

Oregon Telecommunications Coordinating Council
Minutes
July 28, 2005

Attendees:

Council Members: John Irwin, Pam Berrian, Agnes Box, Cathy Britain, Rob Myers, Ed Parker, Brant Wolf, Mark Shrives, Art Hill, Jonothan Dolan of Oregon State University attending for Curt Pederson, and Kim Hoffman.

Staff: Chris Tamarin of Oregon Economic and Community Development Department

Others: John Slocum of Tahoma Telecom, Doug Cooley of Century Tel, Dennis Jorgenson of Oregon Department of Transportation (ODOT), Galen McGill of ODOT, Keith Grunberg of Charter Communications, Jim Rose of Oregon Public Education Network (OPEN), Larry Harker of Association of Oregon Counties, and Judge Terry Tallman of Morrow County.

Remote videoconference locations included Boardman, Eugene, Gleneden Beach, Klamath Falls and Medford.

Public Input:

Art Hill reported that Blue Mountain Community College is planning a survey of Oregon Community Colleges to identify existing broadband access capacities, broadband access capacity needs, and uses. John Irwin recommended that Art confer with Jim Rose. A similar survey was recently completed by OPEN for K-12 schools.

Reports, Discussions and Decisions:

Action Item:

It was moved by Ed Parker that the June 23, 2005 minutes be approved as distributed. John Irwin seconded the motion. The Council approved the minutes as distributed.

Presentation

John Irwin welcomed Galen McGill for a presentation on the use of Intelligent Information Systems at ODOT. Intelligent Information systems (ITS) are tools for getting the most out of our existing transportation system. ODOT's ITS includes the use of roadside equipment, communications, computer hardware and software and they make use of partnerships.

The US Department of Transportation has established ITS standards and requirements for the states (23 CFR Part 940). ODOT has completed its statewide planning for its system architectures and specific planning for Portland, Eugene/Springfield, Medford, and Bend metropolitan areas. Salem is currently being developed. Oregon has a distributed

architecture with four operations centers and infrastructure that includes 135 ramp meters, 141 traffic cameras, 16 highway advisory radio stations, and 54 permanent variable message signs, and 3,400 traffic signals 35% of which are interconnected. A next step is to integrate incident response planning with other agencies. Other elements include TripCheck service www.tripcheck.com, 511 service, and cable TV access to road information in Bend, Portland, and Corvallis. The TripCheck website received over 1,030,000 visits per month in 2004. Oregon's ITS also includes 58 weather stations, 10 weather warning systems, 5 speed/road geometry warning systems, and 9 remotely operated snow zone signs. Future systems may include vehicle integration for in-vehicle signing and information delivery, data collection, and vehicle control.

Art Hill noted the focus on metropolitan high traffic areas, and asked about projects for rural areas, for example, ice detection or dust storm warnings on highways in eastern Oregon? ODOT does have some ice warning systems as pilots with a new one being implemented on Route 140 Lake of the Woods Highway for use this winter. ODOT has looked at visibility detection systems for use on Interstate Highway 84. Art Hill also remarked on the effectiveness of the Ramp control system in keeping traffic flowing in the Portland area.

Doug Cooley asked about ODOT's involvement in sending emergency messages for events such as Tsunami warnings, amber alerts, or Homeland Security? Galen responded that ODOT does carry amber alert messages on variable message signs.

Judge Tallman asked how communities can connect with the network for applications like the cable TV video channels illustrated. Galen indicated that they have had success with Bend Cable and that he, Galen, would be person at ODOT for communities to contact.

John asked if ODOT owns its own network for these applications. Galen indicated that they use a mix of ODOT owned facilities, leased services, fixed wireless, cellular, and in some cases dial-up connections.

Presentation

John Irwin welcomed Dennis Jorgenson of ODOT for a presentation on the Department's telecommunications network infrastructure projects, initiatives and partnerships. Dennis noted that it has been an ongoing challenge to provide communications for the Department's needs and locations, which are spread throughout the state, and bandwidth requirements are steadily growing. It can be particularly difficult to connect to the increasing number of roadside equipment devices like those Galen described. Dennis reported that ODOT's Region 1 (Portland Metro Area) and ITS have installed over 40 miles of fiber optic cable throughout the region in partnerships with the City of Portland, TriMet, the Portland DOT and the Washington DOT. These partners have come together to form the Cooperative Telecommunications Infrastructure Committee, which keeps track of all the fiber installed in the Portland/Beaverton/Gresham areas and coordinates the sharing of facilities for transportation applications and needs.

