the need to be representative and 'statesman-like' in addresses these issues.
2. Meeting schedules and duration are inherently the means by which the Steering Committee is able to identify direction, provide input, build consensus, and insure accountability of all UEN activities.
3. Without adequate leadership and direction, the potential that the UEN will not appropriately accomplish its identified mission and goals becomes a matter of significant concern.

Recommendation

It is recommended that the Steering Committee review the options and adopt a meeting format that meets the requirement that the UEN will proceed with appropriate leadership from the Steering Committee.

Steering Commitee Meeting Format Surevy Results

	Option 1	Option 2	Option 3	Option 4	
Amy Owen	X	X			No Strong Preference
Jeff Livingston	X				Teaching schedule precludes attendance on Friday's
Cliff Drew	2		1		Option 3 preferred
Dave Eisler		X			
Vicky Dahn		X			
Gary Wixom	X				
Wayne Peay		X		X	Subcommittees meet at different times
Brent Goodfellow	X				Will support the majority
Kirk Sitterud	1		2		Option 1 preferred
Reed Eborn			X		
Pat Lambrose		X			Subcommittees meet at different times
Bruce Christensen	X				Subcommittees and Steering Committee 1hour each
Ray Timothy		X			
	6.5	6	2.5		As of 8/06/02 6:00 p.m.

Option 1. Hold the subcommittee and 'committee of the whole' meetings on the same day. The subcommittee meetings would begin at 9:00 a.m. followed immediately by the 'committee of the whole' at 11:00 a.m. The Executive Committee would meet on a day other than the Steering Committee meeting date. (This would eliminate the hour delay between the sub-committees and the Steering Committee.)

Option 2. Hold the subcommittee meetings on a different day (e.g., during the intervening months during which Steering Committee meetings are not held). The Steering Committee would focus upon the actions and reports of the subcommittees and the UEN's overall direction, plans, and budgets.

Option 3. Revert to the original format where the entire Steering Committee would meet as a 'committee-of-the-whole', without sub-committees.

Option 4. Some other format or combination of one or more of the above. If you select this option, please provide your comments regarding your ideas and recommendations.

UTAH EDUCATION NETWORK
STEERING COMMITTEE

AGENDA

AUGUST 16, 2002 – 9:00AM

9:00 am - 12:00pm

Business Steering Committee Meeting

Welcome and Introductions..... Bonnie Morgan

Tab 9

Next meeting - October 18, 2002 (Proposed)

Please place these materials in your Steering Committee Binder

TAB 1

STEERING COMMITTEE MEETING MINUTES

UTAH EDUCATION NETWORK STEERING COMMITTEE

June 14, 2002 - 9:00 am

Steering Committee Meeting

Present: Douglas Abrams, Bruce Christensen, Vicky Dahn, Clif Drew, Reed Eborn, Stephen Hess, Pat Lambrose, Wayne Peay, Michael Petersen, Kirk Sitterud, Glen Taylor, Ray Walker, Barbara White, Phil Windley, Gary Wixom, Andrew Howlett, Lynn Bills, Vernile Prince, Rick Cline, Karen Krier, Victoria Rasmussen, Race Davies, George Miller, Lisa Kuhn, Laura Hunter, Jim Stewart, Bruce Todd, Sheralyn Stevens, Rich Finlinson, Bill Kucera, Cory Stokes, Charice Black, Rick Gaisford, Jon Crawford, Louise Tonin, Sheryl Hulmston, Claire Gardner, Nancy Granducci, Joe Granducci, Phil Titus, Bruce Larson, Joan Lee, Daniel Patterson, Cory Stokes, Nancy Gibbs, Kevin Taylor, Glen Burr, Mina Kang, Colleen Nordberg, and George Brown.

Douglas Abrams attended for Amy Owen.

Lynn Bills attended for Coy Ison.

Jonathan Ball attended via EDNET from the Capitol.

Mark Spencer has left the Utah Valley State College and is now the Associate Commissioner for Finance and Planning at the Utah System of Higher Education. It has been recommended that Ray Walker take his place. That formal appointment is currently being processed.

I. Welcome and Introductions - Gary Wixom

Due to uncertainties in the budget situation and strategic planing, a decision was made to hold the Steering Committee meeting as a committee of the whole instead of following the usual format.

II. Review and Approval of Minutes - March 22nd, 2002 (Information/ Action)

Pat Lambrose asked for the status of the policy on page 1-4. George clarified the policy, stating that it is a file sharing policy that is in progress. It was felt that the policy needed to go to the Technical Services Subcommittee first before bringing it to the Steering Committee.

Motion: It was moved and seconded that the members of the Utah Education Network Steering Committee approve the minutes of the Friday, March 22nd Executive Meeting. After a brief discussion, THE MOTION PASSED WITH ALL VOTING IN FAVOR.

After some discussion of an item on page 2-4, it was agreed that the wording would be changed to reflect that though there is only one priority, Pioneer, there was also consensus that an RFP could be issued to determine what the cost of the video streaming project might be.

Motion: It was moved and seconded that the members of the Utah Education Network Steering Committee approve the amended business meeting minutes of March 22nd. THE MOTION PASSED WITH ALL VOTING IN FAVOR.

III. Honoring of Nancy and Joe Granducci for their Service to education in Utah - Sheryl Hulmston and Mike Petersen presented.

Sheryl Hulmston introduced Joe and Nancy Granducci. Joe and Nancy Granducci are from Ogden H.S. They have been involved with EDNET since it was SETOC. Nancy is the Latin teacher there, and Joe provided technical support. Their dedication to the students and their dedication and commitment to furthering education has been inspirational. They've been involved heavily with allied health sciences program and have provided Latin instruction that exists nowhere else in the state of Utah. They have been teaching for 23 years. Their love, dedication and respect for each other exemplify the kind of partnership that marriage can bring.

Mike Peterson then presented a plaque from UEN to Joe and Nancy, which read, *"In honor of your outstanding service to distance education, presented to Joe and Nancy Granducci, Ogden High School. For years of commitment, compassion, service, support and contributions to distance learning in Utah."*

The presentation was followed by a few words from Joe and Nancy Granducci. Joe thanked the UEN Steering Committee and George Miller. Joe also mentioned the value of money available for training teachers to use technology. He felt that one of the problems today in education is training. Teacher qualification within their certificated field is really a key issue at this point. Nancy also spoke a few words and both thanked the committee warmly.

IV. <u>Tentative FY 2003 Strategic Plan 3-1</u> - George Brown presented.

Before George Brown began his presentation, Gary Wixom and Steve Hess spoke about the current circumstances. Gary commented that the state budget dilemma creates an uncertainty which affects the budget and the strategic plan for UEN. As the budget uncertainty impacts the strategic plan, he suggested first discussing the budget, then the strategic plan, and then making recommendations as to how to proceed regarding the budget.

Steve Hess concurred, reiterating the importance of having some general direction in the strategic plan. The increase in the budget shortfall and the resultant increase in cuts to higher education would result in significant overall reductions in service, and possibly in personnel. He does expect UEN to be able to move forward and accomplish some goals this summer, despite the financial shortfall.

Before George Brown began his presentation, he pointed out a correction on the inside of the cover page, down by the caveat. The special note related to the legislature's need to make budget reductions says that it is 4.28 percent, however, it should be 4.75. George then explained the difference in format of the Plan from previous formats.

The format of the plan this year is different than it has been in the past. The excellent executive summary in the first 4 or 5 pages describes what UEN is about and what its goals are. This is followed by a color stack, which identifies each project for this coming year. Updates will be made and will be provided at least quarterly, as progress is evaluated. The scheduled completion date is on the left hand column, and this correlates directly with the project plans in appendix A. Project plans need to be prioritized. George requested that each of the managers discuss their project plans in brief terms.

UEN Technical - Jim Stewart presented

Jim Stewart stated that the summer projects should have enough money to be completed if the UEN budget cuts are not deeper than about $700,000. He discussed the first two bars in the color stack, which contains most of the projects planned for the summer, and gave an overview of the projects the UEN Technical Services Department had planned for the summer (see strategic plan).

TouchAmerica transport would increase UEN's capacity by an additional 150 mbs of Internet traffic this fall. That will be needed, based on traffic statistics at the end of the school year this year.

There will be a purchase of about $140,000 of equipment to complete the GigE core ring project between SLCC, UVSC, and EBC.

In the Southeast, we are increasing the capacity between Price and Blanding. Upon its completion, UEN will have the ability to deliver up to 6 video paths and still have about 20 megabits capability for data and internet traffic.

<u>Motion:</u> It was moved and seconded that the Technical Services projects previously prioritized by the Technical Services Subcommittee be

approved for completion this summer and be the first priorities of this budget. THE MOTION PASSED WITH ALL VOTING IN FAVOR.

Instructional Services – Laura Hunter presented

George Brown pointed out that the four areas of instructional services are on the top of the color stack: On-line resources, KULC programming, workforce development and professional development. These reflect areas closer to the customer.

Most of the IS projects don't have a large capital outlay. The expenses come mainly in the form of personnel to do on-going projects such as web development, curriculum alignment, etc. Some grant funds are anticipated for this summer - about $50-60,000. Other anticipated capital outlay are on-going subscriptions. The Pioneer committee has been reviewing and prioritizing all the current contracts. If we face a second wave of budget cuts, there would be Pioneer products that are affected. Lower priority subscriptions will have their costs evaluated. The streaming RFP is currently open. No decisions are anticipated until August when the instructional services committee meets again. A new lesson plan tool, a new adjustment tool, a rubric analysis tool and some website changes will be rolled out about a week after the Steering Committee meeting. There will be a new schedule in fall programming. There are no Instructional Service project goals that need to be approved this summer.

Pat Lambrose expressed concern that our limited resources are not being appropriately allocated. The Elementary Secondary Education Act (ESEA) states “no child left behind.” She asuggested the Steering Committee should clarify UEN's role in the "no child left behind” legislation, including teacher quality, teacher training, and professional development. She also asked if new resources need to be created, or if there are ones that already exist. Then she recommended that UEN look at the levels of technology integration which the Jordan District is using in its electronic portfolio.

Laura Hunter noted the alignment of on-line resources to the core curriculum, a new lesson plan tool developed through collaboration with USOE, and a request from UEN’s Higher Ed constituents for the electronic portfolios.

George Brown pointed out that this plan has not been to either of the subcommittees yet, but will go to the subcommittees at the next meeting, when they can be reviewed in specific detail.

Motion: It was moved and seconded to approve budget for Instructional Services on-going contracts, Pioneer and similar subscriptions. Further decisions can be made once items have been reviewed by the subcommittees. MOTION APPROVED WITH ALL VOTING IN FAVOR.

Mike Petersen briefly referred to instructional delivery projects. Goals address the EDNET system, evaluation and piloting of new delivery technologies, enhancing the satellite system, and developing a comprehensive strategic plan for the satellite system.

Clif Drew was concerned about effectively communicating with colleges about teacher education. Mike Petersen pointed out that on page 28, teacher training is addressed and the role that colleges and public school officials will play in that particular area is recognized. He agreed that UEN does need to be sensitive in getting to the right programs within the institutions to be developed.

Wayne Peay emphasized that budget constraints may lead to different strategies for UEN. UEN must target its investments carefully. Perhaps the mission of UEN may be altered due to the changes the budget cuts have brought about.

Pat Lambrose recommended that format of the steering committee be discussed at the next meeting.

It was agreed that further discussion and approval of the plan would occur at the August meeting.

V. <u>FY 2003 Budget Recommendations 4-1</u> – Mike Petersen Presented

Mike Petersen noted that on page 4.3, the second bullet, it is not actually the case that the budget reflects possible 4.75 % holdback. The budget that begins on page 4-4 through 4-8 is actually based on the state appropriation. If there were an additional 4.75 percent cut, that would be an additional $712,000 in reduced state appropriations that's not incorporated into this budget plan. There have been some extensive discussions in the planning meeting this morning as to how to proceed with the budget. Mike Petersen suggested that the Steering Committee endorse the budget, recognizing that any decisions made today will be temporary. People need to be paid and projects need to be started. The approved temporary budget will be reviewed and adjustments made, once the additional cuts have been made.

There is a special legislative session on the 26th, and a two day special session planned for the 8th and 9th of July, where budget decisions are expected to be made.

Jonathan Ball confirmed the dates of the legislative sessions. The two weeks between the 26th and the 9th allows the legislature to hear public comment on proposed cuts. The 9th would be the end of the special session.

Race Davies pointed out that it was important to see reductions as on-going, rather than temporary.

Barbara White mentioned that at Utah State, they had looked at budget reductions at various levels. She was concerned, because reducing programs would affect staff, and vice versa, and the impact of the strategic plan and the plans at other institutions on each other. The satellite system was of particular concern.

Motion: It was moved and seconded that the budget be approved on a tentative basis as it is outlined with the knowledge that after July 9th the Steering Committee will reconvene to finalize its approval. MOTION PASSED WITH ALL VOTING IN FAVOR.

VI. A Formative Evaluation Instrument and Process for EDNET Videoconferencing 5-1 - George Miller presented

The EDNET Evaluation Process was initiated last November. About two years ago, the Public Education Curriculum Coordination Committee (PECCC) recommended that we find a way to streamline and enhance the course approval process for EDNET classes. Today the public education/instructional content committee serves that role. They review all of the EDNET classes and programs. That process has a number of different facets that involve UEN and USOE staff. Evaluating teachers has a twofold purpose: 1) It's an ongoing formative evaluation that provides teachers with needed feedback on their instructional delivery, and 2) It serves as a student evaluation of the class and provides a ready assessment of the quality of the class to the course approval committee. The key conclusion of the evaluation are: (1) Most students are satisfied with the quality of instruction that they're receiving, and especially the opportunity to get it. So educational access really seems to be appreciated all over the state. (2) Teachers must be well trained. Curriculum and their pedagogy, their teaching style, really has to be reworked if it's going to work within EDNET. (3) Minor technical problems do interfere with EDNET teaching, but those can easily be resolved, usually within a matter of hours, if not minutes. (4) Distance learning teaching in Utah is as good as traditional face-to-face instruction. EDNET technology really bridges geography to bring our students, our teachers, and our communities together.

VII. Professional Development Report - Victoria Rasmussen presented

Laura Hunter introduced Victoria Rasmussen, who is the manager of the professional development program. Victoria has been with UEN since September, but has always been out conducting training during the Steering Committee meetings. She provided an excellent report (see tab 6 in the agenda.

Victoria Rasmussen solicited input from the Steering Committee as to the direction of UEN Professional Development.

VIII. Other

- Steve Hess felt that the entire UEN Steering Committee should reconvene to review goals and directions once the budget cuts have been determined some time after July 8th or 9th. He Steve also offered words of encouragement, thanking people for shouldering additional burdens and responsibilities. Though cuts may be on-going, he believes there was reason to be cautiously optimistic, seeing this as an opportunity for UEN to refocus and prioritize
- Gary Wixom thanked everyone for their participation.

The meeting adjourned at 11:00 a.m. with a duration of 2 hours 5 minutes.

