DEPARTMENT OF ADMINISTRATIVE SERVICES
BUREAU OF ENTERPRISE SYSTEMS AND TECHNOLOGY
Legislative Office Building Room 1C
210 Capitol Avenue, Hartford, CT 06106
1:00 – 3:00 PM

M I N U T E S

September 9, 2019

Commission Members in Attendance

Raymond, Mark – Commission Chair and Chief Information Officer, DAS-BEST

Mundrane, Michael — Commission Vice Chair and Vice President and Chief Information Officer, University of Connecticut

Bailie, Colleen — Director, West Haven Public Library

Caruso, Nick — Senior Staff Associate for Field Service, Connecticut Association of Boards of Education (CABE)

Casey, Doug – Executive Director, CT Commission for Educational Technology

Dillon, Tom — Founder, Flagship Networks

Dumais, Charles — Executive Director, Cooperative Educational Services (C.E.S.) (Office of the Governor)

Elsesser, John — Town Manager, Town of Coventry (CT Council of Small Towns)

Feinmark, Russell — Connecticut General Assembly

Fortuna, Carl — First Selectman, Town of Old Saybrook (Minority Leader of the Senate)

Gopalakrishnan, Ajit — Chief Performance Officer, State Department of Education

Minikowski, Andrew — Staff Attorney, Office of Consumer Counsel

Shanley, Scott — General Manager, Town of Manchester (CT Conference of Municipalities)

Shellard, Susan — Director of Administration, Department of Economic and Community Development (DECD)

Stephanou, Steve — Deputy General Manager, Town of Manchester (CT Conference of Municipalities)

Wiggin, Kendall — State Librarian, Connecticut State Library

Zak, Scott — Senior Director of Learning Technologies, Board of Regents

Others in Attendance

Giammarco, Peter — Verizon Wireless

Kocsondy, Ryan — Director, Connecticut Education Network (CEN)

Racamato, Victoria — Assistant to the State Chief Information Officer

Video Archive

A digital video recording of the meeting was available at the time of this writing on the Connecticut Network, http://ct-n.com/ctnplayer.asp?odID=16671.

Welcome

Commission Chair Mark Raymond greeted members and others in attendance and called the meeting to order at 1:00 PM. He began by acknowledging the substantial contributions of Bill Vallee, former Commission member representing the Office of Consumer Counsel (OCC), in his advocacy for broadband availability for all citizens. Mark welcomed OCC Staff Attorney Andrew Minikowski to the Commission and shared some of his background in advocating for consumer interests relating to public utilities operating in the state. Next, he welcomed Josh Geballe, Commissioner of the Department of Administrative Services (DAS). Mark noted that the Commission falls under DAS and thanked the Commissioner for joining the meeting. Commission member Scott Shanley introduced Steve Stephanou, Deputy General Manager for the Town of Manchester. Scott noted that Steve will replace him as the representative appointed by the Connecticut Council of Municipalities (CCM).

Mark noted that Doug now serves as Connecticut's representative to the State Educational Technology Directors Association (SETDA). In June, the members of that organization elected him to a three-year term as a member of its board. Connecticut has a strong voice for educational technology through Doug's role in SETDA, and Mark encouraged Commission members to bring topics of interest and concern to Doug to share with this national advocacy group.

Approval of Meeting Minutes

Mark entertained a motion to approve the minutes from the Commission's June 3 meeting, sent previously and available in hard copy for in-person attendees as well as on the Commission's Web site. Scott Shanley made the motion, with Chip Dumais offering a second. Mark welcomed discussion or changes regarding the minutes. With none offered, the Commission members unanimously approved the minutes, with Ken Wiggin and Scott Shanley abstaining, given that they were not present at the June 3 meeting.

Report of the Executive Director

Mark turned the meeting over to Doug to share the Executive Director's Report, with progress updates on the Commission's Strategic Goals and Plan.

