

SENATE COMMITTEE ON INFORMATION MANAGEMENT
AND TECHNOLOGY

March 19, 1999 Hearing Room C

8:30 a.m. Tapes 15 - 16

MEMBERS PRESENT: Sen. Verne Duncan, Chair

Sen. Peter Courtney, Vice-Chair

Sen. David Nelson

STAFF PRESENT: Marjorie Taylor, Administrator

Patrick Brennan, Administrative Support

MEASURE/ISSUES HEARD: Continued Discussion of Enterprise Information Technology Plan

Tom Cook ñ Oregon Public Educational Network

Diane Walton ñ Office of Community College Services

Vice Chancellor Bill Anslow ñ Oregon University System

These minutes are in compliance with Senate and House Rules. Only text enclosed in quotation marks reports a speaker's exact words. For complete contents, please refer to the tapes.

TAPE/#	Speaker	Comments
TAPE 15, A		
003	Chair Duncan	Calls the meeting to order at 8:35 a.m. States that the committee will be hearing presentations by the education community regarding the Enterprise Information Technology Plan. Mentions that representatives of the Department of Administrative Services (DAS) Information Resources Management Division (IRMD) will also testify.
<u>OREGON PUBLIC EDUCATIONAL NETWORK</u>		
015	Tom Cook	Director, Oregon Public Education Network (OPEN). Offers an overview of the OPEN project (EXHIBIT A). States that the number of Oregon schools with

		internet access has increased from 200 to 1062 during the past two years. Emphasizes that the goal is to have access in every classroom statewide and that significant progress is being made in that area. Adds that internet connectivity is now considered a mission critical program. Says that technology is a way to integrate new resources into the curriculum.
052	Chair Duncan	Expresses surprise and gladness upon hearing that there are so many Oregon schools with internet access.
057	Sen. Nelson	Concurs with the chair.
060	Cook	Indicates that a significant part of the funding for facilitating connectivity has come from the Federal Telecommunications Act of 1996, which created the "Educational Rate" (E-rate) subsidy. Describes the tiered approach to connectivity which OPEN has developed. Says that the two hubs are in Portland and Eugene, that each Educational Service District (ESD) in the state connects to one of those two points of presence, and each school district connects to its ESD. Adds that there is a level of support that can work with schools as needed.
077	Chair Duncan	Inquires as to how OPEN ties in with the Enterprise Information Technology Plan.
082	Sen. Nelson	Mentions that some of the schools in his district are connected to OPEN.
089	Cook	Explains that the schools in that region are connected through a "technical center" at the Umatilla ESD in Pendleton. Says that a larger circuit takes information to and from that technical center to Portland.
099	Sen. Nelson	Indicates that he has further questions on the issue which he will ask later.
101	Chair Duncan	Asks how the schools in Malheur County are connected to OPEN.
104	Cook	Replies that Malheur County has a technical center which has chosen to connect to the internet through Micron Corp. in Boise, Idaho. Says that the cost to do so is lower than the cost of bringing in circuits to Ontario from Portland. Clarifies that the county is still connected to the rest of the state, though it is via a different path. Adds that Jefferson County has chosen to use a local provider as well. Emphasizes that OPEN always encourages districts to take alternatives if they can save money by doing so.
121	Chair Duncan	Asks if connection to non-state providers could have a detrimental effect upon the statewide network project.
123	Cook	Replies that it does not. Explains that schools in Jefferson and Malheur Counties go out to the World Wide Web via their providers, and from there reconnect to the Oregon system. Indicates that the other counties use an intranet connection and bandwidth within the state first.

		Says that OPEN has been involved in the development of the Enterprise Network. Says that OPEN has been involved in the acquisition of IT hardware through the "Fast-Packet" contract, including 350 circuits purchased by K-12 education. Says that the Oregon State Lottery is the primary user of "Fast-Packet" but that education has been able to utilize the system at minimal cost.
154	Chair Duncan	Suggests that is an indirect benefit of the lottery.
156	Cook	Concurs with the chair. States that K-12 education has three areas of concern. Says that there is a constantly expanding demand for bandwidth. Explains that projections show that when the optimal level is reached, the bandwidth requirements of the education system will double every 180 days. Says that there are a variety of technologies which hold the promise of enhancing deployment of education statewide. Indicates that education currently spends \$200,000 annually for internet access and that it is projected to grow to \$500,000 and \$1 million in the next two years, respectively.
185	Chair Duncan	Wonders if the cost of internet access is a major budget consideration for education.
188	Sen. Nelson	Says that SB 142 has a potential impact. Indicates that education has been a supporter of the bill.
205	Cook	Agrees that SB 142 is a big issue.
209	Chair Duncan	Notes that there is currently a big battle over funding for education. Inquires as to where the money to fund the cost of internet access will come from.
217	Sen. Nelson	Asks if the costs quoted are for services or for infrastructure.
219	Cook	Replies that the costs mentioned are for supplying internet and intranet service bandwidth. Says that OPEN currently uses a total of 46 megabits and is adding six per month to accommodate growth. Mentions that the process includes some segments of higher education as well.
238	Sen. Nelson	States that the Enterprise System fits into the OPEN system. Asks how SB 142 would be incorporated into the Enterprise Plan.
241	Cook	Replies that the objective for both is to provide connectivity and infrastructure statewide. Explains that the Enterprise Strategy considers the state as a whole, while SB 142 is concerned primarily with rural areas. Argues that the primary concern for education is to reach the non-connected areas which are the most difficult to reach. Says that some such areas, such as Lake and Klamath Counties, will be troublesome to connect to the system based on lack of facilities and financing. Adds that the financing problems will be alleviated by the Federal Telecommunications Act and the E-rate.
300	Chair Duncan	Asks how OPEN fits into the stated principles of the Enterprise Plan.