The next meeting is scheduled for August 16, 2002 - 9:00a.m. at the Dolores Doré Eccles Broadcast Center

TAB 2

EXECUTIVE COMMITTEE ACTIONS

August 8, 2002

TO: UEN Steering Committee

FROM: Stephen Hess, Executive Director

Issue

Two actions taken by the UEN Executive Committee on July 22, 2002 require final action and approval by the Steering Committee. The committee approved in concept a UEN position paper on maximizing e-rate funding, and actions proposed to accommodate a budget cut of $83,200 in the FY2002-2003 budget. Detailed information on the two items follow in tabs IIA and IIB.

Background

The UEN Executive Committee met on July 22, 2002 at the Eccles Broadcast Center. In attendance were co-chair Gary Wixom, and members David Eisler, Vicky Dahn, and Ryan Thomas. UEN staff members present were Steve Hess, Mike Petersen, George Brown, Laura Hunter, Jim Stewart, Lisa Kuhn, and Randy Scott.

The Executive Committee agreed conceptually to support the objectives and activities outlined in the draft position paper on maximizing e-rate funding. Suggestions were made to refine the paper, with the understanding that it would then be reviewed and approved by the Steering Committee on August 16.

The Executive Committee approved the budget cut plan outlined in Tab IIB, contingent upon full review, discussion, and approval of the FY 2002-2003 budget by the Steering Committee. Detailed information regarding the full budget is provided in Tab III.

TAB 3

E-RATE POSITION PAPER - ACTION

August 8, 2002

TO: UEN Steering Committee

FROM: Stephen Hess, Executive Director

Issue

The attached UEN Position Paper on E-Rate Funding was approved conceptually by the Executive Committee on July 22, 2002, and requires final action by the Steering Committee. It identifies goals and outlines plans to significantly increase e-rate funding and expand support of the efforts of school districts to maximize their e-rate funding.

Background

The E-Rate program is now entering its fifth year. It reimburses public schools and libraries for certain telecommunications costs incurred to telecommunications service providers using revenues paid by phone customers into the Universal Service Fund (USF). Since the program's inception, UEN has successfully applied each year for reimbursement for circuit charges paid by UEN for telecommunications connectivity provided by telecommunications service providers to high schools, middle and junior high schools, and district offices. In addition, UEN has provided some support to local districts, who are also eligible to receive E-Rate funding.

Table I summarizes the E-Rate funding received by UEN during the first 4 years of the program, and the amount approved for reimbursement for year 5, which began July 1, 2002. Funding levels have remained fairly stable, although we should receive a substantial increase during the current fiscal year.

Table 1: E-Rate Funding in Utah, 1998-2002

	1998	1999	2000	2001	2002**
UEN	$1,090,326	$2,735,743	$2,085,763*	$2,031,872	$2,498,733
Utah, totall	$6,386,100	$5,739,385	$5,051,993	$5,712,267	$6,634,306

*Reduction in funding from 1999 to 2000 resulted from Network redesign that reduced circuit costs.

**As of end of July, 2002. Additional commitments are outstanding, including $1.2 million submitted by UEN and not yet approved.

Since the start of the E-Rate program, UEN has been successful in applying for reimbursement for all eligible circuit charges. However, for approximately the past two years, E-Rate eligible organizations in many states have been more aggressive than either UEN or most of the Utah school districts in expanding their funding. Two major developments have led to the sizeable growth of funding in some states.

1. End-to-end service contracts between service providers and schools have been authorized by the administrators of the E-Rate program. These contracts allow organizations to be reimbursed for equipment and maintenance costs that are included in the services provided by the vendor, instead of the cost of circuits only.
2. E-Rate programs have been coordinated on a state-wide basis, to assure that schools with high reimbursement rates are able to take full advantage of the program, and to design and coordinate technology planning throughout the state to maximize E-Rate funding.

Because there have been relatively few efforts in Utah to develop end-to-end service contracts and there has not been a systematic effort to provide statewide coordination, Utah ranked 39th out of the 56 states and territories in total E-Rate funding received in 2001. Utah residents paid significantly more into the Universal Service Fund than Utah schools and libraries received in E-Rate reimbursements: $8.4 million was paid into the USF by Utahns in 2001, while E-Rate reimbursements amounted to $5.7 million, a gap of $2.7 million.

In contrast to Utah, New Mexico, a neighboring state with a similar population of school children, received over $50 million in E-Rate funds last year. Although New Mexico has more schools in the highest need categories, this shows the benefit of statewide coordination and planning.

Tennessee was the first state to propose the use of end-to-end service contracts to allow for reimbursement of equipment and maintenance costs within service contracts with telecommunications providers. A Utah example is now available to demonstrate the increased funding resulting from end-to-end service contracts. Beginning last year, the Davis School District negotiated this type of contract with Qwest. Davis District E-Rate funding has grown from $435,000 in FY2000 to $1.35 million committed during the current program year. Not all of that growth has come from end-to-end service contracts, but it has been a major factor.

Policy Considerations

UEN must take a leading role in working with telecommunications service providers and with school districts to increase the amount of E-Rate funding returning to Utah. The key steps that we must take are:

1. Negotiate end-to-end service contracts with telecommunications providers.
2. Provide leadership and support to school districts that require help in maximizing their E-Rate funding.

Preliminary efforts to do this were started last winter, but the attached Position Paper outlines aggressive goals and strategies that should result in significant growth in E-Rate funding.

Recommendation

It is recommended that the Steering Committee review the attached UEN E-Rate Position Paper, and that it be approved as the basis for guiding UEN staff in their efforts to increase E-Rate funding and to support similar efforts by Utah public schools.

TAB 3 ATTACHMENT A

UEN E-RATE POSITION PAPER

August, 06 2002

UEN intends to significantly increase the E-Rate funding it receives, by more aggressively establishing end-to-end services contracts with Utah's telecommunications companies. In addition, UEN will assist local school districts to ensure they maximize E-Rate funding.

Major Objectives

- Double UEN's E-Rate funding commitments from FY 2003 to FY 2004 ($2.5M to $5M).
- Assist school districts and regions to maximize E-Rate funding.

Activities Planned to Achieve Objectives

- Acquire end-to-end services contracts with telecommunications providers. Providers will be asked to negotiate contracts that combine charges for circuits, equipment, and maintenance.
  - ◇ Coordinate with Qwest to identify existing elements that may be included in these services.
  - ◇ Coordinate with rural telecommunications providers and the Utah Rural Telecommunications Association (URTA), and public school regions and districts to identify existing elements that may be included in these services.
  - ◇ Where appropriate, facilitate partnerships between multiple telecommunications providers for end-to-end services.
  - ◇ Maintain status quo (e-rate discounts on circuits only) with rural telecommunications companies that are unable to offer end-to-end services.
- Identify schools eligible for 90% discount.
  - ◇ Equipment purchases will be eligible for E-Rate funding.
  - ◇ Coordinate with school districts in raising discount levels for all schools.
- Identify new services that may be included in end-to-end contracts to receive E-Rate support.
  - ◇ Potentially, H.323 IP video conferencing might be part of a "distance learning" service, or voice services may take advantage of Voice over IP.

Key Steps to Achieve Objectives

- Working with Qwest and rural telecommunications companies, UEN will seek to acquire end-to- end services contracts in most areas of the state for Year 6 (FY2004)
  - ◇ Circuits, equipment, and maintenance will be sought as end-to-end E-Rate eligible services next year.
  - ◇ New services (H.323, VOIP) will also be considered.

- Initial work has already begun by UEN staff to coordinate with state purchasing, Qwest, URTA, and local school districts, and regions.

- In the next several weeks, specific circuit and hardware requirements and services will be identified. Planning will be finalized regarding:
  - ◇ Router replacement
  - ◇ Circuit upgrades
  - ◇ Core migration (Ethernet services as stated in strategic plan)
  - ◇ Engineering/NOC/TOC requirements to integrate end-to-end services.
  - ◇ Network, hardware, and router replacement and enhancements required for new services, such as VOIP and video.

- All of these steps must be completed by Mid-November, so that appropriate E-Rate forms can be filed immediately after the filing window opens in late November.
  - ◇ UEN staff will aggressively increase outreach efforts to help maximize E-Rate funding by school districts. It is anticipated that the major payoff from these efforts will occur in FY2004. Major efforts will be directed at:
  - ◇ Rural schools, URSA board meetings, regional and district purchasing and technical staffs.
  - ◇ UEN will provide oversight statewide to maintain compliance with SLD rules in order to eliminate funding denials and reduce liability.

Policy Guidelines

1. With the E-Rate filing window approaching in November, it is imperative that all stakeholders and service providers understand the others' perspectives and that each entity consistently communicates needs and service offerings.
2. UEN will pursue contracts for services that are deemed necessary by our public education stakeholders, and attempt to qualify these contracts for E-Rate discounts.
3. UEN will coordinate with service providers, districts, regions, and, in some cases libraries, throughout the state to help identify end-to-end service scenarios that are acceptable to and benefit all parties.
4. From this effort, UEN will help the state achieve a significant increase in E-Rate funding commitments.

TAB 4

FISCAL YEAR 2003 BUDGET CUTS - ACTION

August 8, 2002

TO: UEN Steering Committee

FROM: Stephen Hess, Executive Director

Issue

The plan proposed to reduce the FY 2003 Budget by $83,200 was approved by the Executive Committee on July 22, 2002, contingent upon final review and approval of the full FY 2003 budget by the Steering Committee. The budget cut plan outlined in Attachment A requires final action by the Steering Committee.

Background

At its special session on July 8-9, the Utah Legislature adopted a plan to reduce FY 2003 state appropriations allocated to UEN by a total of $83,200. The cut was significantly smaller than initial estimates suggested (reductions of $700,000 to over $1.34 million had been indicated as necessary to achieve a balanced budget). The budget cut of 0.56 percent reflected a strong commitment by legislative leadership, Governor Leavitt, and the Higher Education Appropriations Subcommittee to minimize the impact of budget reductions on education, and specifically on the Utah Education Network.

Policy Considerations

The following key steps were recommended to the Executive Committee:

1. Out of state travel and professional development expenditures will be minimized during the year, and that budget line will be reduced by $74,115.
2. The CEU Distance Education line in the UEN budget was reduced by legislative action by $1,440.
3. The UEN Satellite System budget was reduced by legislative action by $7,645. The UENSS equipment and site installation budgets will be reduced by that amount to accommodate the cut.
4. Earlier plans to reduce budget support to regional service centers and regional hubs will not occur. Their budget support will remain at the same levels as in FY 2002.

5 Early plans to freeze all vacant positions at UEN can now be selectively modified. A limited number of vacancies in key positions in Engineering, the Network Operations Center, and the EDNET Technical Operations Center are now being posted. However, previous reductions of 10 FTE staff positions will not be restored.

Recommendation

It is recommended that the Steering Committee approve the actions of the Executive Committee and adopt the attached plan to reduce the FY 2003 budget by $83,200, contingent on its final approval of the UEN FY 2003 budget as recommended in Tab V.

TAB 4 ATTACHMENT A

DATE: July 19, 2002

Summary: UEN Budget

I. REVENUES	Budget FY 2002	Budget FY 2003	Change in Budgets	.56% Budget Reduction
State appropriations	18,269,444	14,904,100	(3,365,344)	(83,200)
Interest Income	150,000	75,000	(75,000)	
Community Service Grant	1,654,126	1,695,000	40,874	
Grant / Foundation Support	108,000	248,220	140,220	
E-rate	1,860,444	1,850,000	(10,444)	
Inner fund transfers	162,115	186,855	24,740	
Other	170,371	163,756	(6,615)	
Carry Forward				
KULC funds held for DTV	1,071,304	2,000,000	928,696	
Grants	170,979	101,531	(69,448)	
UEN operating cash	211,185	103,885	(107,300)	
TOTAL REVENUES	23,827,968	21,328,347	(2,499,621)	(83,200)

II. SUMMARY OF EXPENDITURES	Budget FY 2002	Budget FY 2003	Change in Budgets	.56% Budget Reduction
Personnel	5,862,115	5,578,624	(283,491)	
Supplies	208,200	195,950	(12,250)	
IT supplies	147,820	147,532	(288)	
Travel / professional development	257,736	189,290	(68,446)	(74,115)
Instate travel	140,800	117,779	(23,021)	
Capital equipment	57,800	85,300	27,500	
IT Capital equipment	406,801	183,300	(223,501)	
Circuit charges / Internet access	5,442,636	5,454,000	11,364	
Software and maintenance	808,677	740,874	(67,803)	
Pass through money	1,294,883	1,177,513	(117,370)	(1,440)
UENSS (Satellite System)	1,508,561	1,474,555	(34,006)	(7,645)
UEN direct building support	535,241	722,000	186,759	
UEN project account	-	899,288	899,288	
Building expansion	840,000	-	(840,000)	
Replacement routers	150,000	-	(150,000)	
UEN operating funds	718,297	609,432	(108,865)	
Projects	5,448,401	3,752,910	(1,695,491)	
TOTAL EXPENSES	23,827,968	21,328,347	(2,499,621)	(83,200)

TAB 5

FISCAL YEAR 2003 BUDGET - ACTION

August 8, 2002

TO: UEN Steering Committee

FROM: Stephen Hess, Executive Director

Issue

The FY 2003 budget was reviewed preliminarily by the Steering Committee at its June 2002 meeting. However, uncertainty over the impact of additional budget cuts prevented final action from being taken during that meeting. Final appropriations decisions have now been made by the State Legislature, so final review and approval of the FY 2003 UEN budget is now requested.

Background

The FY 2003 UEN budget reflects multiple challenges of minimal economic growth, higher unemployment, and reduced tax revenues for state government. Despite those challenges, we are confident that the financial plan reflected in the FY 2003 budget will allow UEN to maintain the statewide network with adequate capacity and reliability, deliver classes and programs through EDNET, UENSS, and KULC, and provide critical instructional support services to Utah teachers, faculty members, and students.

Detailed information about the FY 2003 budget is provided in the attachments following this memorandum. Attachment A summarizes revenue sources used to fund the budget, and expenditures by broad categories as well as programmatic areas. Attachment B provides an organizational context for assessing the budget and it provides general and more detailed organizational charts for UEN, and indicates personnel who serve in each organizational area.

Policy Considerations

Major FY 2003 policy considerations focus on (1) revenues that are available and restrictions that limit the uses of particular revenue sources, (2) major expenditure choices that are identified, and (3) priorities shown by the budget choices that are recommended.

1. Revenues

As summarized in Table 1, total state appropriations allocated to UEN are $3,365,344 less than in the 2001-2002 fiscal year.

Table 1
2002-2003 Reductions in State Appropriations to UEN

Item	Amount of Reduction
Loss of one-time money for Equipment/ Router Replacement	$1,000,000
KULC digital conversion one-time money	$1,715,444
On-going base budget reduction	$649,900
Total reduction in state funds	$3,365,344

In addition to state appropriations, UEN will receive revenues from grants and E-Rate reimbursement of telecommunications services, carry forward other revenues from last year, and budget revenues from other miscellaneous sources. Most of these revenues have restricted uses. For example, the Community Service Grant ($1,695,000) must be used to support KULC and related services and personnel, and E-Rate funds reimburse a portion of telecommunications services provided to public schools and paid for by UEN.