- **GoOpenCT (OER) Campaign**

  The Commission has made Connecticut a GoOpen state, embracing the use of open education resources (OER) to afford equitable access to high-quality, free, and openly licensed learning materials. Doug noted the launch in May of GoOpenCT.org, which provides testimonials from educational leaders across the state on the benefits of using open materials. Through e-mail and social media. Doug has promoted the site, which includes a number of resources to support OER development as well as an online survey designed to capture educators' attitudes toward, use of, and development of OER.

  He shared the preliminary results of that survey, with responses from an even mix of individuals from K – 12 and higher education as well as those familiar with and new to OER concepts and use. The top concerns that respondents shared were assurances of instructional material quality as well as professional development around topics such as copyright and intellectual property. Many expressed interest in having a shared technology platform for finding, curating, and sharing open materials already in use in classrooms across the state.

  The Commission's work, informed by a steering committee of OER specialists that Doug has convened, aligns with the efforts of the newly created OER Coordinating Council. Under the direction of the Office of Higher Education, the Coordinating Council came out of PA 19-117 (implementer bill) to design and oversee a grant program for the use of OER in higher education. Michael Mundrane noted the use of materials protected under copyright and not technically "open" but that professors employ at no cost, under narrow fair use provisions.

- **Advisory Commission on Intergovernmental Relations (ACIR)**

  On August 19, Commissioner Geballe, Mark, and Doug were invited to attend a meeting of the ACIR to discuss efficiencies and delivery of services. At that meeting, Doug shared the Commission's work around OER, privacy and security, software licensing, digital equity, E-rate maximization, and CEN. All of these initiatives and programs speak to ways in which the Commission continues to work across a diversity of stakeholders to introduce efficiencies and cost savings in the equitable provision of digital learning opportunities. Scott Shanley thanked all three for attending the ACIR meeting and shared positive feedback from other members of

that group. They appreciated learning more about how State agencies have enabled service delivery through current and planned technology initiatives.

- **Advocacy and Endorsements**

  Doug noted that between the Commission's quarterly meetings, he receives requests from outside organizations for endorsements of initiatives that align with the Commission's vision and mission. In addition, opportunities will arise to provide comments to State and federal agencies that support the effective use of technology in teaching and learning. He shared brief updates on several activities since the June 3 meeting:

  o July 26: The Commission filed comments opposing the Federal Communications Commission (FCC) notice of proposed rulemaking (NPRM) on capping and combining the E-rate and Rural Broadband programs (full filing comments posted at https://www.fcc.gov/ecfs/filing/10729171768060). The two programs serve different purposes and constituents, so combining them would pit them against each other. Introducing caps does not address the underlying issue of underutilization that results from the highly complex nature of the E-rate program.

  o August 7: The Commission provided an endorsement of ReadyCT (formerly Connecticut Center for Education Reform) to develop, in partnership with Newtown Public Schools, a model computer science curriculum that all districts in the state could leverage.

  o August 16: The Commission endorsed the Center for Applied Special Technology (CAST) to continue operating the National Center for Accessible Educational Materials (AEM Center), which provides Connecticut's districts and Department of Education with high-quality support, research, and training resources to help make learning opportunities and materials accessible to all students.

  o August 30: In response to the Public Utilities Regulatory Authority (PURA) request, the Commission filed comments on changes to the eligibility criteria for the Public, Educational, and Governmental Programming and Educational Technology Investment Account (PEGPETIA) grant program. The comments argued against the proposed widening of eligibility to "individuals," given the design of the program to support educational purposes best addressed by organizations and institutions dedicated to teaching and learning (e.g., school districts, libraries, and universities). The Connecticut State Library, let by Commission member Ken Wiggin, and Discovery Video, under Commission member Rich Mavrogeanes, also

submitted comments opposing these proposed changes to eligibility. PURA has posted all comments at http://www.dpuc.state.ct.us/dockcurr.nsf/(Web+Main+View/All+Dockets)?OpenView&StartKey=07-10-11RE01.