307	Cook	Refers to the cost chart (EXHIBIT B) which discusses the E-rate benefit. Notes that the program has saved the state over \$9 million system-wide. Indicates that constraints on the E-rate are a concern for K-12 education with regards to moving into the Enterprise Strategy. Argues that there are limitations which may force K-12 education to choose between the Enterprise Plan and the E-rate benefit. Asserts that the goal is to do both. Says that schools are required to receive direct billing from providers which also provide services for public consumption in order to maintain their E-rate benefit.
350	Chair Duncan	Requests clarification regarding the E-rate.
352	Cook	Explains that state-supplied systems are not eligible for E-rate subsidies. Says that the Federal Communications Commission (FCC) requires the purchase of services from private providers such as US West. Mentions that there are processes which will allow participation in the Enterprise Network.
393	Sen. Courtney	Asks if US West provides services to Eastern Oregon schools.
395	Cook	Replies that US West supplies services through the Fast-Packet program. States that K-12 education needs internet connection and will affiliate itself with whoever it is that can provide it. Emphasizes that if the Enterprise Strategy offers the same or better services for a lower cost they will be a part of the program and that the various components of OPEN could be assimilated by the plan.
TAPE 16, A		
010	Sen. Courtney	Asks for clarification on the services provided by US West.
014	Cook	Replies that US west provides particular types of connections through the Fast-Packet contract. Indicates that the bandwidth requirements of K-12 education will exceed that which already exists in some parts of the state. Says that the Enterprise Plan or a buildup resulting from passage of SB 142 could provide the additional necessary bandwidth.
022	Sen. Courtney	Inquires as to whether the Enterprise Plan would be as effective as SB 142 at providing the necessary bandwidth to rural areas in Oregon.
025	Cook	Replies that it would.
029	Chair Duncan	Summarizes the key points: <ul style="list-style-type: none"> • There is a need within K-12 schools for internet connection • The current system will not be able to sustain the growth necessary to keep up with the rising demand for bandwidth • The current system will fail unless changes are made
032	Cook	Concurs with the chair's summary.

OFFICE OF COMMUNITY COLLEGE SERVICES

040	Diane Walton	Representative, Office of Community College Services (OCCS). Outlines the OCCS equation for the future of internet access, which consists of the current structure, the Enterprise Network, and "X" (EXHIBIT C). Explains that colleges want to know how the Enterprise Network can benefit them and how much it will cost. Indicates that those two variables must be defined before colleges can determine whether they will participate. States that several areas are working independently to facilitate connectivity in their districts but that OCCS is working closely with DAS, K-12 education, and the Oregon University System (OUS).
085	Sen. Nelson	Requests a description of the "X" in the equation.
088	Walton	Replies that "X" refers to the unknown remainder which will have to be calculated once the connective and financial impacts of the Enterprise Network are known. Suggests that some of the remainder could be provided by the Governor's \$50 million lottery bond proceeds, SB 142, or other resources for infrastructure.
092	Sen. Nelson	Asks if OCCS is aware of what the Enterprise Network will be offering to community colleges.
095	Walton	Replies that the various community colleges will see things differently, even if all are offered the same services for the same cost.
100	Sen. Nelson	Mentions that Ms. Walton had previously testified that the Enterprise Network is an integral part of OCCS plans but that it is not entirely sufficient.
105	Walton	Argues that the backbone envisioned by the Enterprise Network will allow for a great deal but that there will need to be additional work with regards to connecting "the last mile."
109	Chair Duncan	Asks if OCCS is supportive of the principles of the Enterprise Network.
111	Walton	Replies that OCCS supports the network but that it is insufficient to meet all of the needs of higher education. Indicates that the Enterprise Network was not built with the high performance needs of education in mind but was rather envisioned as a "production network." Emphasizes that OCCS does not expect state government to do everything and that the systems used by higher education are compatible with those of the state.
118	Sen. Nelson	States that the Enterprise Network will eventually have higher standards than are currently in place. Asks if OCCS is sticking by its system because it is already in place while the Enterprise Network is still in the planning stages.
122	Walton	Replies that the standards are evolving rapidly and there is an effort to reach "inter-operability."