Significant efforts are being made to replace lower state appropriations by increasing other revenue sources:

1. E-Rate funds will be significantly higher during the current year than in FY 2002. Commitments have already been received that are $470,000 higher than last year, and approval is still awaited for an additional $1.2 million from E-Rate. Steps are underway to further increase E-Rate funding during FY 2004 by an additional $2.5 million. These actions will allow us to reduce our reliance on state appropriations to upgrade routers and other network equipment and provide ongoing equipment and software maintenance.
2. Grant funding is being aggressively pursued. Consequently, nearly half of all instructional services expenditures are from grants. A digital distribution grant has already been awarded to UEN to support the digital conversion of KULC, and the full cost of KULC operations is paid with Community Service Grant funds.

Attachment A shows how the various revenue sources will be assigned to expenditures.

2. Major Expenditure Choices

A number of key decisions have been made to reduce expenditures during the coming year, while at the same time protecting the viability of the network and the effectiveness of instructional delivery systems and instructional services.

1. A total of 10 FTE staff positions have been lost compared to the beginning of FY2002. These reductions include a senior administrative position, 2 instructional delivery staff positions, 2 instructional services positions, and 5 technical service staff members.
2. No salary increases will be given to UEN staff members this year. The benefit package, including the cost of monthly premiums for health insurance, will remain the same as last year.
3. Significant reductions in operating budgets are being implemented throughout the organization. For example, salary and benefit costs of personnel are nearly $290,000 lower than a year ago, administrative expenditures have been reduced by nearly $100,000, and out of state travel and professional development support budgets have been reduced by more than $68,000.
4. Despite the budget cuts, savings have been pooled from throughout the budget to create a technical service project account totaling $1,018,288 and an instructional service project account containing $206,000. These funds will pay for high priority projects based on recommendations of UEN staff and stakeholders to the Steering Committee.
5. A commitment has been made to maintain financial support to UEN-supported activities managed by regional service centers and regional hubs. Budget support to these areas will remain the same as in FY 2002.

3. Budget Priorities

A helpful way to show funding priorities in the FY 2003 budget is to examine the extent to which programmatic areas have received increased funding or budget reductions, from FY 2002 to FY 2003.

Table 2 demonstrates that a sizeable increase in funding is recommended in the technical services area, and that a slight increase in funding is also proposed for the instructional services area. Support to regional hubs and regional service centers will remain the same, while all other programmatic areas are recommended to receive budget cuts.

Table 2
Changes in Funding from FY 2002 to FY 2003, by Programmatic Area

Programmatic Area	Increase or Decrease in Funding
Technical Services	-$310,35
Instructional Services	-$26,568
Pass through to Hubs & Regional Service Centers	-$0
UENSS	-$44,006
Public Information	-$50,564
Administration	-$99,920
Other Pass through (CEU, USOE	-$107,370
Instructional Delivery	-$131,939
KULC	-$277,529
O & M, Contingency	-$415,218
Total Funding Change, FY 2002 to FY 2003	-$789,621

A second way to demonstrate the priority of particular programs is by indicating the percentage of available state appropriations that each will receive.

Table 3 ranks program areas according to the percentage of total state appropriations they receive. There is limited discretion on usage of most other revenue sources, so grants, E-Rate reimbursements, and other revenue sources are not reflected in the table.

Table 3
Percentage of State Appropriations Received by Program Areas, FY 2003

Program Area	State Appropriation	Percent of Total
Technical Services	$8,895,971	59.7%
UENSS	$1,474,555	9.9%
Instructional Services	$1,256,907	8.4%
O & M, Contingency	$956,432	6.4%
Hubs & Regional Service Center	$781,867	5.2%
Instructional Delivery	$612,194	4.1%
Administration	$515,528	3.5%
Other Pass through (CEU, USOE)	$395,646	2.7%
KULC	$15,000	0.1%
Public Information	$0	0.0%
Total State Appropriations	$14,904,100	

Recommendation

It is recommended that the Steering Committee approve the FY 2003 UEN budget.

DATE: August 16, 2002

Summary: UEN Budget

I.	REVENUES	Budget FY 2002	Budget FY 2003	Change in Budgets
	State appropriations	18,269,444	14,904,100	(3,365,344)
	Interest Income	150,000	75,000	(75,000)
	Community Service Grant	1,654,126	1,695,000	40,874
	Grant / Foundation Support	108,000	798,220	690,220
	E-rate	2,000,444	2,500,000	499,556
	Inner fund transfers	162,115	186,855	24,740
	Other	170,371	163,756	(6,615)
	Carry Forward			
	KULC funds held for DTV	1,071,304	2,000,000	928,696
	Grants	170,979	101,531	(69,448)
	UEN operating cash	211,185	753,885	542,700
	TOTAL REVENUES	23,967,968	23,178,347	(789,621)

II.	SUMMARY OF EXPENDITURES	Budget FY 2002	Budget FY 2003	Change in Budgets
	Personnel	5,862,115	5,578,624	(283,491)
	Supplies	208,200	195,950	(12,250)
	IT Supplies	147,820	147,532	(288)
	Travel / Professional Development	257,736	189,290	(68,446)
	Instate travel	140,800	117,779	(23,021)
	Capital Equipment	57,800	85,300	27,500
	IT Capital Equipment	406,801	183,300	(223,501)
	Circuit charges / Internet access	5,582,636	6,104,000	521,364
	Software and maintenance	808,677	740,874	(67,803)
	Pass through money	1,294,883	1,177,513	(117,370)
	UENSS (Satellite System)	1,508,561	1,474,555	(34,006)
	Shared building maintenance, computer support, etc.	535,241	722,000	186,759
	Technical services project account	-	1,018,288	1,018,288
	Instructional services project account	-	206,000	206,000
	Building Expansion	840,000	-	(840,000)
	Replacement Routers	150,000	-	(150,000)
	DTV Conversion, Grant Projects & Pioneer Software	5,448,401	4,302,910	(1,145,491)
	Contingency	718,297	934,432	216,135
	TOTAL EXPENSES	23,967,968	23,178,347	(789,621)

III. Budget Summary by Departments

Source of Funding

A.	TECHNICAL SERVICES	Budget FY 2002	Budget FY 2003	Balance	State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
	Personnel	3,254,846	3,252,952	(1,894)	3,156,097				96,855	3,252,952
	Circuit charges / Internet access	5,548,636	6,077,000	528,364	3,478,500			2,500,000	98,500	6,077,000
	IT Supplies	147,820	147,532	(288)	147,532					147,532
	Travel / Professional Development	167,736	110,165	(57,571)	110,165					110,165
	Instate Travel	85,000	74,100	(10,900)	74,100					74,100
	Capital Equipment	145,510	46,000	(99,510)	45,000				1,000	46,000
	Software and maintenance	808,677	740,874	(67,803)	740,874					740,874
	IT Capital Equipment	261,291	183,300	(77,991)	183,300					183,300
	Equipment -- Hub and End Site Development	329,657	165,000	(164,657)	165,000					165,000
	Replacement Routers	150,000	0	(150,000)	0					0
	Network reliability and capacity project (one-time money)	605,681	0	(605,681)	0					0
	Technical Services Project Account	-	1,018,288	1,018,288	795,403				222,885	1,018,288
	TOTAL	11,504,854	11,815,211	310,357	8,895,971	0	0	2,500,000	419,240	11,815,211

B.	INSTRUCTIONAL SERVICES	Budget FY 2002	Budget FY 2003	Balance	State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
	Personnel	1,000,398	931,203	(69,195)	435,610	453,593			42,000	931,203
	Supplies	22,100	23,000	900	23,000					23,000
	Travel / Professional Development	37,000	26,700	(10,300)	26,700					26,700
	Instate Travel	34,800	23,179	(11,621)	23,179					23,179
	Capital Equipment	6,800	6,800	-	6,800					6,800
	Pioneer Library	486,267	465,209	(21,058)	465,209					465,209
	Regional Training and Teacher Training Institute	66,800	143,356	76,556	7,769		83,831		51,756	143,356
	Partnerships : MarcoPolo / Intel / Teacher line / Gates	262,919	265,920	3,001			265,920			265,920
	Web Design , lesson plans and work shops	152,580	109,640	(42,940)	109,640					109,640
	KULC Programming	263,775	159,000	(104,775)	159,000					159,000
	Instructional Services Project Account	0	206,000	206,000					206,000	206,000
	TOTAL	2,333,439	2,360,007	26,568	1,256,907	453,593	349,751	0	299,756	2,360,007

C.

INSTRUCTIONAL DELIVERY	Budget FY 2002	Budget FY 2003	BALANCE
Personnel	672,033	537,819	(134,214)
Circuit charges / dial in/ Internet access	34,000	27,000	(7,000)
Supplies	8,100	14,950	6,850
Travel / Professional development	19,500	18,925	(575)
Instate Travel	16,000	16,000	-
Capital Equipment	6,500	9,500	3,000
TOTAL	756,133	624,194	(131,939)

State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
537,819					537,819
15,000				12,000	27,000
14,950					14,950
18,925					18,925
16,000					16,000
9,500					9,500
612,194	0	0	0	12,000	624,194

D.

UENSS (Satellite System)	Budget FY 2002	Budget FY 2003	Balance
Personnel	471,488	471,488	-
Supplies	111,793	66,098	(45,695)
Instate Travel	4,200	4,200	-
Space Segment	746,169	746,169	-
1-800 phone line / backhaul	98,000	98,000	-
IT Equipment	86,911	88,600	1,689
TOTAL	1,518,561	1,474,555	(44,006)

State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
471,488					471,488
66,098					66,098
4,200					4,200
746,169					746,169
98,000					98,000
88,600					88,600
1,474,555	0	0	0	0	1,474,555

E.

KULC	Budget FY 2002	Budget FY 2003	Balance	State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
Personnel	253,508	242,041	(11,467)		242,041				242,041
Travel / Professional development	6,500	6,500	-		6,500				6,500
Instate Travel	2,000	2,000	-		2,000				2,000
Capital Equipment	15,000	15,000	-	15,000					15,000
Broadcast Engineering									
Transmission and operation of KULC signal	246,974	253,660	6,686		253,660				253,660
DTV conversion	2,822,748	2,550,000	(272,748)			550,000		2,000,000	2,550,000
									0
TOTAL	3,346,730	3,069,201	(277,529)	15,000	504,201	550,000	0	2,000,000	3,069,201

F.

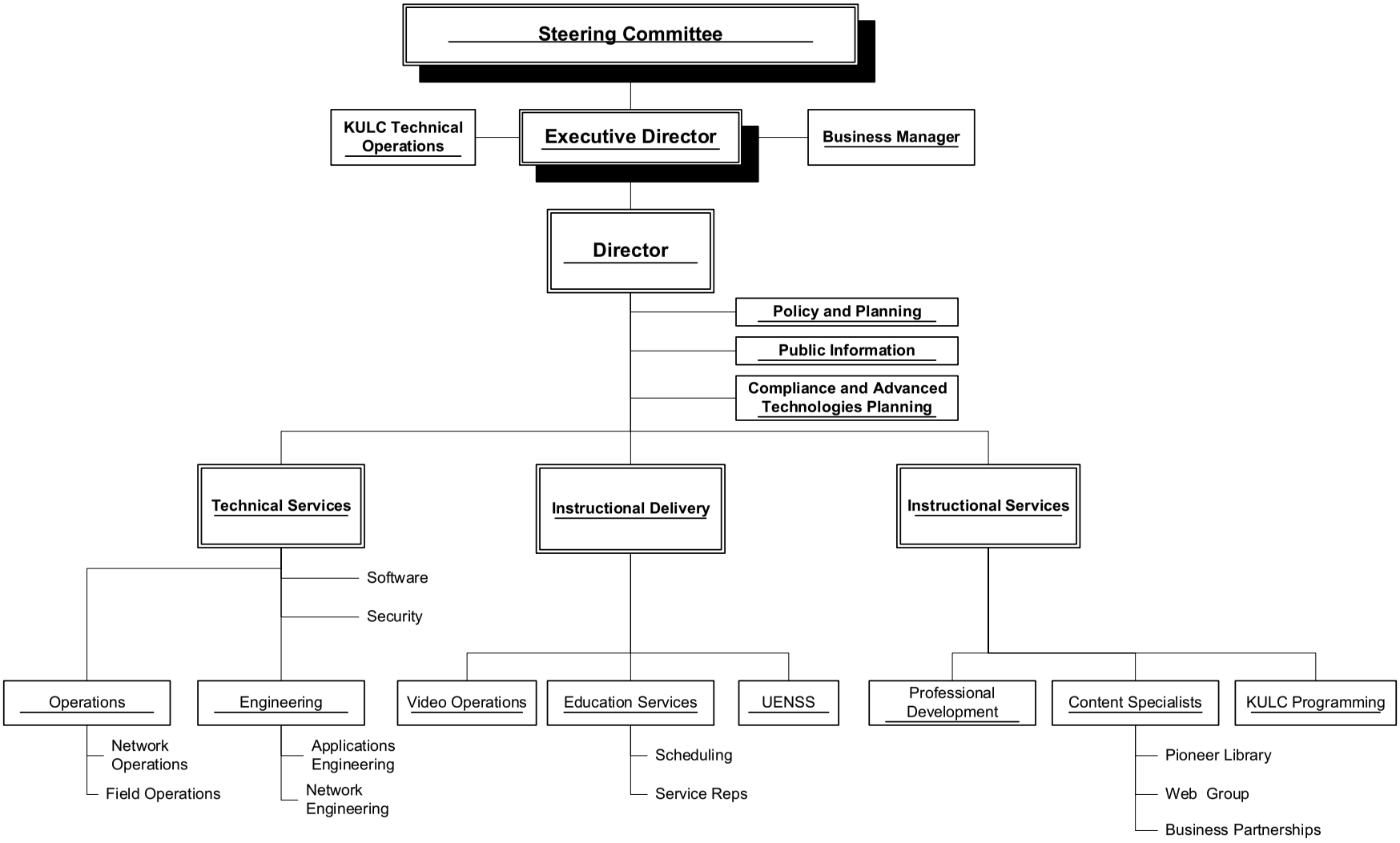
ADMINISTRATION	Budget FY 2002	Budget FY 2003	BALANCE	State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
									0
Personnel	507,769	467,237	(40,532)	122,028	345,209				467,237
Supplies	147,000	132,000	(15,000)	81,500	50,000			500	132,000
Travel / Professional development	17,500	14,500	(3,000)	4,500	10,000				14,500
Instate Travel	500	2,500	2,000	2,500					2,500
Capital Equipment	26,500	5,000	(21,500)	5,000					5,000
Office of Information Technology	321,888	300,000	(21,888)	300,000					0
									0
TOTAL	1,021,157	921,237	(99,920)	515,528	405,209	0	0	500	621,237