John Elsesser stated that the State has swept the PEGPETIA fund for the last five to seven years. His understanding is that $5M was recently appropriated, but that the program would be eliminated over the next two years. His town of Coventry has benefitted from the program, which has paid for equipment to broadcast Coventry's board of education and municipal meetings and hearings. As with other towns, Coventry does not have the funds to purchase much-needed high-definition video equipment.

- **Data Privacy**

Doug shared updates on the Commission's ongoing work to support school districts and educational technology companies in complying with state statute. He provided a brief background on Public Act 18-125, which allows districts a narrow exception to the student data privacy law to support individualized education plans (IEPs) and 504 plan accommodations. The law requires districts to report their use of the exemption to the Commission. Doug is in the process of reviewing the submitted reports and will post those on the Connecticut Open Data portal, Data.CT.gov.

In other efforts taking place since the last Commission meeting, Doug worked with DAS Senior Policy Advisor Michael Barrera and Adobe to bring about that company's compliance with the Connecticut data privacy requirements. This announcement follows months of discussions and directly benefits districts statewide, which depend on Adobe's products to teach graphic design and programming courses. He is engaged in compliance discussions with several other educational technology companies to clear the way for schools to use their services as well.

- **CEN Highlighted in State Educational Technology Directors Association (SETDA) Broadband Study**

During the winter and spring of 2019, SETDA developed a landscape review of state education network policies, governance, and leadership structures, *State K – 12 Broadband Leadership: Driving Connectivity, Access and Student Success*. As an author of this report, Doug worked with SETDA to develop a case study on CEN, with direct input from Ryan. As part of the report's release, SETDA hosted a Webinar on April 9 that featured Ryan as a guest speaker and highlighted the innovative uses of CEN connections in Farmington and Norwalk public schools.

CEN Updates

Mark turned the floor over to Ryan to provide an overview of his quarterly updates, posted to the [Commission's Web site](). Ryan began by noting the revised format of his report to reflect the structure of CEN's strategic plan, adopted this spring.

- **Provide Value**

    Ryan noted the significant cost avoidance provided when comparing CEN services at current rates versus the same services offered in neighboring states (New York, Massachusetts, and Rhode Island). The Network's costs represent between a 19 and 138 percent savings when compared with fees for the same services in those states. Additionally, calculations for distributed denial of service (DDoS) mitigation, included with CEN circuits, reflect a savings of $10 – 18 million annually, when compared with open-market costs for these services. This estimate does not even account for the indirect costs of lost productivity when DDoS attacks occur. The Connecticut Library Consortium buildouts have also resulted in nearly $1.4M in savings over the past four years. Ryan noted the influx of testimonials from libraries —especially those in more rural areas — of how broadband has enabled them to offer programs they could not have provided to constituents before connecting to fiber.

- **Ignite Innovation**

    Ryan briefly underscored the availability of new and expanded services from CEN, including [Managed Firewall]() and [Cloud Connect](), and encouraged members to provide feedback on services they need at [https://bit.ly/CENSurvey19]().

- **Foster Collaboration**

    The 2020 CEN Conference has expanded to a two-day event, May 7 – 8, with longer form workshops taking place the first day, and the second day featuring the same hour-long sessions as in previous years. Ryan acknowledged the substantial contributions of the three CEN advisory council chairs and members, especially Rebecca Osleger of Suffield and Karen Warren of Wesleyan in the Engagement Advisory Council. Finally, Ryan shard that he was elected as the Vice Chair of the CEO Roundtable of [the Quilt](), a national affinity group comprised of leaders from 40 research and education networks.

- **Promote Advocacy**

    The CEN team continues to work with Education Superhighway to ensure accuracy of the data that the organization publishes for Connecticut schools in its annual [State of the States]() report. District-by-district review of E-rate connectivity data has

helped to clarify gaps between what those national datasets indicate and actual speeds provided by CEN. For the fifth year in a row, CEN will be distinguished as a Connectivity Leader by Education Superhighway. The Network provides more than seven times the connectivity per student as the national benchmark of 1 Mbps. Education Superhighway also acknowledged CEN for affordability of its services and for connecting all districts in the state.