An OC48 SONET network has been built within the greater Portland Area to help reduce communication costs of projects and network connections between remote ODOT offices. Four wireless sites have been installed on Highway 26 utilizing the SONET network. A connection at the TriMet Sunset Station allows several offices to be connected either directly by fiber or by Aironet wireless. There is also a project to create an additional high bandwidth route via I-205 and I-5, which is currently in the design phase. ITS is also installing fiber cable along Highway 26 from Portland to Hillsboro.

ODOT Region 1 Headquarters has optic fiber that runs south from the Interstate Bridge along Interstate 5 to the South Wilsonville off ramp with a spur from the Rose Quarter across the Steel Bridge to Region 1 headquarters. Region 1 ITS also has fiber that runs from Government Island along I205 to the I5/I205 Intersection and conduit that runs to the Barlow PM Office. ODOT would like to install fiber to Barlow PM and create a Gigabit network connection.

Another recently started project is the Terwilliger Curves/I-5 wireless network. ODOT is working with EZ Wireless of Hermiston to install wireless communications along the I-5 Corridor to provide full time communications to their Comet (Incident Response) Vehicles. Wireless cameras will be mounted on the vehicles for added security and the network will also become a test site for other ITS devices

ODOT is partnering with Higher Education to obtain access to an OC3 network from Salem to the Pittock Building in Portland. This connection will increase bandwidth from the 100 Mbps MPLS DAS Connection to a 155 Mbps connection and also reduce costs. ODOT is partnering with WashDOT on a GigE network connection via the Interstate Bridge. Another GigE network has been designed and will be installed for the Regional Transport Committee to help with future transportation communication needs for such projects as the Transport Advanced Traveler Information Implementation project.

ODOT is using the Burns Fiber network ISB is installing to establish an MPLS connection to the Region 4 Headquarters and plans to use the Bend Cable network to reach other remote sites and has identified additional fiber paths that are available for use to create network redundancy.

ODOT is partnering with Lane Consortium of Governments, DAS and ITS on an OC48 SONET network and plans to lease 4 dark optical fibers. Funds for this lease were realized by partnering with DAS giving them 40% of the bandwidth. Remote sites in Jefferson, Albany, Junction City and Halsey will also use this for connection. This will create multiple networks between Eugene and Salem and will help provide a redundant path for the Digital Microwave Upgrade being envisioned. ODOT is also working to establish a high bandwidth connection to Oregon State University and the Corvallis PM Office and connect to the Salem to Eugene OC48.

Another partnering opportunity for ODOT is to work with ITS and the Lane Council of Governments to create a redundant path from Roseburg to Salem via ODOT's OC48 SONET network. The Roseburg, Coos Bay, Florence fiber loop also presents for the

possibility of additional bandwidth between Florence and Depoe Bay. By partnering with the local communities, a connection to an existing network along Hwy 101 may be realized.

ODOT is working with NoaNet of Washington on a bid for a redundant fiber path from the Pittock Building in Portland to Hermiston. This would also create a spur to Pendleton and LaGrande and operate at either 100Mbps or GigE depending on needs. The network would also create communication connections at Troutdale, Parkdale, Hood River, The Dalles, and Rufus.

Dennis also noted the State of Oregon's ongoing Computing and Networking Infrastructure Consolidation (CNIC) Initiative. He is not sure of all the network implications that may result from this project. He will be working with Mark Reyer, the Data Center Administrator on these questions.

The end result of all these many projects and partnerships with LCOG, ITS, NoaNet, 360, OSU, University of Oregon, local electric companies and local Cable companies is to provide increased amounts of manageable bandwidth, multiple networks on common fibers, and increased control. The benefits produced are lower communications costs, ability to support more powerful applications, safer highways and more informed citizens.

Cathy Britain asked if the Terwilliger Curves project was for fixed location video. Dennis replied that the video application is mobile for ODOT's incident response Comet vehicles. There is a rest stop in the Boardman area that uses a fixed location video camera connecting via the EZ Wireless network in that area.

Art Hill asked if there were Homeland Security programs that could be utilized to fund these projects? Dennis indicated that there are funds available, he is aware of a US Coast Guard project to develop video surveillance capabilities along the Columbia River. Art asked if it the ORTCC might play a coordination role in connecting various agencies and parties around the state with Homeland Security Department funding? Dennis responded that ORTCC might do that, but he does not know how that might work in the future. It would be helpful if the many different Oregon interest groups could work together for mutual benefit. Partnering can be very effective. Ed Parker observed that it would be very valuable to have a working relationship with ODOT relative to the many ongoing telecommunications projects and issues. Dennis agreed that it would be useful for all Oregon state agencies, councils, and commissions to coordinate their efforts, share information, and work together where possible. He cited the Oregon State Unified Network (OSUN) as a past project that worked to achieve this kind of collaboration.