G. PUBLIC INFORMATION	Budget FY 2002	Budget FY 2003	BALANCE	State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
Personnel	173,561	147,372	(26,189)		147,372				147,372
Supplies	31,000	26,000	(5,000)		26,000				26,000
Travel / Professional development	9,500	12,500	3,000		12,500				12,500
Instate Travel	2,500		(2,500)						
Capital Equipment	3,000	3,000	-		3,000				3,000
Projects									
ITV Guide	69,000	48,000	(21,000)		24,000			24,000	48,000
Public relations	142,000	143,125	1,125		119,125			24,000	143,125
TOTAL	430,561	379,997	(50,564)	0	331,997	0	0	48,000	379,997

H. PASS THROUGH	Budget FY 2002	Budget FY 2003	BALANCE	State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
CEU System Support	280,300	267,260	(13,040)	267,260					267,260
EDNET Site Support									
SUU, DATC, USU, CEU, UVSC, SLCC, UBATC	305,000	305,000	-	305,000					305,000
Regional Help Desk Support									
NUES, CUES, SESC, SEDC	219,779	219,779	-	219,779					219,779
Regional Training Specialist									
NUES, CUES, SESC, SEDC	257,088	257,088	-	257,088					257,088
State Office of Education	222,716	128,386	(94,330)	128,386					128,386
TOTAL	1,284,883	1,177,513	(107,370)	1,177,513	0	0	0	0	1,177,513

I. Operations , Maintenance and Contingency	Budget FY 2002	Budget FY 2003	BALANCE	State Approp.	Community Serv. Grant	Grants / Foundations	E-rate	Other	Total
Building Expansion	840,000	-	(840,000)						
Contingency	718,297	934,432	216,135	609,432				325,000	934,432
Univ. of Utah Building Maintenance	-	250,000	250,000	175,000				75,000	250,000
Building Maintenance	101,723	86,000	(15,723)	86,000					86,000
EBC Computer Support	111,630	86,000	(25,630)	86,000					86,000
TOTAL	1,771,650	1,356,432	(415,218)	956,432	0	0	0	400,000	1,356,432