In August, CEN released a [statement on network security](#) to its members, given the increased frequency and media coverage of cyber attacks on schools, libraries, and universities. The notice summarizes the mitigation services that CEN provides, how it works with partners to address incidents, and the State agencies —the Connecticut Intelligence Center and the Cyber Crimes Investigation Unit — that members should contact in case of an incident.

- **Enhance Core Services**

  Ryan provided updates on staffing, acknowledging the contributions of Melanie Raczkowski, who has moved to a new position at UCONN, and welcoming network technician Brad Tudisca. The Network is currently interviewing for a Business Services Supervisor and is launching a search for a Program Administrator.

  Ryan thanked Mark and Commissioner Geballe for supporting a $1.5M authorization at the June 26, 2019 Bond Commission meeting to pay for distribution layer hardware that has reached end of life or support. Michael Mundrane reiterated the key role that the State has played since CEN's inception by providing support for capital upgrades, which contain member costs. Ryan also shared the outcome of successful negotiations with Crown Castle resulting in the State's ability to renew fiber maintenance without the need for re-purchase under these indefeasible right of use (IRU) agreements. This agreement saves an estimated $50K per mile of the combined 2,600 miles of fiber statewide between CEN and the Public Safety Network.

  John Elsesser returned to the issue of DDoS and other attacks and asked what role CEN could take in assisting towns in the area of cybersecurity. He noted that bond reviews by groups such as Standard & Poor's request information about towns' cybersecurity plans. He felt it would make sense to design statewide solutions to common cybersecurity problems rather than letting towns source support and services independently. Ryan noted that both the CEN Services and the Technical Advisory Councils are looking at common needs and potential solutions that CEN can provide, such as offsite storage. He cautioned that the Network does not have the capacity currently to provide "higher touch" services that would require assistance from outside partners.

Mark welcomed the question and noted that the State runs a monthly cybersecurity meeting through the Department of Emergency Services and Public Protection, addressing current threats and matters of situational awareness. Those meetings have acknowledged common municipal needs and have provided some assistance for cybersecurity training. He also referred to the State's Cybersecurity Strategy and Cybersecurity Action Plan, posted to the Connecticut Cybersecurity Resource page, which have identified municipalities as targets.

Michael observed that the State has contributed to the problem by focusing on connectivity, but security requires compartmentalization to contain threats. People that use networks are the weakest target, so he encouraged a continued focus on staff training to minimize the risks of spear phishing and other attacks that capitalize on behavioral vulnerabilities. From user to user, institution to institution, there exists a wide range of cyber security maturity and practices.

Scott Shanley expressed a need to optimize the use of the Network, a great asset to Connecticut's educational institutions and municipalities. Ken Wiggin felt that we do make good use of the Network but could do a better job in "telling the stories" of its impact. Ryan agreed and referred to the SETDA case study on Connecticut, which highlights Farmington and Norwalk Public Schools' innovative use of broadband provided by CEN. Mark agreed and noted that advocacy should always include stories and data and encouraged Commission members to share their own stories with the group and to relay those successes back to the organizations that appointed them to the Commission.

Digital Learning Advisory Council Report

Nick Caruso began the report of the Digital Learning Advisory Council meeting of August 14 (minutes on Commission Web site, CT.gov/CTEdTech) by reinforcing the role of that group to review and advise the full Commission on matters requiring action to ensure the effective use of technology in learning. During that meeting, the group — representing a wide array of interests and expertise across K – 12, higher education, libraries, and towns — provided comments on the preliminary results of the statewide OER survey. Members of the Council expressed concern over the appropriate use of OER, concerning copyright privileges. They also discussed a desire to ensure quality and alignment with standards of any shared materials. This input provided helpful guidance to ground the OER work in practical terms and help ensure its value to students and teachers. Nick also mentioned the need for common terminology in defining "open" learning materials.