127	Chair Duncan	Wonders if OCCS is a "player" in the development of standards.
128	Walton	Replies that they are, "absolutely," insofar as people outside of DAS/IRMD are involved. Indicates that there is a great deal of work that goes on internally within DAS/IRMD.
135	Chair Duncan	Acknowledges that the committee understands the differing needs of the various players in the development of a statewide strategy. Asks if there are aspects of the Enterprise Network strategy that make OCCS uncomfortable.
147	Walton	Replies that the Enterprise strategy is sound. Says that DAS/IRMD has a "huge job" in getting state government aligned on the issue. Adds that once the network comes on line to a greater extent it will be easier to discuss the position of higher education in relation to the network. Says that it may be the case that higher education may have to struggle through some issues on its own and work with the state on a case-by-case basis. Praises DAS/IRMD for having always been available to higher education.
158	Sen. Nelson	Asks about the existence of a higher education network as opposed to the Enterprise Network.
161	Walton	Replies that there are pieces of the Enterprise Network already in place and that higher education will take advantage of them. Mentions that the Oregon-Wide Area Network (OWEN) is currently being used by higher education. Reiterates that local decisions are made by the individual community colleges with regards to participation.
<u>OREGON UNIVERSITY SYSTEM</u>		
177	Bill Anslow	Vice-Chancellor, Oregon University System (EXHIBIT D). States that communications technology plays an important role in all aspects of university activity. Indicates that the campuses of OUS are connected by the OWEN system, which is funded through 2001. Indicates that OUS is interested in maintaining Net II service for 1-2 more years. Suggests that long-term partnerships between parties can provide many benefits.
235	Anslow	<p>Outlines why OUS needs to maintain the capacity to operate through various networks including, but not limited to, the Enterprise Network:</p> <ul style="list-style-type: none"> • OUS will utilize circuits of the Enterprise Network which are appropriate to its needs • The Enterprise Network cannot completely address the last-mile issue • OWEN is already in place and delivering services through a partnership with DAS and K-12 education • Higher education must have engineering authority over network components in order to stay at the "cutting edge" of technology • Some higher education requirements are not consistent with the needs of state agencies. The three major universities have requirements for a state research network • The need for bandwidth to the outside world requires that higher education be able to select contracts for internet bandwidth

271	Anslow	<p>Concludes that the major concerns of OUS are compatibility, affordability, and access. Argues that current activities and services must be allowed to continue, including OWEN and satellite services. Emphasizes that the issue is higher education's exemption from a mandated use of the Enterprise Network. Explains that OUS participation in the Enterprise Network or with any other provider is guided by several principles:</p> <ul style="list-style-type: none"> • Services should be distinct, measurable, and customer-driven • Costs should be clearly identified and assigned • Rates and fees should be available in advance • Any state subsidies should be direct and explicit
330	Sen. Nelson	Inquires as to how OUS feels about SB 142.
335	Joanne Hugi	Representative, Computing Department, University of Oregon. Indicates that the OUS has taken no position on SB 142 but that it is seen as a source of funds for building out the infrastructure into rural areas. Suggests that it is also possible for investment in networking through SB 142.
353	Chair Duncan	Wonders what would happen in the event that SB 142 fails to pass.
357	Hugi	Replies that there will be an urgent need for money to procure bandwidth capacity. Adds that there is not adequate funding to meet the needs of bandwidth expansion.
368	Anslow	Suggests that a strategy for reducing rates could be to have schools contract independently.
382	Chair Duncan	Inquires about the cost projections mentioned by Mr. Cook.
386	Anslow	Replies that there are savings through federal policies and that the relationship must be between schools and providers. Indicates that there may be a way to connect schools "on the back side."
400	Curt Patterson	Associate-Provost, Oregon State University; former Chief Information Officer, State of Oregon. Acknowledges that there is a great deal of pressure on DAS to aggregate demand. Concurrs that the concept of connecting rural areas can be facilitated by SB 142. Argues that previous success was based upon taking the best aspects of the many options available and that the goal was collaboration. Mentions that higher education employs some of the world's top internet engineers. Emphasizes that there is a need for universities to know what they will get from the Enterprise Network and what it will cost.
TAPE 15, B		
036	Chair Duncan	Asks Mr. Patterson if he would have concerns about the direction that higher education is taking if he were still the state's Chief Information Officer.