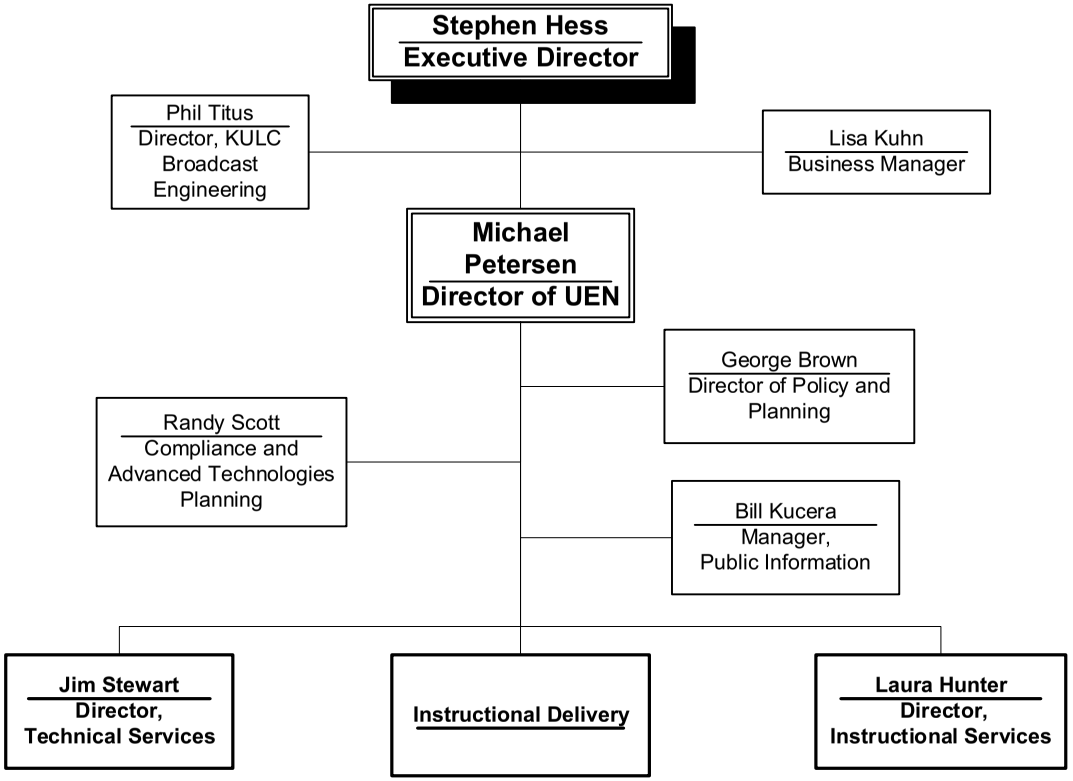
Utah Education Network



TAB 5 ATTACHEMENT B

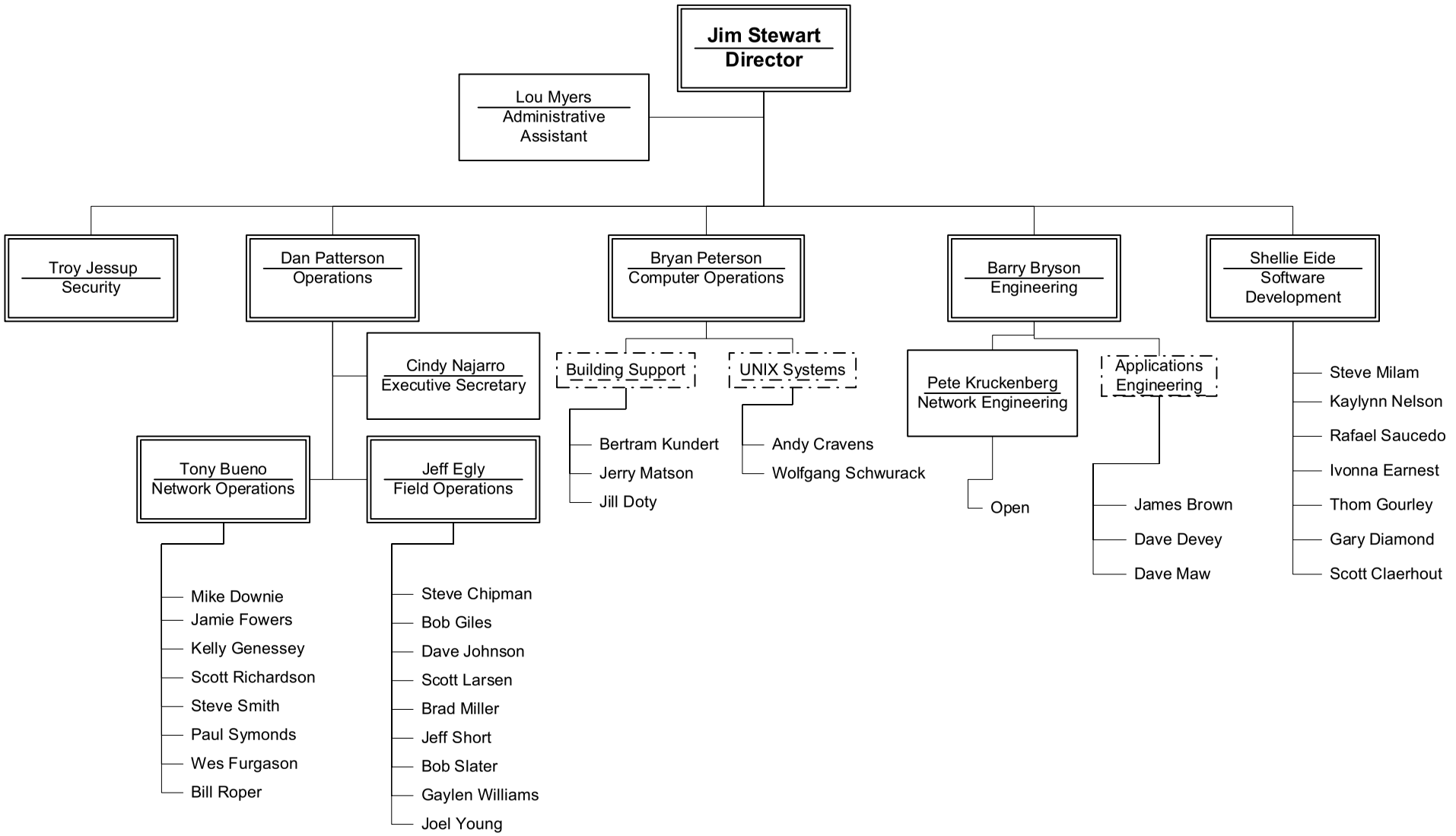
Utah Education Network

Administration



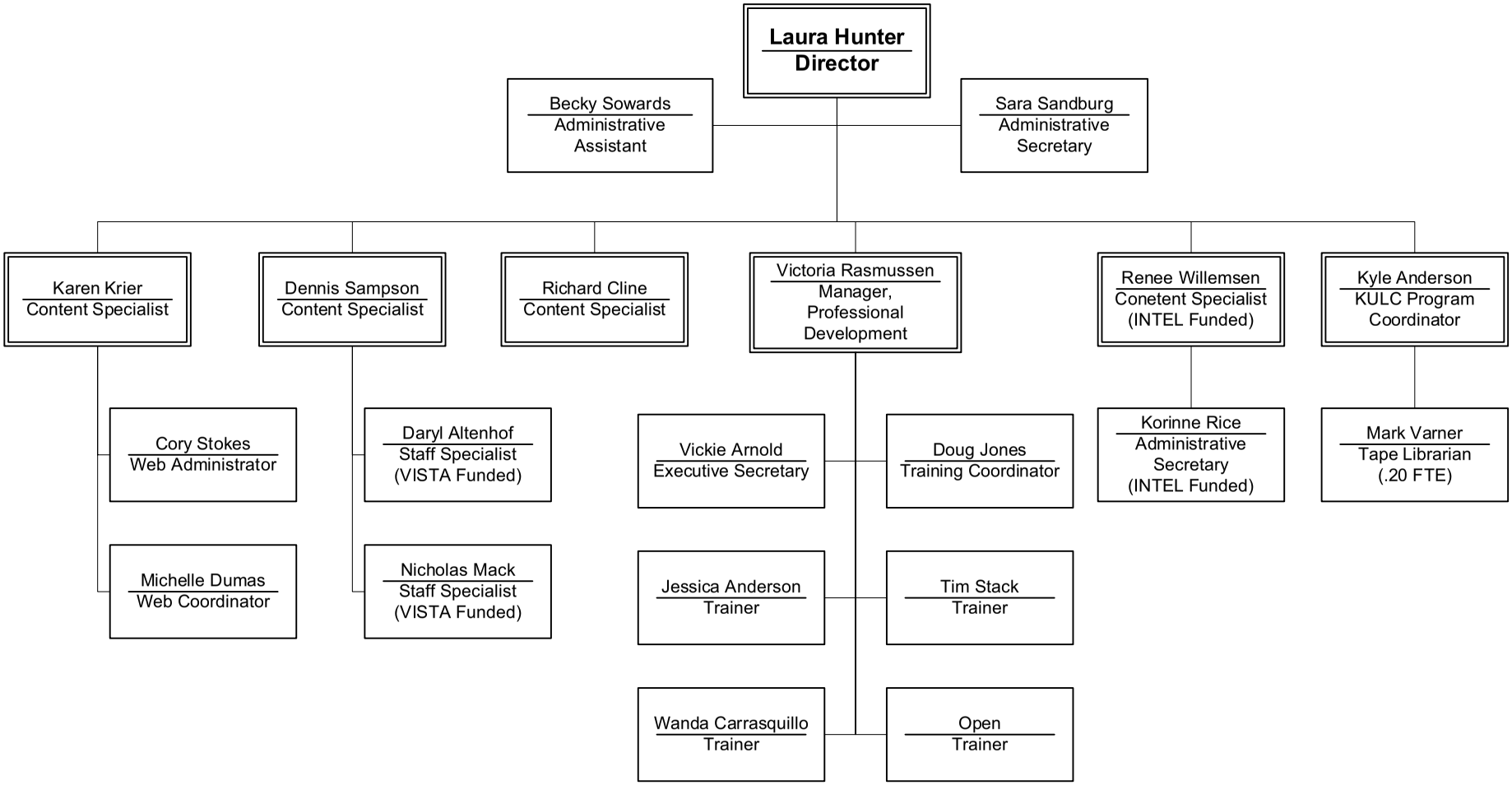
Utah Education Network

Technical Services



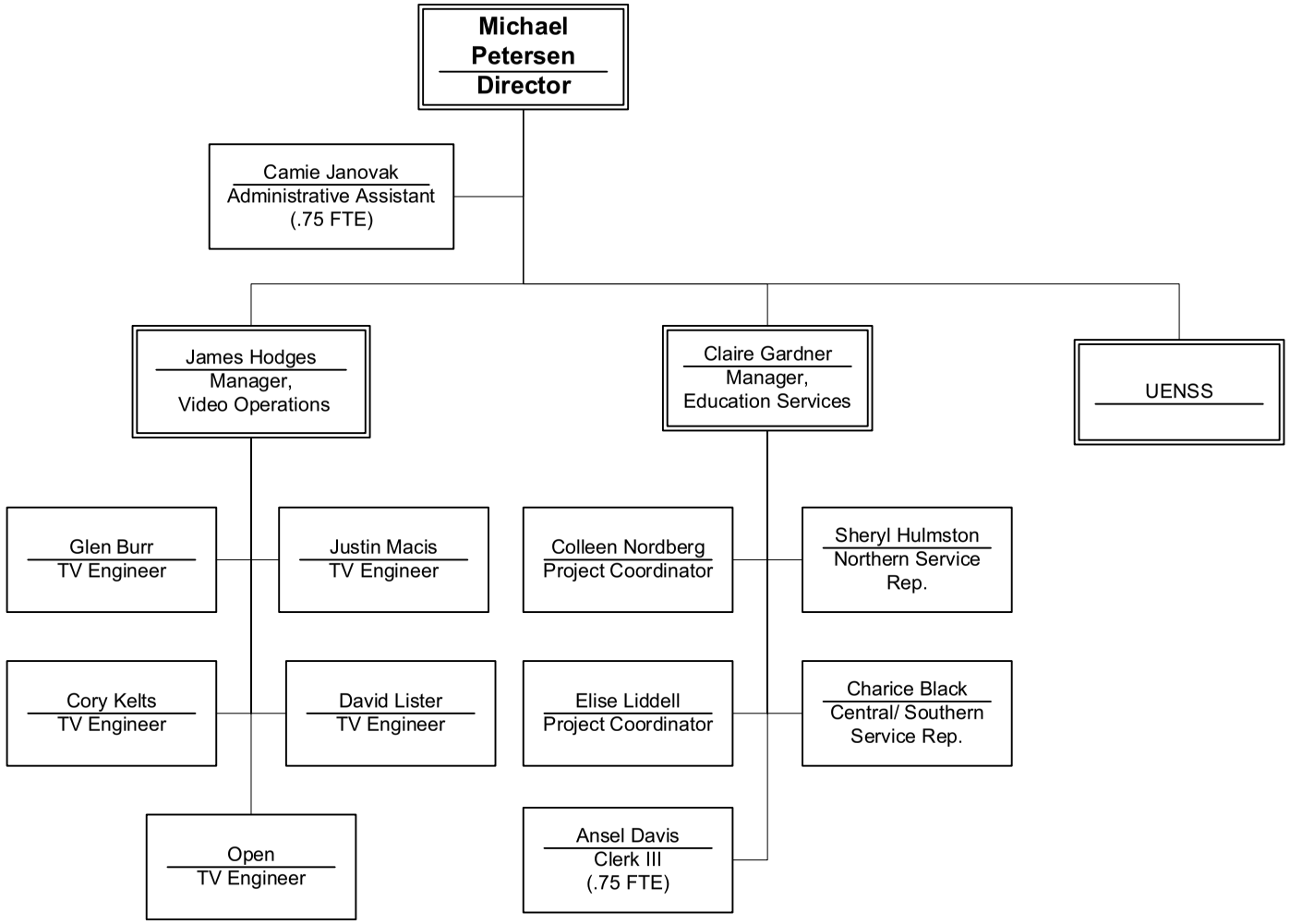
Utah Education Network

Instructional Services



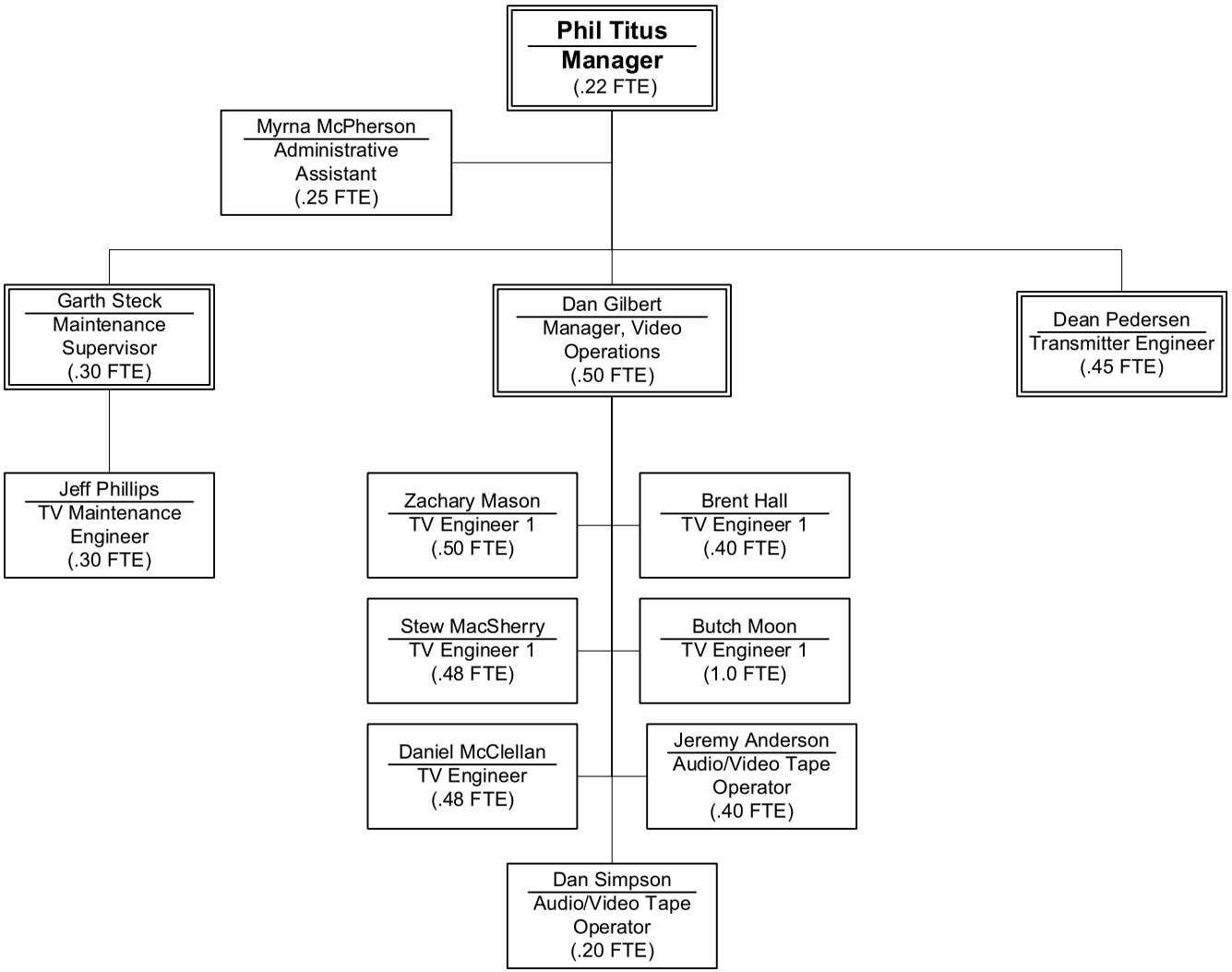
Utah Education Network

Instructional Delivery



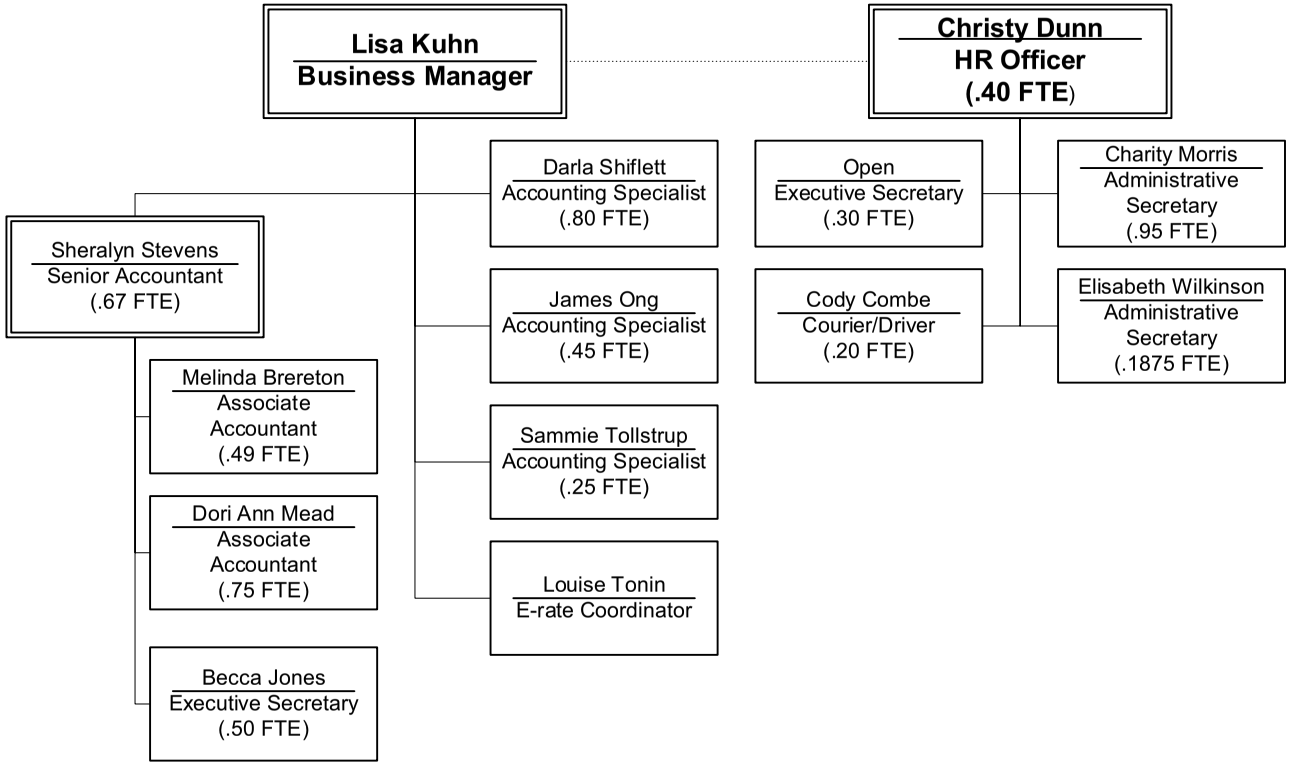
Utah Education Network

Broadcast Engineering
KULC Technical Services



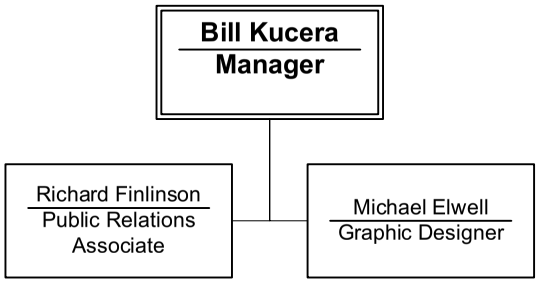
Utah Education Network

Finance and Personnel



Utah Education Network

Public Information



TAB 6

TECHNICAL SERVICES FY 2003 STRATEGIC PLAN - ACTION

August 8, 2002

TO: UEN Steering Committee

FROM: Stephen Hess, Executive Director

Issue

The Technical Services FY 2003 Strategic Plan has been updated to reflect revised goals and FY 2003 budget information that was not available in May. It is requested that the Plan and associated budget priorities be reviewed, discussed and approved.

Background

Three attachments are provided for your consideration. These are as follows:

1. Attachment A: Regional Priorities Spreadsheet

This spreadsheet was developed from the March Technical Services Retreat and was originally submitted to the Steering Committee at the March Meeting. This version of the spreadsheet has been updated to reflect the progress that has been made since that time.

Three columns have been added and one has been deleted. The first new column is a status line to reflect the current status of each project. The second new column is a yes/no comparison of the project and the Technical Services FY 2003 Goals and Objectives. This comparison has allowed us to refine our goals and help ensure that the regional priorities and UEN goals are coordinated together.

The third new column identifies the specific FY 2003 goal that is associated with the regional priority. This column is filled with one of three types of entry. If a goal exists for FY 2003 then that goal is designated. If the goal was accomplished in FY 2002 that project is designated “DONE”, and if further clarification is required prior to setting a goal that project is designated “CLAR”.

The “Total” column, a budgetary guess made in March, has been eliminated.

2. Attachment B: Items for Further Clarification

This document is developed from the third new column of the Regional Priorities document. Each project needing further discussion has been addressed. Only items that did not have a FY 2003 goal or objective are mentioned here.

3. Attachment C: Goals and Objectives Document

This document was originally developed to support the Color Stack in the UEN FY 2003 Strategic Plan. New goals have been added for consideration as a result of work done on the second new column of the Regional Priorities Document. Additionally, budget numbers have been assigned to the items in this document. No attempt has been made to assign priorities to these goals and objective.

Policy Considerations

For the Technical Services Subcommittee to determine whether the plans, goals, and budget priorities outlined in the attachments are appropriate, the following steps are suggested.

1. Review and discuss the Regional Priorities document in its updated form.
2. Provide time for the Subcommittee members to review and discuss the items presented for clarification.
3. 3Review the FY 2003 Goals and Objectives Document.
4. Discuss prioritization of the Technical Services Goals and outline the budget priorities for FY 2003.

Recommendation

It is recommended that the Technical Services Subcommittee carefully review the attached materials which update the Technical Services portion of the FY 2003 Strategic Plan, and provide additional materials elaborating goals, objectives, and budget priorities. If satisfied, it is requested that approval be granted to proceed to implement the recommended plans and priorities as outlined in the FY 2003 Technical Services Strategic Plan.

TAB 6 ATTACHMENT A

Project	Region	Status	Goals (Y or N)	Goal Identity	Initial Connectivity	Reliability Equipment	Reliability Alternate Path	Increased Capacity	Planned Equipment Replacement	Security	Training	Optimize Network Resources
Involvement in online testing plans	Statewide	Ops Review	Y	III.3								
Security Resources	Statewide	IDS installation	Y	XIII.1						X		
QoS Pilot and implementation	Statewide	Eng Planning	Y	I.8								X
Mutlicast enable the UEN network	Statewide	Eng Planning	Y	VII.5								X
VoIP Plan	Statewide	Director	Y	VII.1								X
Video Master Plan	Statewide	Director	Y	IV								X
CVDS replacement	Statewide	Eng/Ops Planning	Y	I.5		X						
H.323 Video	Statewide	Installed	Y	VII.2								X
Audio bridge upgrade	Statewide	Installed	Y	VII.3		X						
Spares, (Routers, Switches, Microwave radios)	Statewide	HOLD	Y	I.6		X						
Completion of Core ring	UVSC	Director	Y	I.1		X						
Move Internet OC-3 Connection to UVSC	UVSC	On Hold	Y	I.1			X					
Redundant equipment and location at UVSC	UVSC	Pending Core Ring	Y	I.1		X						
CommIX point of presence at UVSC	UVSC	Eng. Planning	Y	XII.3				X				
Community Network links at Provo, Alpine and Nebo districts.	UVSC	In Process	Y	XII.4				X				
Routers for firewall implementation	UVSC	HOLD	Y	IV.1		X						
LAN/WAN performance diagnostic tools	UVSC	HOLD	Y	III.5		X						
Technical Training and cross training for hub support	UVSC	Ongoing	Y	XV.1		X						
Alternate Routes into the region	CUES	Eng Planning	Y	I.2			X					
Spares	CUES	HOLD	Y	I.6		X						
Router replacement	CUES	HOLD	Y	IV.1					X			
The List	CUES	Completed	N	DONE		X						
Security, Firewall implementation	CUES	HOLD	N	CLAR						X		
Technical Training	CUES	Ongoing	Y	XV.1		X					X	
CUES connectivity to Snow South	CUES	Completed	Y	DONE								X
Diagnostic access to the routers (view Access Lists)	CUES	Completed	Y	CLAR								X
Hub equipment redundancy at Snow South (SPARES)	CUES	HOLD	N	I.6		X						
Dutch John Elementary connectivity	NUES	HOLD	N	CLAR	X							
NUES DS-3	NUES	In Process	Y	II.13				X				
NUES router upgrade	NUES	Completed	Y	DONE		X						
Tri-School Fiber Project	NUES	In Process	Y	II.2				X				
GigE circuits for Vernal and Roosevelt	NUES	In Process	Y	II.2				X				
Redundant Connectivity	NUES	HOLD	Y	I.2			X					
Upgrade Ethernet card at NUES Office from 10 to 100 Meg.	NUES	Completed	Y	DONE				X				
Repoint Morgan to NUES	NUES	Ordered Pending Qwest	Y	XI.1								X
Reengineer CEU Hub	SESC	Completed	Y	DONE		X						
Router Upgrades throughout the region	SESC	In Process	Y	IV.1					X			
DS-3 Upgrade and bandwidth management	SESC	Completed	Y	II.4				X				
IP Telephony Project	SESC	HOLD	N	II.9								X
Clay Hills Microwave Site	SESC	HOLD	Y	V.1; II.3								X
CEU New Building and Hub Move	SESC	HOLD	N	II.10	X							
Data T-1 relocation at Granite, Salt Lake City and Jordan Districts	SLCC	In Process	Y	XI.1		X						
Alternate paths from Granite, Murray, Salt Lake City and Jordan Districts	SLCC	Eng. Planning	Y	I.7			X					
Router Replacement	SLCC	HOLD	Y	IV.1					X			
Moving frontline router responsibility to districts	SLCC	In Process	Y	III.1								X
Fiber/high speed links to SLCC satellite sites.	SLCC	HOLD	N	CLAR								X
VoIP gateway	SLCC	In Process	Y	VII.1								X
I2 Participation	SLCC	In Process	N	VIII.2								
MGX equipment replacement	SLCC	In Process	Y	X.1		X						
Harden power at SLCC (Dave Devey).	SLCC	Completed	N	DONE		X						
Eskdale Connection	SEDC	In Process	Y	II.1	X							
Millard DO Capacity Expansion	SEDC	Ops Planning	Y	II.6				X				
Spares	SEDC	HOLD	Y	I.6		X						
Training	SEDC	Ongoing	Y	XV.1							X	
Additional Personnel	SEDC	HOLD	N	CLAR								X
Ethernet WAN	SEDC	In Process	Y	II.11								X
Data Warehousing	SEDC	HOLD	N	CLAR								X
Backbone Redundancy	SEDC	HOLD	Y	I.2			X					
Elementary Schools	SEDC	HOLD	N	CLAR								X
Tools	SEDC	HOLD	Y	III.5								X
Layer Three Switches	SEDC	HOLD	N	CLAR				X				
LSR	SEDC	HOLD	N	CLAR								X
Migration to GigE connection with UEN	U of U	Completed	Y	DONE				X				
Implement a split node with diverse termination on the lower campus	U of U	HOLD	Y	I.7			X					
Fix redundancy into WSU	DATC	Eng Planning	Y	I.3			X					
Internet Capacity	DATC	HOLD	N	I.2; I.3				X				
Router replacements	DATC	Completed DSD	Y	IV.1					X			
Davis Ethernet Connections and Video Redesign	DATC	Completed	Y	DONE				X				
Re-engineer Weber District traffic.	DATC	Completed	N	DONE								X
Davis Elementary router migration	DATC	In Process	N	DONE					X			
Redundant link (Alternate path)	USU	Director	Y	I.2			X					
Router replacements	USU	Director	Y	IV.1					X			
Capacity in the future (what should we do beyond 2 DS-3 links).	USU	Director	N	I.2					X			
More training needed from UEN.	USU	In Process	Y	XV.1							X	
Box Elder Mini-hub	USU	In Process	Y	II.12		X						

