

Issue Brief – Internet Protocol Videoconferencing

UTAH EDUCATION NETWORK

NUMBER UEN-01

SUMMARY

The Utah Education Network (UEN) is upgrading its videoconferencing network to digital Internet Protocol (IP) based technology. To continue doing so, UEN has requested \$800,000 in one-time funds for equipment and \$200,000 for ongoing maintenance contracts. The Analyst supports UEN's request.

BACKGROUND

Among the services provided by the Utah Education Network is two-way interactive videoconferencing – formerly known as EdNet. UEN provides such services in three ways: via older dedicated analog circuits; via satellite; and, increasingly, via digital Internet based technology.

Internet based video allows more capacity than analog or satellite in that it does not require a central hub and/or “send” site. If an IP videoconference has only two sites, the sites can directly call one another. If more than two sites are involved, regional bridges can be used independent of one another, relieving the burden on a central hub.

IP video is also more flexible than analog or satellite as it can be moved from room to room within a facility, or even facility to facility within a campus, using a “media cart” approach.

Because IP video uses the same circuits used by other Internet traffic, it is also more capable than satellite or analog. Video and audio are two-way with IP, unlike satellite videoconferencing. Digital data can be shared among sites in an IP videoconference, unlike analog discussions.

Bandwidth limitations sometimes decrease the quality of video delivered over the Internet. However, UEN's Network Infrastructure Development initiative is helping to address this by bringing better quality, higher speed, and larger capacity circuits to sites that host, or will host, IP videoconferencing rooms.

UEN's IP video network supports not only education, but Legislators have also benefited. Room W325 of the Capitol Complex House building is an IP video site. The Legislature has used this site to videoconference

committee meetings, caucuses, and town hall meetings, saving members, witnesses, and the public time and travel costs. The Capitol's IP video site has even hosted late night higher education courses during the Legislative General Session.

In each of the past two General Sessions the Legislature has provided one-time money for IP video conversion. Table 1 displays a three year funding history (including FY 2007 recommended levels).

Table 1: Internet Protocol Video Funding

	FY 2005	FY 2006	FY 2007
Ongoing			200,000
One-time	240,000	800,000	800,000
Total	<u>\$240,000</u>	<u>\$800,000</u>	<u>\$800,000</u>

With the first two years of funding, UEN will convert 60% of its EdNet videoconferencing classrooms. An additional 70 classrooms will be converted using the funds requested for FY 2007, combined with \$120,000 in Federal eRate discounts.

Initially, UEN projected that it would complete the upgrade within three appropriations cycles, and that FY 2007 would be the final year of funding. More recently, however, it has extended this time-frame from three to four years and increased the anticipated cost of the project.

Nonetheless, given the increased capacity, flexibility, and capability of Internet Protocol videoconferencing, and given the high-cost of satellite and obsolescence of analog connections, the Analyst recommends providing additional funding to UEN for continued conversion.

RECOMMENDATION

The Analyst recommends the following steps to continue UEN's Internet Protocol video upgrade:

1. Place on a priorities list an increase in ongoing appropriations from Income Tax of \$200,000;
2. Place on a priorities list an \$800,000 one-time FY 2007 appropriation from Income Tax.