Presentation

John Irwin welcomed Keith Grunberg of Charter Communications for a presentation on Charter Business Networks and the growing availability of data communications services delivered through the cable TV networks. Keith noted that Charter Communications has a large service area in Oregon, which includes approximately 95% of the Coast and areas

of Southern Oregon. Cable networks have the ability to transmit voice, video and data at high speeds, and are platforms for delivering these services not only to homes, but also to businesses. Charter is delivering advanced services through its broadband infrastructure.

Charter Business Network services include single site Internet services offering Internet access and hosting services from coax to fiber speeds. Multi-site services include Wide Area Network services offering high-speed connectivity between multiple business sites, Virtual Private Network services offering secure connections between multiple business sites (Guardnet), data back-up services for off site storage of critical files, wireless Line Extension – point to point or multi point, and hospitality services –VOD and wireless.

Charter Business Networks is also providing these services as well as Transparent Local Area Network Services (TLS) at speeds of 10, 100, and 1000 Megabits per second with fiber facilities to the customer location. Charter provides fiber network facilities and high-speed services to Rogue Community College and Clatsop Community College including Gigabit Ethernet with 5 Mbps symmetrical Internet access. Charter is providing fiber to the business as the next generation of its network architecture.

Traditional cable networks have a tree and branch design. Charter is working to deploy fiber facilities further into its distribution networks toward the end-user in branch and ring configurations for greater network capacity and efficiency.

Brant Wolf asked how Charter decides where to place its fiber. Do they follow the “if you build it they will come” approach? Keith replied that they place fiber when they have a customer that wants service. For example, Charter is currently deploying the “Southern Oregon Medical Network,” a project that Charter won in response to an RFP issued by a consortium of the Asante Health System, Providence Medical Center, Merle West Medical Center, and several clinics. Charter evaluates opportunities on a case-by-case basis looking for each build to be an independent business case.

Keith noted that Salem Keizer Schools is another example of a multi-location customer with a cable company fiber network providing 1 Gbps network access to all schools. A cable company fiber network also services Silverton Schools.

Through the use of Coarse Wave Division Multiplexing (CWDM) technology Charter can offer high bandwidth services such as Gigabit Ethernet, SONET, and data storage solutions. If a customer has the need for more than 100 Mbps, charter can allocate an entire wavelength.

Brant asked if Charter serves Bandon. Keith replied yes, however, they do not have cable modem services available in that area. John Irwin asked about plans for Port Orford. Keith replied that Port Orford is in the same position as Bandon. Network upgrades may be possible in a 2006-07 time frame but that is uncertain. Chris Tamarin asked about Roseburg, and Keith indicated that cable modem services are now available in Roseburg. Art Hill asked about Pendleton. Keith replied that service is available in Pendleton and that they are working to tie Pendleton into their backbone.

Ed Parker thanked Keith for Charter’s participation with CoastNet and its private sector partner in the link between Newport and Lincoln City and expressed appreciation for Charter’s investment in fiber and advanced services in Oregon communities.

Cathy Britain asked if Charter offers hospitality services and if so, have they been extended to hospitals and assisted living facilities. Keith replied that it has not been, but this may be possible.

John Irwin asked about network route diversity. Keith noted that route diversity is a challenge on the coast, which is a service territory 300 miles long and about 4 miles wide. Facility redundancy is often in the same sheath or in a different cable in the same cable run. Route diversity is an objective for the future.

Jim Rose thanked Charter for the work they have done with OPEN and ESDs.

John Irwin and Ed Parker asked about uplink bandwidth. Keith said that Charter is working on Data over Cable Service Interface Specification 2 (DOCSIS2) standards and the cable industry is working on DOCSIS3 which may support up to 100 Mbps on the cable network in about three years. Currently cable modem service provides 300 Kbps upstream. Business grade services provides up to 1Mbps upstream. Services delivered by fiber provide symmetrical transmission speeds.

Keith added that he is a member of the Society of Telecommunications Engineers, an organization for all cable operators nationwide. It serves as a standards not-for-profit organization for the industry and works closely with the American National Standards Institute (ANSI).

Presentation

John Irwin reported that Greg Theis of Clearwire was unable to attend as scheduled. John noted that Clearwire is a new service provider entering Oregon this year to serve the Medford, Roseburg, and Eugene areas.