Items Submitted for Steering Committee Discussion and Clarification

August 6, 2002

Move Internet OC-3 Connection to UVSC

- This move has been postponed to Summer 2003 due to budgetary constraints.
- Diversifying Internet Access points is a major goal for UEN. The cost of moving one OC-3 to UVSC would be between $50,000 and $60,000 annually. That is the additional mileage cost associated with hauling a circuit from Orem to the Salt Lake Point of Presence of the Internet provider.
- Clarification of the priority of this project is needed before proceeding.

Routers for Firewall Implementation (UVSC)

Layer 3 Switches (SEDC)

- While this is addressed by the Districts in the UVSC region, this request applies to all districts. UEN Technical Services needs clarification on the role of UEN in supporting firewall implementations. What is the UEN responsibility to provide the second router for establishing a firewall?

Dutch John Elementary Connectivity

- This is an Elementary school, not in UEN stewardship

Fiber/high speed links to SLCC satellite sites

- There must be further discussion and clarification of this point. The SLCC goals and the specific requirements are unclear.

Additional Personnel (SEDC)

LSR (SEDC)

- UEN Technical Services will refer these items to UEN Leadership.

Data Warehousing (SEDC)

Elementary Schools (SEDC)

- UEN Technical Services considers these areas to be outside our roles and responsibilities.

TAB 6 ATTACHMENT C

Goal I. Network Speed, Reliability, and Capacity

Objectives Funding, Lead Responsibility	Tasks	Status	Completion Date
1. Finish Core Ring (Phase One) UVSC, SLCC, EBC Funded: yes Budget: $210,000 Project Leader: Pete Kruckenberg, Dan Patterson	1. Determine hardware vendor 2. Install Circuits 3. Install Hardware 4. Test Traffic 5. Go Live 6. Diverse Locations at UVSC	Circuits have been ordered and installed. Hardware analysis and award is pending MirCom report. This project is funded and on schedule.	1. Summer, 2002 2. Summer, 2002 3. Summer, 2002 4. Summer, 2002 5. Summer, 2002
2. Plan and communicate Phase 2 of Core Ring Project. USU, DATC, SUU, Snow, Snow South, CEU, Dixie, UBATC Funded: no Budget: N/A Project Leader: Barry Bryson	1. Barry to lead 2. Develop draft plan		1. Spring, 2002
3. Assist Weber State University in planning and implementation of a campus alternate path and Davis Campus connectivity. Funded: no Budget: Project Leader: Pete Kruckenberg	1. Vendor walkthrough and bidding process 2. SHARPS implementation 3. Installation of alternate path		1. Summer, 2002 2. Summer, 2002 3. Fall, 2002
4. Assist Utah State University in pursuing alternate path options to Cache Valley. Funded: no Budget: Project Leader: Barry Bryson	1. Conduct talks with ATT BNS 2. Participate in Cache Valley initiative; Barry 3. Pursue opportunities with ITS		1. Summer, 2002 2. Ongoing 3. Summer, 2002
5. Identify all elements of CVDS replacement. Funded: no Budget Project Leader: Pete Kruckenberg	1. Cost Analysis 2. Applications 3. Components 4. Scheduling 5. Time Lines		1. Analysis Complete by Fall 2002. 2. Project complete by Summer 2005.

Goal I. Network Speed, Reliability, and Capacity Continued

6. Provide regionalized spares for critical network hardware. Funded: No Budget: 150,000 Project Leader: Dan Patterson	1. Create list 2. Seek Funding	List of spares requirements has been submitted and is currently awaiting approval.	
7. Add diverse paths to Granite, Murray, Jordan and Salt Lake City Districts. Funded: No Budget: Project Lead: Barry Bryson			
7.Assist UofU in establishing a "split node" architecture Funded: No Budget: $80,000 (post E-Rate) Project Lead: Pete Kruckenberg			
7.Design, Test and Implement QOS into backbone . Funded: No Budget: Project Lead: Pete Kruckenberg			

Goal II. Increased Rural Capacity

Objectives **Funding, Lead Responsibility**	**Tasks**	**Status**	**Completion Date**
1. Complete Eskdale Connectivity Funded: Yes Budget: $150,000 Actual Cost: $80,000	1. Establish microwave path 2. Use microwave radios decommissioned from SE 3. Install and test equipment for use by Fall Term 2002	Radios for T1 connectivity have been removed from Southeast Path and are being re-tuned for installation on Frisco Peak. Monopole installation is	1. Summer, 2002 2. Summer, 2002 3. Summer, 2002

Project Leader: Jeff Egly	Term 2002	underway in Eskdale. Project is funded and currently running 15 days behind schedule. Expect completion 8/30/02.	
2. Implement GigE Circuits in Uintah Basin Funded: Yes Budget: $70,000 Project Leader: Jeff Egly	1. Sign Contract 2. Upgrade Routers 3. Install Circuits 4. Connectivity Testing 5. Go Live	Contracts have been signed with UBTA . Routers have been ordered. Conduit projects to install fiber are underway. This project is funded and on schedule.	1. May, 2002 2. Summer, 2002 3. Summer & Fall, 2002 4. Fall, 2002 5. Fall, 2002
3. Make decisions about move from Mossback to Clay Hills site Funded: No Budget: $75,000 Project Leader: Jeff Egly	1. Determine costs 2. Make recommendations to Steering Committee	This decision is dependent on replacing analog radios with digital. Funding does not currently exist. This project is not funded and will not be completed on schedule.	1. Summer, 2002 2. Summer, 2002
4. SE Bandwidth and video project Funded: Yes Budget: $20,000 Project Leader: Jeff Egly	1. Increase bandwidth from Moab to Blanding 2. Increase bandwidth from Price to Moab 3. Replace Nortel Equipment and upgrade routers in the southeast	Nortel equipment has been replaced with Miranda MGEG2 hardware, providing two additional video paths and approximately 15Mb/s additional bandwidth for V-bricks and data. Project is complete and considered a huge success.	1. Summer, 2002 2. Summer, 2002 3. Summer, 2002
5. Find a home for the OC-3 microwave radios Funded: Yes Budget: $42,000	1. List options 2. Make recommendations to Steering Committee 3. Install	This project has been approved and is currently being engineered. Anticipated completion date is Fall 2002.	1. Summer, 2002 2. Summer, 2002 3. Fall, 2002

Project Leader: Jim Stewart			
6. Increase capacity in Millard County Funded: Yes Budget: $12,000 Project Leader: Jeff Egly	1. Add T-1 circuits to the DO in Delta	Order has been place and is waiting for Frontier Communications to complete OC-12 to Fillmore. Project not likely to be completed prior to Winter of 2002.	1. Summer, 2002
7. Increase capacity in Emery County Funded: No Budget: Project Leader: Jeff Egly	1. Add T-1 circuits at Green River HS and Castledale		1. Dependent on E-rate funding
8. Assist Grand county in reorganizing and improving access Funded: Yes Budget: $6,000 Project Leader: Tony Bueno	1. Tony working with Jeremy Winder to determine timeframe and steps	Complete.	1. Summer, 2002
9. Assist Carbon County with VOIP development and implementation Funded: No Budget: $32,000 Project Lead: Tony Bueno	1. Secure funding for layer 2 and 3 switches ($32,000)	Request has been submitted to UEN Admin and Committee for review and approval.	
10. Work with CEU in designing and implementing plans for new building Funded: N/A Project Lead: Jeff Egly	1.Provide CEU with UEN requirements. 2. Assist CEU in review of Construction plans.		Summer, 2004
11. Assist SEDC Region in developing Ethernet WAN Funded: No Budget: Unknown Project Lead: Dan Patterson	1.Meet with Service Providers to determine feasibility 2. Investigate E-Rate strategies. 3. Identify Funding potential		
12. Assist Box Elder in the design			

and development of a “mini hub” Funded: Yes Budget: Project Lead: Barry Bryson			
13. Design and implement increased capacity to NUES (DS3) Funded: Yes Budget: $18,500 Project Lead: Tony Bueno	1. LSS circuit has been ordered.	Pending conduit at NUES.	

Goal III. Formalize Stakeholder Relationships

Objectives Funding, Lead Responsibility	Tasks	Status	Completion Date
1. Fully implement NOA, SLA and Network Connection agreements Funding: N/A Project Leader: Jim Stewart	1. UBATC, NUES and nine districts; Tony 2. SLCC, Granite, Jordan, Murray and SLC; Jim 3. UVSC, Nebo, Alpine and Provo; Mike/Pete 4. SEDC and 6 Districts; Dan 5. SESC, Grand, Carbon, Emery, San Juan and CEU; Jim 6. USU, Box Elder, Cache and Logan; Barry 7. WSU, DATC, Davis, Weber and Ogden; Barry 8. CUES, Snow, Snow South and Districts; Dan	NOA’s have been signed in CUES and SEDC.	1. August, 2002 2. August, 2002 3. August, 2002 4. August, 2002 5. August, 2002 6. July, 2002 7. August, 2002 8. August, 2002
2. Provide the NOA/SLA/Connection agreements online	1. Shellie, Dan and Jim to coordinate		1. TBD

Funded: N/A Budget: Project Leader: Jim Stewart			
3. Provide an effective Scorecard and publish this regularly Funded: No Budget: $20,000 Project Leader: Dan Patterson	1. Dan establishing prototype 2. Develop subset of districts to beta 3. Full implementation to all districts	Initial prototype and Web presence has been created. Currently working with in-house reporting tools to export data (graphs, etc). This project is funded and on schedule.	1. Summer, 2002 2. Fall, 2002 3. Spring, 2003
4. Develop methods to track UEN performance on the NOA/SLA Funded: Yes Budget: $0.00 Project Leader: Dan Patterson	1. Dan and Tony to determine steps	I-View Network Reporting tool has been selected as the tool to track SLA's on NOC services. Presently working on means to populate I-View with data received from NOA's.	1. Summer, 2002; ongoing
5. Provide training for the use of Network Management Tools Funded: Yes Budget: $5,000 Project Leader: Dan Patterson	1. Regional T-Forum meetings 2. Individual and districts	Training as been provided at T-Forums and in special one-on-one sessions as requested. This project is on track.	1. As requested 2. As requested
6. Regular T-Forum Meetings Funded: N/A Project Leader: Jim Stewart	1. Determined by regional co-chairs, supported by the advocates		1. Ongoing
7. Develop process to effectively use the Remedy Help Desk software Funded: N/A Project Leader: Dan Patterson	1. Dan and Tony to determine steps 2. Coordinate with TS Management 3. Communicate to Stakeholders	Remedy Help Desk has been installed and is functional. Remedy is currently being used to track Point of Contact database, intra-departmental service requests and will soon assist in	1. Ongoing 2. Ongoing 3. Ongoing

		inventory management.	
8. Determine UEN's role in assisting USOE in On-line Testing. Funded: No Budget: Unknown Project Lead: Dan Patterson	1. Work with Barbara Lawrence and staff to identify space in UEN's machine room to house testing servers.		Fall 2002

Goal IV. Update Routers and Switches

Objectives Funding, Lead Responsibility	Tasks	Tasks	Completion Date
1. Develop Replacement Priorities list. Funded: No Budget: $150,000 - $200,000 Project Leader: Jim Stewart	1. Work with Regional Leaders 2. Publish list on Web site 3. Determine cost and develop plan		1. Ongoing 2. Ongoing 3. Ongoing
2. Support increased E-rate reimbursement Funded: N/A Project Leader: Jim Stewart	1. Louise Tonin to regularly attend Tech Services Management Meeting 2. Advocates to discuss support with region contacts		1. Every 2 weeks 2. Summer 2002; Ongoing

Goal V. Maintain Microwave Assets

Objectives Funding, Lead Responsibility	Tasks	Status	Completion Date
1. Make decisions about move from Mossback to Clay Hills site Funding: No Budget: $75,000 Project Leader: Jeff Egly	1. Determine costs 2. Make recommendations to Steering Committee	This project is awaiting decision to migrate to digital radios. Additional information will need to collected and analyzed.	1. Summer, 2002 2. Summer, 2002
2. Find a home for the OC-3 microwave radios	1. List options 2. Make recommendations to Steering		1. Summer, 2002 2. Summer, 2002

Funded: Yes Budget: $42,000 Project Leader: Jim Stewart	Committee		2002
3. Develop a replacement plan Funded: No Budget: Unknown Project Leader: Jim Stewart	1. Inventory all assets 2. Determine spare equipment needs/costs 3. Write and distribute replacement plan		1. Summer, 2002 2. Summer, 2002 3. Fall, 2002

Goal VI. Develop Relay Site Agreements

Objectives **Funding, Lead Responsibility**	**Tasks**	**Status**	**Completion Date**
1. Establish Written Agreements Funded: N/A Project Leader: Ed Ridges, Jeff Egly	1. Ed Ridges to define scope and tasks 2. Identifiy all site components. 3. Determine site ownership 4. Develop access policy 5. Complete written agreement for each site 6. Begin with sites co-located with ITS 7. Complete balance of microwave sites. 8. Complete translator sites. 9. Identify sites for which formal agreements will not be adequate		1. June 2002 2. Ongoing 3. 4. 5. 6. June - July, 2002 7. Fall 2002 8. July 2002 - June 2003 9.