The August Digital Learning Advisory Council meeting also included a discussion of how 5G mobile technology may influence teaching and learning. Nick commented that,

given the efficiency of carriers' serving dense population areas first, students in urban communities would likely see coverage before those living in the suburbs or rural areas. The group provided a mixture of optimism about 5G's potential benefits along with concerns over its rollout timeline and reach. Nick encouraged Advisory Council and Commission members to focus on defining the educational community's technology needs, rather than exactly how private sector partners should achieve those ends.

Referring to a longer discussion about 5G among Commission and Advisory Council members that took place July 18, John Elsesser expressed that he left that meeting knowing more and feeling worse about the likelihood of 5G to support widespread digital equity. He called for efficiencies in commercial rollouts and encouraged the Commission to share concerns with the Council on 5G Technology, created out of Public Act 19-163. Mark agreed that the Commission's role does include making recommendations to groups such as the Council on 5G if there is consensus among members. He called on the Infrastructure Advisory Council to address this topic in its next meeting.

Ken noted that the rollout of 5G cellular technology, with faster speeds, greater capacity per square mile, and other benefits, raises again the importance of digital equity, ensuring learners have the skills to use technology effectively. Michael noted the lack of coordination among 5G providers and echoed Ken's concerns. He stated that 5G's technical benefits would not inherently address these inequities and could even exacerbate them. Nick expressed his concerns over cellular providers continuing to lobby for control over provision, as municipal leaders face significant limits in using new technologies to connect citizens through town networks. Doug acknowledged Jonathan Costa of EdAdvance, a member of the Digital Learning Advisory Council, for initially raising the topic of 5G in education for consideration. Members of the advisory councils play a critical role in the Commission's work in raising such issues, and he thanked the advisory council chairs and members for their service.

Nick concluded his report by touching on the opportunities that exist around shared services among districts and towns. Looking across institutions to appreciate economies of scale in procurement and service provision will remain an ongoing topic in the Digital Learning Advisory Council meetings. He hopes to bring specific action items to the Commission for consideration.

Infrastructure Advisory Council Report

Tom Dillon, Chair of the Infrastructure Advisory Council, shared highlights from the group's meeting on August 7 (minutes posted on the Commission's site) and a subsequent planning discussion around the Eduroam initiative. Tom provided background on Eduroam, a technical solution that allows students and faculty to log

into networks across the world using the user name and password from their own, local institution. This system has served the higher education community well for years. The Infrastructure Advisory Council is now pursuing pilot sites to extend this program to local libraries and districts to get students online outside of school.

Following the council's meeting, on August 22 Fred Kass of Trinity College, Charisse Snipes of Metro-Hartford Information Systems (MHIS), Rick Widlansky of Libraries Online (LiON), and Ryan Kocsondy of CEN met to discuss a pilot in Hartford. Sabina Sitaru, former CIO of MHIS, helped facilitate the meeting, which resulted in commitments to enable students from the [Hartford Magnet Trinity College Academy](#) to access the Internet via Eduroam on Trinity's campus as well as through Hartford Public Library locations. Costs for the initiative should remain low, limited to minimal Eduroam licensing charges, and the group addressed several technical issues that could otherwise challenge the success of the project. The attendees shared a strong enthusiasm for expanding the pilot to all public schools and libraries, given MHIS's oversight of technology in those locations.

Tom pointed out the economic and workforce development advantages of addressing the digital divide through innovative programs such as Eduroam. He welcomed leaders in other communities to learn more about the Commission's work in this area. Mark thanked Tom for his report and solicited questions and feedback from the other members. John Elsesser echoed Tom's excitement and suggested that the Hartford Foundation for Public Giving would likely have interest in supporting this initiative, given the organization's past support for programs that address the digital divide.