Committee Reports:

Legislative Committee Report

Cathy Britain reviewed the current status of several of the Bills introduced by and being followed the Council.

Bill Number	Description	Status
SB 11	Increases annual cap on costs of telecommunications facilities that may be certified for advanced telecommunications facility income tax credit.	Stalled in Senate Revenue Committee

SB 12 Pre-empted by companion bill HB 2234	Increases number of enterprise zones that may be designated for electronic commerce from four to ten.	HB 2234D Passed House, Passed Senate, and is going to the Governor for signature
SB 13-B	Extends sunset on law requiring annual report by Public Utility Commission to Governor and Legislative Assembly on various matters relating to telecommunications industry.	Governor signed 7/7/05
SB 14	Allows moneys generated by universal service surcharge to be used to ensure that broadband services are available at reasonable and affordable rate.	No support – Dead
SB 15 –A	Continuation of the Council until 2010	Governor signed 7/11/05
SB 16-A	Changes dispersal trigger on School Technology Account created by SB 622	Stalled in Senate Budget Committee
SB 17	Creates a taskforce on Telecommunications Law revision	Work Session scheduled for 7/29/05
SB 541	Creates a taskforce on electronic medical records	Stalled in House Budget Committee
SB 794	Establishes state-wide EAS	No support – Dead. There will be an Oregon PUC state-wide EAS workshop on 8/3/05
SB 831	Removes requirement for separate designation of electronic enterprise zone for tax credit and property tax option for business engaged in or preparing to engage in electronic commerce in enterprise zone.	Dead- some of provisions contained in HB 2234
SB 878	Requires Public Utility Commission to exempt certain telecommunications services and products of telecommunications utility from regulation under certain circumstances.	Dead – no support
SCR 7	Recognizing community teamwork for health care education initiatives.	Enrolled
HB 2175	Revises process for approval of financing for certain economic development projects.	Dead – no action

HB 2445	Imposes requirements on local governments with respect to provision of telecommunications service by local government. Provides exceptions.	Dead – no support
HB 3026	Evaluate the impact a telecommunications infrastructure project or a fiber optic infrastructure project determined eligible for revenue bond financing under ORS 285B.467 to 285B.479 would have on private companies that provide telecommunications or fiber optic services to the public.	No Hearings
HB 3353	Prohibits local government from imposing fees or taxes, except privilege tax, upon telecommunications providers unless authorized by statute. Establishes minimum duration of contract between municipality and telecommunications provider.	Reissued as SB 162

Cathy reported that funding for the Telecommunications Coordinator position at OECDD is currently in both the House and Senate versions of the Budget and is also supported by the Governor’s office.

Pam Berrian recommended that ORTCC also monitor developing legislation at the national level dealing with municipal pre-emption in providing telecommunications services and nationalizing local government cable franchising authority governing rights-of-way.

Cathy indicated that the legislative committee will continue to monitor and track these and other telecommunications related Bills.

Conference Planning Committee Report

Chris Tamarin reported on planning activities for the 2005 Oregon Connections Telecommunications Conference scheduled for Thursday, September 29 and Friday

September 30, 2005, at the Mt. Bachelor Village in Bend. The program is posted on the conference website. The keynote speaker will be Ron Resnick, President and Chairman of the WiMAX Forum and Director of Marketing for the Broadband Wireless Division at Intel Corporation. For more information, see the conference web site at www.cotel.org/conf2005.htm.

Oregon Gateway Project Report

Ed Parker and Chris Tamarin reported on activities regarding the development of an Oregon gateway plan as recommended by the Council to the Oregon Economic and Community Development Department (OECDD). The proposal is to explore the need for and feasibility of establishing a network exchange or “Oregon Gateway” in Oregon with North America’s best and most direct network connections to the Pacific Rim. The first step in the process has been to develop a “working” concept paper to promote and communicate the concept of an Oregon Gateway, provide reference information and serve as a basis for discussion. Some initial meetings have been held with IT experts in the Oregon University System and NWAX to refine the concept and develop a proposal. The draft concept paper will eventually be posted on the ORTCC website.

Reports from Consortia:

No Reports

New Business

Suggested Presenters and / or topics: Suggested presentation topics for the next meeting included proposed federal legislation, the Universal Service Fund, and broadband over power lines.

Meeting Schedule:

The next meeting of ORTCC is scheduled on Wednesday, September 28 at the Oregon State University Cascades Campus in Bend to coincide with the 2005 Oregon Connections Telecommunications Conference. There will be no meeting in August. John Irwin adjourned the Oregon Telecommunications Coordinating Council meeting at 11:45 AM.

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