Goal VII. Develop Video Streaming Infrastructure

Objectives **Funding, Lead Responsibility**	**Tasks**		**Completion Date**
1. Develop VoIP plan Funded: No Budget: $10,000 Project Leader: Jim Stewart	1. QoS model and implementation 2. Cooperative Trunking 3. Call Management development		1. Summer 2002 2. Summer 2002 3. January 2003
2. Complete the H.323 pilot project Funded: Yes Budget: Unknown Project Leader: Dave Maw/ Jeff Egly	1. Evaluate the training project in the SESC region and develop a written report 2. Install, test and use the MCU 3. Install a new Audio conference bridge 4. Install, test and demonstrate an analog gateway to H.323 EDNET capability 5. Assist Rural Regions in adding matching funds to successful grant applications	Polycom H.3232 hardware has been distributed and in use in the Southeast region.	1. Winter 2003 2. Summer 2002 3. Summer/Fall 2002 4. Fall 2002 5. Fall 2002
3. Implement and Test Video Bridge Funded: Budget: Project Leader: Dave Devey			1. Summer 2002
4. Implement Audio Bridge Funded: Budget: Project Leader: Dave Devey			1. Fall 2002
5. Configure Router for Multicast Funded: N/A			1. Fall 2002

Project Leader: Mike Downie			
6. Develop Analog to H.323 Gateway Funded: Budget: Project Leader:			1. Fall 2002

Goal VIII. Diversity Internet Access Points

Objectives Funding, Lead Responsibility	Tasks	Status	Completion Date
1. Complete the Internet Peering and Bandwidth expansion Project Funded: Budget: Project Leader: Pete Kruckenberg	1. Core Ring dependent 2. Establish GigE connection from UVSC to EBC 3. Install Touch America transit OC-3 at UVSC 4. Install Touch America peering circuit PAIX to EBC 5. Disconnect Qwest Internet OC-3 6. Work with Davis District for minimal impact of Qwest circuit deletion		1. 2. Summer 2002 3. Summer 2002 4. Summer 2002 5. July 1, 2002 6. Summer 2002
2.Provide Internet 2 connectivity to K-12. Funded: N/A Project Lead: Barry Bryson			

Goal IX. Develop/Implement Video Master Plan

Objectives Funding, Lead Responsibility	Tasks	Tasks	Completion Date
1. Develop the elements of the Technical Services Tactical and video master plans Funded:	1. IMA Removal 2. Microwave upgrade and maintenance 3. Resources 4. Digital Video 5. New Endsite		1. Summer 2002 2. Ongoing 3. Ongoing 4. Ongoing 5. Ongoing 6. Ongoing

Budget: Project Leader: Jim Stewart	upgrade and maintenance 6. Public Communication and continuation 7. QoS pilot and implementation		7. Ongoing

Goal X. Increase Digital Video Stability

Objectives Funding, Lead Responsibility	Tasks	Status	Completion Date
1. Finish MGX out project Funded: Yes Budget: $80,000 Actual Cost: $80,000 Project Leader: Mike Downie	1. USU 2. DATC 3. SLCC	This project has been extremely successful. All MGX's except SLCC (8/13/02) have been removed. As a result, bandwidth and reliability have increased exponentially. This project was completed on time and on budget.	1. Summer 2002 2. Summer 2002 3. Summer 2002
2. Plan and Communicate the ATM out project Funded: Budget: $80,000 Project Leader: Jim Stewart	1. Jim to lead 2. Develop draft plan		1. January 2002 2.

Goal XI. Complete District T-1 Re-points

Objectives Funding, Lead Responsibility	Tasks	Tasks	Completion Date
1. Complete District T-1 Re-points Funded: N/A Project Leader: Jim Stewart	1. Davis District 2. Salt Lake City District 3. Granite District 4. Jordan District 5. Logan District 6. Cache District 7. Weber District 8. Ogden District	Repoints in Salt Lake,	1. Summer 2002 2. Summer 2002 3. Summer 2002 4. Summer 2002 5. Summer

	9. Others		2002 6. Summer 2002 7. Summer 2002 8. Summer 2002 9. TBD

Goal XII. Complete Statewide Peering Project

Objectives Funding, Lead Responsibility	Tasks	Status	Completion Date
1. Cooperate with State CIO and Smart Utah CEO to develop understanding of Community Networks Funded: N/A Project Leader: Jim Stewart	1. Pete and Jim to determine tasks		1. Ongoing
2. Complete the Internet Peering and Bandwidth expansion Project Funded: Partial Budget: $250,000 Project Leader: Pete Kruckenberg	1. Core Ring dependent 2. Establish GigE connection from UVSC to EBC 3. Install Touch America transit OC-3 at UVSC 4. Install Touch America peering circuit PAIX to EBC 5. Disconnect Qwest Internet OC-3 6. Work with Davis District for minimal impact of Qwest circuit deletion		1. 2. Summer 2002 3. Summer 2002 4. Summer 2002 5. July 1, 2002 6. Summer 2002
3. Assist the Utah Valley Community Network group in establishing a Community Network exchange Funded: N/A Project Leader: Pete Kruckenberg	1. Pete to work with UVSC and Utah Valley communities to determine steps		1. Ongoing 4.
4.Work with Utah Valley Community Network to install high speed network circuits to UEN sites			

Funded: Yes (NEBO only) Budget: $20,000 Project Lead: Pete Kruckenberg			

Goal XIII. Implement Intrusion Detection System

Objectives Funding, Lead Responsibility	Tasks	Status	Completion Date
1. Install IDS Software Funded: Budget: $ Project Leader: Troy Jessup	1. EBC Installation 2. Analyze Data 3. Demonstrate utilization 4. Plan Hub Implementation 5. Implement Software at Hubs 6. Analyze Core and Hub Data		1. Summer 2002 2. Summer 2002 3. Summer 2002 4. Summer 2002 5. Fall 2002/Winter 2003 6. Ongoing

Goal XIV. Assist with Firewall Planning and Implementation

Objectives Funding, Lead Responsibility	Tasks	Status	Completion Date
1. Regional Firewall Training and Implementation Funded: N/A Project Leader: Troy Jessup	1. Emery implementation 2. Communicate with regions 3. As requested by the regions		1. Summer 2002 2. Summer 2002 meetings 3. Ongoing
2. Fully implement Firewall for UEN.ORG and UEN.NET Funded: Budget: $ Project Leader: Bryan Peterson	1. Bryan and Troy to determine steps		1. Ongoing

Goal XV. Provide Security Leadership and Training

Objectives Funding, Lead Responsibility	Tasks	Status	Completion Date
1. Statewide Technical/Security	1. Operations		1. October

Summit Funded: Yes Budget: $5,000 Project Leader: Troy Jessup / Dan Patterson	developing October conference 2. Engineering developing March conference		2. March

TAB 7

UTAH EDUCATION NETWORK CONNECTION POLICY - ACTION

August 8, 2002

TO: UEN Steering Committee

FROM: Stephen Hess, Executive Director

Issue

This proposed Network Connection Policy was presented to the Technical Services Sub-Committed several months ago, and recommendations for modifications were suggested and incorporated into its provisions. Final approval of the policy is now requested.

Background

The statewide education network backbone, managed by the Utah Education Network, is designed and managed to impose minimal restrictions to its users while maintaining adequate levels of control thereby ensuring quality of service and security. The Network Connection Policy provides formal guidelines establishing clear expectations for both the users and managers of the Network.

Policy Considerations

Two basic assumptions underlie the Policy:

1. Users are expected to assume a critical role in providing adequate environmental accommodations for network hardware.
2. Users of the network are expected to assume the responsibility to maintain adequate point of contact information with the UEN NOC.

Recommendations

It is recommended that the Steering Committee review the attached Network Connection Policy, raise any questions, and if satisfied, approve the Policy for implementation.

TAB 7 ATTACHMENT A

Network Connection Policy
for the
Utah Education Network

January 27, 2002

I. PURPOSE

The statewide educational network, heretofore referred to as the UEN Backbone, managed by a public and higher education consortium heretofore referred to as the Utah Education Network (UEN) has developed out of a highly distributed and autonomous environment. As a result, certain policies and procedures, as stated within this document and other supporting references, are being suggested as the basis for an agreement between UEN and network users to assure the quality and security of state-wide inter-network communications. The purpose of this document is to describe possible policies for Regions or Districts regarding connection to the UEN Backbone and the management of this resource. This policy addresses:

- UEN Backbone Network Connection Procedures
- Protocols Supported on Network Backbone
- Supported Backbone Connection Methodology and Technology
- Management of Backbone Network Services
- Network and Computer Security
- Assignment of Network Segments
- Management of Routing Information
- Creation of sub-uen.org level domains
- Delegation of Authority for sub-uen.org level domains

II. REFERENCES

- 18 U.S.C. § 2510: Electronic Communications Privacy Act
- Utah Code Ann. § 76-6-703: Utah Computer Crimes Act
- Network Operating Agreement (UEN document)
- UEN Network Security Guidelines

III. DEFINITIONS

A UEN Backbone – The physical, electronic, and management of the network infrastructure, allowing for inter-network communications between District and

Regional Local Area Networks (LANs) including access to Internet and advanced research networks.

B Region, District – Refers to a school district or region within the state of Utah.

C Inter-network Communications – Communications that must traverse areas of network operations that are not under the immediate control of the local network administrator.

D Intra-network Communications – Communications that remain local to the network under the control of the local Institution, Region or District.

E d-marc – The point of demarcation, either physical or logical that separates the Inter-network (UEN) from the Intra-network (Institution, District or Region)

F UEN Partners – This term includes Institutions, Districts, Regions, Libraries, State Agencies and other authorized entities that are connected to the UEN Backbone.

G CERT® - The CERT® Coordination Center (CERT/CC) is a center of Internet security expertise, at the Software Engineering Institute, a federally funded research and development center operated by Carnegie Mellon University.

H UEN Partners "Partners" – Reference to any user of the UEN Network that is compliance with this and other policies respectively.

I Device – A "device" refers to a piece of hardware that is connected to the UEN Backbone and is under the control of the UEN Technical Services Network Operations Center (NOC).

IV. SCOPE

This policy applies to all devices utilizing UEN's IP space and all users of such devices, and governs all connections to the UEN Backbone network, network assignment, registration in the Domain Name System, and services provided over the UEN Network Backbone to UEN Partners. Any agreements between UEN and a specific Partner will be covered by a Network Operating Agreement.

V. Association with the Utah Education Network (UEN)

A All public education institutions, applied technology centers, institutions of higher education, public libraries and authorized state agencies are eligible for connection to the UEN backbone.

B Institutions of Higher Education and schools serving levels 7 through 12 are connected to the UEN Backbone through UEN-provided facilities (circuits, radio and hardware).

VI. Connectivity

A A. Types of Media

- UEN Owned Media – UEN owned facilities may include radio/microwave, copper or fiber optic facilities either placed or leased by UEN.
- Institution/District/Regional Owned Media – Institution, District, Regional owned facilities may include radio, microwave, copper or fiber optic facilities either placed or leased by an Institution/District or Region.

B Physical Demarcation of the Utah Education Network

- Physical connectivity/demarcation of facilities for institutions of higher education and institutions enrolling levels 7 through 12 education, including District Offices and Regional Centers are the responsibility of UEN. UEN will be accountable for the physical integrity of the circuits as well as the hardware device (router) that establishes the physical d-marc.
- Physical connectivity/demarcation for institutions providing educational services to the level of kindergarten through grade 6 are the responsibility of the School District. UEN agrees to provide extended services to these institutions with the understanding that the District responsible for that school ensures compliancy with expectations set forth in this document.

C Global Naming & Addressing (Identifiers)

- UEN is responsible to provide a consistent forum for the allocation of network services such as IP addressing and domain name services. UEN shall monitor the network to help insure such services are properly adhered to.

D E. Security

- In connecting to the UEN Backbone, a District or Region agrees to abide by this Network Connection Agreement and the Utah Education Network Security Guidelines document. Any network security incidents will be handled though a Point of Contact in the originating department or will be administered through the department's network connection to the backbone.

1 Local Responsibilities

UEN Partners are responsible for the security requirements of all their resources including; space, hardware, software, and data. In addition, Partners are responsible for ensuring that their resources are utilized in a way that does not pose a security threat to other entities attached to the backbone, including the Internet. The network d-marc space should have controlled access to ensure physical security of hardware. The space must be made available to UEN technical personnel either through code or key assignment or through an access list of personnel that are available on a 24x7 basis.

2 Utah Education Network Responsibilities

As administrators of the UEN Backbone, UEN will serve as the CERT® advisory for the UEN backbone and is responsible for ensuring that all security polices and practices are strictly adhered to. UEN will assist the Partners in meeting their security needs, including but not limited to; security scans, advisories, and where necessary isolation of network that pose a threat to other Partners connected to the backbone.

3 Internet Connection

Internet access points, managed by UEN, are a natural location to place filters for the benefit of security. UEN has done this. For security reasons,

these filters will not be placed in an easily accessible location such as a web site. Any Partner can call UEN to receive a copy of these filters to be considered in the UEN's security equation.

4 Utah Education Network Security Office (UENSO)

All suspected security violations or suspicious network activity must be reported to the UENSO's Computer Security Response Team (www@abuse.uen.org). Appropriate measures will be taken to stop/prevent this activity.

E Environmental

- The physical environment of the network d-marc is the responsibility of the Partner. The space should:

1 Have dedicated 110v/20amp electrical service for network hardware.

2 A controlled climate that is capable of maintaining a temperature range of 70 to 90 degrees Fahrenheit.

F Point of Contact (POC)

- Contact information is required for all resources connected to the network. It is the responsibility of each Partner who has a device connected to the network to maintain current POC information with the Network Operations Center (NOC). Interfaces or hardware identified as lacking POC information may be disconnected from the inter-network.

  The NOC at UEN maintains a Point of Contact database for each device connected to the network. Twice a year the NOC will verify the accuracy of this list with each Partner. If a device does not have a designated point of contact for network related issues and the traffic originating from that device is suspect of adversely affecting other network devices, that device is at risk of being disconnected without being notified. In such cases, UEN will make efforts to notify District or Regional personnel of the impending disconnection.