042	Patterson	Replies that the concerns were the source of agreements between DAS and higher education regarding the areas where education would cooperate and those where it would be given independence. Says that the partnership model has worked fairly well. Argues that the Enterprise Network should be structured so well that higher education will want to join of its own volition. Concludes that if the network cannot meet the needs of OUS then higher education will have to look at alternatives.
070	Hugi	States that the networks utilized by OUS will be interconnected to the Enterprise Network. Denies that higher education is "doing its own thing."
080	Sen. Nelson	Asks if higher education is holding on to the idea that it will "do its own thing" if events warrant.
084	Hugi	Replies that higher education is not doing so. Asserts that higher education has specialized needs, such as control over research networking, which must be maintained by OUS.
091	Chair Duncan	Asks if the legislature can play a role in making the Enterprise Network more enticing to higher education.
096	Anslow	Replies that OUS recently negotiated the continuation of satellite services. Indicates that the cost of maintaining that system is \$1.2 million annually. Suggests that if the legislature could consider funding some of higher education's basic investment infrastructure there would be a greater chance that the Enterprise Network could grow to capacity.
120	Patterson	Argues that serving the entire state with a common distance education network will not work. Asserts that those who need distance education the most are the least able to afford the system. Says that distance learning could "price out" those who need it most.
146	Don Mazziotti	Chief Information Officer, DAS/IRMD. Indicates that there is not "sufficient, critical mass" of resources or demand for advanced telecommunication services to support divergent solutions to the provision of such services in the public sector. Explains that in Oregon, unlike California or Washington, there are opportunity costs associated with providing multiple systems. Says that the education community does not have the resources to fund the advanced technology and will look at solutions which would not otherwise be entertained out of resource starvation. Argues that the education sector cannot meet its growing demand for bandwidth but that further analysis may allow better utilization of existing statewide resources.
197	Mazziotti	Mentions the comments by Mr. Cook regarding the E-rate subsidy. Explains that education's participation in the Enterprise Network would not jeopardize E-rate subsidies because the network would not be the provider of services but would rather be contracting services from certified, private sector providers. Indicates that DAS/IRMD has been told that the relationship would not jeopardize E-rate subsidies and that there may even be the potential for increasing them.

224	Mazziotti	Agrees with Ms. Walton's earlier comment that there is a need to identify cost before making commitment to spending taxpayer dollars. States that large customers of telecommunications services cannot get better prices individually than they can collectively. Suggests that aggregate costs will be lower once the parties make a commitment to the Enterprise Network.
248	Chair Duncan	Asks if there is agreement that everything possible should be provided through the strategic planning process of the Enterprise Network and that independent planning should be used only as a last resort.
264	Anslow	Replies that there is a need to know the costs and implications of joining the network as opposed to other available options. Indicates that higher education will participate to the extent that portions of the Enterprise Network can provide necessary services.
272	Walton	Reiterates that community colleges need to set their own usage policies. Argues that colleges must not have their decisions driven by what is beneficial to state government.
288	Cook	States that there is no desire on the part of K-12 education to act independently if there is a possibility to receive desired services through the Enterprise Network. Mentions that K-12 education has no intention of running its own networks. Acknowledges that the Enterprise Network, in its conceptual form, is the right strategy for Oregon. Indicates that the one dilemma is that OPEN represents over 200 school districts, each of which with their own agendas, which will need to be persuaded to sign on.
325	Sen. Nelson	Asks if the tension between DAS/IRMD and the education community is similar to that which existed in 1998 between DAS/IRMD and the Oregon Department of Transportation (ODOT).
330	Mazziotti	Replies that ODOT is less constrained in regards to available resources than the education sector. Indicates that ODOT, as part of the executive branch, is more connected to state government than is education. Says that GST, an advanced network provider, has spent \$250 million on infrastructure on the west coast but that very little was spent in Oregon. Explains that, according to GST, the reason for the lack of investment here was that Oregon does not have a cohesive, collaborative public sector for network convergence. Says that California and Washington, where most GST investments were made, spend a great deal on statewide networks, whereas Oregon spends only \$50 million annually.
380	Chair Duncan	Wonders if the \$50 million includes higher education.
386	Mazziotti	Replies that it does not. Asserts that the Enterprise Network would provide resources to the education community and that there is an understanding that those resources are needed badly. Says that the shortage of resources within education is the cause of its pursuing the most promising options for as little cost as possible.
408	Chair Duncan	Adjourns the meeting at 9:56 a.m.

Submitted By, Reviewed By,

Patrick Brennan, Marjorie Taylor,

Administrative Support Administrator

EXHIBIT SUMMARY

A ñ OPEN, printed materials, Tom Cook, 34 pp.

B ñ OPEN, chart, Tom Cook, 6 pp.

C ñ OCCS, information packet, Diane Walton, 16 pp.

D ñ OUS, testimony, Bill Anslow, 23 pp.