Resolution on the Role of Libraries to Support Digital Equity

Following discussions from previous Commission meetings on the role of libraries in addressing the digital divide, the group considered a formal resolution on the topic. As the lead author of the resolution, Michael Mundrane noted that several members had offered suggested changes to the draft resolution, which Doug had consolidated into a form that the Commission could consider adopting. Mark thanked Michael for his work in championing this effort and summarized the [core resolution](#) to include work by the Commission, the Connecticut State Library, and the Connecticut Library Association "to develop a comprehensive, statewide initiative to provide public libraries with equipment, software, and infrastructure to leverage their place in the community, their expertise, and their mission as a key means to facilitate access to digital capabilities and education in digital literacy to advance digital citizenship in communities throughout Connecticut." Mark entertained a motion to adopt the resolution, with Ken providing the first and Colleen Bailie the second. The resolution passed unanimously with no abstentions. Mark thanked those who worked on the document and pointed to future efforts to develop the comprehensive plan that the resolution defines.

Legislation Governing the Commission

In preparation for the next (short) legislative session, Mark introduced the topic of potential changes to the statute that governs the Commission (CGS § 61a). Following a brief discussion at the last quarterly meeting (June 2019) and an invitation for suggestions, Chip Dumais had expressed an interest in revising the statute to include more representation by the K – 12 community. Mark noted that past versions of the Commission statute did include named teacher and superintendent members. He opened the topic again for discussion, noting that proposing changes introduces the risk of statutory revisions that may not strengthen the Commission's overall mission and standing.

Nick welcomed the addition of municipal members to the current version of the statute and recommended the addition of superintendent and teacher representatives. This potential change had come up during discussions of a legislative working group among Commission members in 2017. Ken agreed, noting that teachers — one of largest beneficiaries of the Commission's work — have no named representatives. Colleen offered herself as an example of a constituent representative, underscoring the importance of her current role as a librarian to speak for the interests of librarians statewide.

In terms of timing and likelihood of adoption, John Elsesser noted that agencies short-list such requests, and that any proposed changes would need to go through DAS for consideration. Michael expressed hope that by crafting narrow and specific statutory revisions, the Commission might have a strong likelihood of having the Legislature adopt them, given the restricted timeframe of the upcoming short session. Ken felt that regardless of the likelihood of adoption, the Commission should state its desire to add named teacher and superintendent members. Mark thanked everyone for their comments and summarized the next steps to include the formation of a working group to craft language for increasing teacher representation, then a special meeting of the Commission to consider and possibly vote on such recommendations. He called for a motion to adopt these next steps, which Michael offered and Nick seconded. The Commission unanimously approved this plan, with no abstentions.

20th Anniversary

In light of the 20th anniversary of both the Commission and CEN, Doug announced that he and Ryan would be developing an awareness campaign to launch in December. He called for suggestions of individuals with compelling testimonies and stories to share

about the Commission and Network's impact. Anyone with ideas can contact Doug by phone or e-mail.

Public Comment

With no members of the public offering comment, Commissioner Geballe did provide a few remarks to the Commission. Since taking office, he has learned a lot about the Commission and Network and thanked the members for their service. The Commissioner noted that in the midst of healthy conversations about ways to work across agencies and the private sector to extend service delivery and appreciate cost savings, the Commission has been achieving those ends in a tangible way for many years. He expressed his gratitude for the dedication and commitment of the members.

Scheduled 2019 Meeting Date

The Commission will convene its final scheduled meeting of 2019 on December 2.

Adjournment

Mark entertained a motion to adjourn, with Nick offering the first and Scott Shanley a second. The motion passed unanimously with no abstentions. The meeting adjourned at approximately 3:00 PM.

Respectfully submitted,

Douglas Casey
Executive Director
Connecticut Commission for Educational Technology
55 Farmington Avenue
Hartford, CT 06105
(860) 622-2224
Doug.Casey@ct.gov
www.ct.gov/ctedtech