G Remote Access

- While a personally-owned device is remotely connected to the Utah Education Network, all UEN policy applies.

VII. Authority

A The policies this document embodies are under the authority and oversight of the UEN Steering Committee. The Network Connection Agreement is intended to provide central coordination of the UEN Backbone with local control for intra-nets connected to the backbone.

B Technical review of this document is under the direction and authority of the UEN Technical Services Committee.

C The UEN Backbone and its active components are administered, maintained and controlled by UEN's Network Operations Center (NOC).

D UEN's Partners are responsible for providing current Point of Contact information to the Network Operation Center within UEN, and to be aware of and comply with the governing policies and procedures as set forth in this document.

VIII. Procedures

A Network Operation Center (NOC)

Through the NOC, UEN will monitor the UEN Backbone 24 hours a day, 7 days a week. All network failures and/or excess utilization will be reported to a technical staff for problem resolution or design enhancement. Trouble calls can be placed via the UEN Network Operation Center at 801-585-7440.

B Disconnect Authorization

As administrators of the UEN Backbone, UEN Technical Services has the responsibility to isolate any network device from the Network whose traffic violates practices set forth in this policy or any network related policy that governs network activities. In the event of a situation where the normal flow of traffic is severely degradated by a Partner's machine or network, UEN will endeavor to remedy the problem in a manner that will have the least adverse impact to the other members of that network. If a Partner's device is disconnected for reasons other than security, e.g., lack of or inaccurate POC information, UEN will call the department Network Administrator or department head before removal. If the device is disconnected, UEN will provide to the owner of the disconnected device the conditions that must be met to be reconnected. UENSO will review the situation at their next scheduled meeting and make recommendations to UEN Technical Services accordingly.

C Enforcement

UEN Network Operations Center (NOC), in cooperation with the UEN Security Office will periodically scan the UEN Backbone network and DNS data space for provisos set forth in the Network Connection Agreement. Failure to comply could ultimately result in discontinuance, and/or, in the case of delegated sub-uen.org DNS authority, assumption of that authority.

D Grievance Policy

In the event a device is removed from the UEN Backbone/IP Space/DNS and the owner or manager of that device wishes to contest that action or to dispute the conditions set forth for reconnection the following steps shall be taken:

Step One (Reconnection) – If for some reason the Partner and NOC do not agree on the necessary procedures to reconnect a device that has been removed from the UEN Backbone, the Director of UEN Technical Services should be contacted for resolution. The Director will consult with UEN, Regional and/or District technical personnel and management to resolve the issue. The Director will respond with his/her opinion within 24 hours of being contacted by the NOC or Partner.

Step Two (Appeal) – If the Director of Technical Services is unable to resolve the reconnect request within the time allotted, the request will be forwarded to the Associate Director of UEN for resolution. The Associate Director will work with Regional or District Management and with the Executive Director

of UEN to bring immediate resolution to the matter. The Associate Director will respond to this request within 24 hours of receipt.

Step Three (Appeal or Grievance) – The UEN Steering Committee will serve as the final line of authority for all appeals and/or grievances that may arise from any action as a result of this policy.

TAB 8

FILE SHARING AND MISAPPROPRIATION OF NETWORK RESOURCES POLICY - ACTION

August 8, 2002

TO: UEN Steering Committee

FROM: Stephen Hess, Executive Director

Issue

This attached File Sharing Policy has been previous reviewed and discussed by the Technical Services Subcommittee. Final review and approval by the Subcommittee and the full Steering Committee are now requested.

Background

Based on suggestions made when this policy was initially discussed in the Technical Services Subcommittee, the Technical Services staff has worked with George Brown, to develop a policy regarding the management of peer-to-peer file sharing.

Implementation of many key elements of the policy will be the responsibility of staff at the schools and colleges and university, and other responsibilities will be assigned to UEN Technical staff. Further clarification and direction from the subcommittee will be essential as we move forward with this important issue.

Policy Considerations

The File Sharing Policy must adequately and appropriately address:

1. Roles and responsibilities of the schools and institutions served by UEN
2. Roles and responsibilities of UEN Technical Services staff members
3. Communication of policy decisions

Recommendation

It is requested that the Technical Services Subcommittee, and members of the Steering Committee, carefully review the attached File Sharing Policy. If satisfied that the Policy appropriately addresses the responsibilities of both Network users and UEN staff in this important area, it is recommended that the File Sharing Policy be approved by the Steering Committee.

Utah Education Network
File Sharing
and
Misappropriation of Network Resources
Policy

August 6, 2002

Background

As the utilization of networks and network technologies continues to increase exponentially, there are some very difficult challenges associated with such an ubiquitous, robust, and powerful resource. Abuses are common and can run the gamut from innocuous nuisances to very serious violations of copyright, privacy, and misappropriation of services, resources, and/or funds.

One notable example of network usage that has now reached a point of significant concern is what is classified as 'recreational/personal use'. Because virtually any information or data that can be digitized is available via the Internet, enterprising individuals have found ways to access the data and download it to their computers. Most of them use software that is grouped into the category of 'file sharing'. Among the file sharing software options is a set known as 'peer-to-peer' (p2p) software. This software allows an individual to download information from any other computer any where in the world which is also running p2p software; and permits anyone else any where in the world to download any information from that individual's computer as well.

Although there are very legitimate reasons to share data and information using a p2p environment, most of the information that is being shared using p2p facilities is ***'recreational/personal'***. The problem is, as this network of users grows and the amount of bandwidth that is being used expands, network facilities which are intended for other more important and legitimate uses become 'clogged'. Participation by all entities with the provisions and intent of this policy will help ensure that network's facilities will not suffer degradation resulting from inappropriate activities associated with the uses specified above.

Issues and Considerations

There are several considerations which must be addressed in examining this problem and potential solutions:

- The Utah Education's Network's (Network) resources are funded by the Legislature for the purpose of providing support to the educational process.
- The Legislature may not be able to provide sufficient funds to continue to meet the escalating need for additional capacity as was the case in FY 2003.
- Much of the recreational use of the network is apparently related to, or involves copyright violations.
- Traffic volumes associated with recreational use of the network have reached the level where it is necessary to address reasonable, equitable, responsible, and acceptable solutions.
- Acceptable Use Policies must be the foundation for any long-term solution to be viable.
- Public and higher education have somewhat different issues related to network use and standards.
- There are at least four different network traffic types: Mission Critical, Educational/Informational, Research and Development, and Recreational/ Personal. It may become necessary to prioritize network traffic according to these categories.
- As noted, there are legitimate file sharing applications, however, a survey of all academic and administrative leadership on the University of Utah campus failed to identify a single valid or legitimate use of peer-to-peer file sharing software.
- The implication is that peer-to-peer file sharing facilities within the network service only recreational/personal uses.
- Under the Digital Millennium Copyright Act (DMCA) and Electronic Theft Act, network providers can be judged as complicit if they knowingly permit copyright violations to be facilitated by their network resources.

Additionally, it is important to note that the Network has an Acceptable Use Policy (AUP) related to public education, and that each of the school districts also have adopted an AUP which governs the use of the network by their students, teachers, administrators, and staff.

However, this is not the case with higher education. Because institutions of higher education value a significant level of academic freedom, there is a substantial level of reticence for those institutions to adopt stringent policies restricting the access to or use of information. However, most of the institutions do have policies related to the violation of copyright provisions in the law; and the excessive use of facilities for activities not associated with the mission of the institution and/or the relatively direct pursuit of an education.

Solution Strategies

As noted, technical solutions can be implemented to restrict traffic via specific channels or ports that are most commonly used by present file sharing software. This is a very temporary solution at best because the channel/port designation can

be easily modified as a 'work-around'. There are other technical options which permit the 'rationing' or 'limiting' of bandwidth to particular entities or locales (e.g., dorms, etc.).

However, it is far more reasonable to adopt a policy encouraging and supporting the principles of 'acceptable use' as well as identifying potential traffic priorities which might result in certain types of traffic receiving priority. Additionally, the policy probably needs to address what might be done in the event that, in spite of all of our best efforts, the problem continues to persist. This might well involve the disabling of the port or channel presently serving the most common or prevalent p2p software. Finally, a goal of this process should be a statement of cooperation, and that, only in the most egregious circumstances would the UEN ever act independently to resolve this problem.

Policy Statement

It is the policy of the Utah Education Network that:

- Each institution and school district/regional service center, as well as other entities which utilize the Network's publicly funded resources should:

  1 adopt provisions within their institutional Acceptable Use Policy standards which:

    1 identify misappropriation of resources (i.e., excessive recreational, personal or commercial uses) as uses not consistent with those purposes identified as 'acceptable use',

    2 specify as 'unacceptable use' the use of file sharing software for the purpose of acquiring or sharing copyrighted material(s) in violation of the copyright owner's rights and privileges;

2 monitor, wherein possible, the portions of the network for which they have direct responsibility for traffic types (e.g., file sharing wherein copyright violations are evident, excessive recreational/personal, etc.) and volumes which would directly impinge upon appropriate and legitimate traffic;

3 take appropriate action to resolve problems identified above. These actions should include, but not necessarily be limited to:

  1 notification to users violating copyright provisions or who are using excessive network resources;

    a where continued abuses or copyright violations persist, network access should be disabled;

    b in some instances, it may be necessary to 'rate-limit' the traffic volumes to groups of users (e.g., dorms, etc.) where substantial violations are occurring;

    c identify/register server sites for which legitimate peer-to-peer file sharing has been recognized.

  4 UEN will monitor the backbone traffic for security violations and for high volume uses which might imply excessive and inappropriate consumption of network resources, and will notify the institution and/or agency responsible for the user from which the traffic is originating;

5 UEN will monitor the network's backbone for 'excessive' file sharing traffic and will provide notification to the institution and/or agency responsible for the users from which the traffic is originating;

6 UEN will work cooperatively with the Network's institutional users to assure that network resources are utilized for the purposes for which they have been funded, and will assist institutions, and/or school district/regional service centers in implementing reasonable, equitable, responsible, and acceptable courses of action wherein persistent and/or egregious uses are identified. These courses of action may include, but are not limited to those defined in I-C above;

7 In order to preserve network reliability, security, viability, and/or stability, the Utah Education Network may be required to take certain actions (e.g., blocking of specific servers, routers, or the IP addresses of specific user machines). These actions will be taken as a 'last resort' and only after sufficient notification to the offending user. Additionally, any action will also be in accordance with the Network Connection Policy and Network Operating Agreements; and , wherein necessary, as an official action of the Executive Committee of the Steering Committee. These actions will only impact the excessive recreational/personal uses and/or instances where copyright violations have been clearly identified. These actions will not in any way impinge upon nor impact the mission critical traffic of any institution.

TAB 9

REVIEW OF STEERING COMMITTEE MEETING FORMAT - ACTION

August 8, 2002

TO: UEN Steering Committee

FROM: Stephen Hess, Executive Director

Issue

The guidance, direction, and input from the Steering Committee are critical to the success of the Utah Education Network in fulfilling its mission of providing telecommunications services, facilities, and training to public and higher education, public libraries, and state governmental entities. Since the network is a consortium and has a diverse set of constituencies and users, each of which has varying and often widely different needs, it would not be possible to service those needs without a process of building consensus and identifying how to best serve all of the partners associated with the network. The need is to insure that these are accomplished in the most efficient and effective manner and especially that the time and resources provided by Steering Committee members are judiciously used.

Background

In an attempt to maximize the effectiveness and of the Steering Committee and to assure that the very valuable time of Steering Committee members is used most effectively and efficiently, a new meeting format was introduced several months ago. Subcommittees were organized in which much of the detail and substance of the work of the Steering Committee could be accomplished. Meetings were scheduled bi-monthly and extended in length to accommodate the more detailed subcommittee agendas. However, it has become apparent that there are some challenges associated with that format. It has been suggested that the meeting format be reviewed again to determine if there are some modifications and/or refinements that might be instituted to address these issues.

Some of the challenges which have been noted include: 1) the inability of subcommittee agendas to be completed in the allotted time; 2) members of one subcommittee may have significant interest in or would like to provide input about or participate in the discussion on an agenda item on the other subcommittee's agenda; 3) the present format excessively 'draws out the day'; and 4) a lack of time

to fully discuss subcommittee reports in the full Steering Committee meeting which results in a insufficient amount of information among members; etc.

A survey was conducted among Steering Committee members and the results are reported in the attachment (Tab 9 - Attachment A). As noted the results are almost evenly divided between Option I and Option II. The dilemma appears to be the how to balance the need to be very efficient yet effective, coupled with the need of many Steering Committee members to be informed at the level with which they feel comfortable.

Policy Considerations

The requirement is to find a process so that the leadership provided by the UEN Steering Committee can be adequately focused upon the needs of the many Network users in such a way as to assure that the Network is meeting its mission and goals.

1. Steering Committee members are appointed to represent various constituencies as well as to represent the needs of all of education in Utah. There will always exist a challenge as the normal tension between competing issues draws upon the need to be representative and 'statesman-like' in addresses these issues.
2. Meeting schedules and duration are inherently the means by which the Steering Committee is able to identify direction, provide input, build consensus, and insure accountability of all UEN activities.
3. Without adequate leadership and direction, the potential that the UEN will not appropriately accomplish its identified mission and goals becomes a matter of significant concern.

Recommendation

It is recommended that the Steering Committee review the options and adopt a meeting format that meets the requirement that the UEN will proceed with appropriate leadership from the Steering Committee.

Steering Commitee Meeting Format Surevy Results

	Option 1	Option 2	Option 3	Option 4	
Amy Owen	X	X			No Strong Preference
Jeff Livingston	X				Teaching schedule precludes attendance on Friday's
Cliff Drew	2		1		Option 3 preferred
Dave Eisler		X			
Vicky Dahn		X			
Gary Wixom	X				
Wayne Peay		X		X	Subcommittees meet at different times
Brent Goodfellow	X				Will support the majority
Kirk Sitterud	1		2		Option 1 preferred
Reed Eborn			X		
Pat Lambrose		X			Subcommittees meet at different times
Bruce Christensen	X				Subcommittees and Steering Committee 1hour each
Ray Timothy		X			
	6.5	6	2.5		As of 8/06/02 6:00 p.m.

Option 1. Hold the subcommittee and 'committee of the whole' meetings on the same day. The subcommittee meetings would begin at 9:00 a.m. followed immediately by the 'committee of the whole' at 11:00 a.m. The Executive Committee would meet on a day other than the Steering Committee meeting date. (This would eliminate the hour delay between the sub-committees and the Steering Committee.)

Option 2. Hold the subcommittee meetings on a different day (e.g., during the intervening months during which Steering Committee meetings are not held). The Steering Committee would focus upon the actions and reports of the subcommittees and the UEN's overall direction, plans, and budgets.

Option 3. Revert to the original format where the entire Steering Committee would meet as a 'committee-of-the-whole', without sub-committees.

Option 4. Some other format or combination of one or more of the above. If you select this option, please provide your comments regarding your ideas and recommendations.