

Categories have been arranged for alignment with CEN's 2019-2024 [Strategic Plan](#).

1. Provide Value

- Filtering & 1:1 Support
 - Addition of iBoss cloud to Core licensing supporting 1:1, at home CIPA compliance, and students at risk module.
 - Second filtering contract near complete. Aggregation model where CEN will purchase and redistribute licenses and cost to level set pricing across all districts for net savings.
- CT Library Fiber Consortium Project
 - Project to connect libraries through federal E-rate and matching State Library bond funds.
 - Many project sites connect underserved communities where connectivity options have remained relatively unchanged for decades. This project provides high quality service at reasonable costs to bridge gaps in the digital divide and help libraries continue to thrive as community assets.
 - Phase 5: 18 sites have library/town approval to move forward.
 - The current project across all phases (1–5) will bring total fiber-connected libraries to 168 (including 47 branches), representing 70% of all 239 libraries statewide.
 - Total savings on previous 4 funding years is \$1,392,000 (FCC/USAC E-Rate dark finder IRU savings).
 - Awarded Phase 6 on January 14, 2020 targeting remaining eligible libraries. 2 committed.
- PEGPETIA Grant (http://www.ct.gov/pura/cwp/view.asp?Q=490944&puraNav_GID=1702)
 - CEN awarded \$64,417 towards video conferencing head end equipment; roughly 1/3 the total requested amount.
 - Amount requested for funding based on reduced scope and CEN will bridge the remaining funds to purchase the system.
 - The intent is to revive current offering for video conferencing for all on-net members.
 - Three (3) community anchors have accepted awards for fiber builds to connect to CEN under the Educational Technology Initiative organization type.
- New Members/Customers since the last Commission meeting
 - Town of Fairfield (demarcation move to PD building)
 - Stonington Free Library (Ph5)
 - Town of Washington (ISP for town center WiFi Project)
 - Acton Public Library – Old Saybrook (Ph5)
 - East Hampton Public library (Ph5)
 - Town of Winchester
 - Stonington Police Dept.
 - Mystic & Noank Library (Ph5)
 - Quinebaug Valley Emergency Communications, Inc.

2. Ignite Innovation

- Firewall Service <https://ctedunet.net/managed-firewall/>
 - Goal is to provide a high quality, high capacity, next generation firewall experience that can scale with member bandwidth growth and provide a front-line defense for our organizations.
 - Value proposition: With DDOS protection, security is an arms race, and CEN can leverage economies of scale to procure a solution larger and more feature-rich than what members may otherwise afford.
 - Two versions offered:



- Virtual firewall (vFirewall) - member managed rulesets and policies
- Managed Firewall (mFirewall) partner Managed Security Services provider managing rulesets and policies on behalf of members
- Both submitted to USAC for eligibility
- Incremental growth, 16 members committed, 4 utilizing.
- Bid on 30 additional through E-Rate form 470 process. Some require/dependent on Category 1 ISP in addition to Category 2 Firewall.
- Cloud Connect Service <https://ctedunet.net/cloud-connect/>
 - Goal is to provide connectivity to cloud providers to enable more advanced and robust services at scale to benefit member business and service needs.
 - In partnership with Internet2, no-cost transport for community anchor institutions to Amazon Web Services, Google Cloud Platform, and Microsoft Azure Express Route. 5Gbps limit
 - Since announced in April, four members committed and are in various stages of progress
- Rapid Private Interconnect (RPI) Service – New offering
 - Dedicated ports, bandwidth, and cross connects to any NEREN and/or Internet2 POP location regionally or nationally.
 - For members who require dedicated physical connections for capacity, diversity, and/or increased security.
 - Fee based model, 10Gbps connection/min commit + cross connect fees; 2 Members using.
 - Website in development.
- Eduroam <https://www.eduroam.us/>
 - Goal is to help with digital divide issues impacting students in learning areas and provide more seamless network access experience for students attending Hartford Magnet Trinity College Academy.
 - Tom Dillon helping coordinate activities as CET Infrastructure Advisory Council Chair, with CEN resource and fiscal support.
 - Pilot districts and neighboring Higher ed include: Metro Hartford Information Systems (MHIS) and Trinity College, Middletown Public Schools, Library, and Wesleyan University, New Haven Public Schools and SCSU, Stratford Public Schools.
 - Discussions with Internet2 on programmatic approach to rolling out the service across a state.
- Other services are in development and will be prioritized based on community feedback
 - With help of SMAC Chair, items categorized and prioritized
 - UConn procurement assisting with RFP development
 - Aligning initiatives with existing Uconn RFP cycle where possible to make more efficient use of time and effort

3. Foster Collaboration

- CXO Roundtable
 - Virtual meeting on May 8 of College and University CIO and CISO with focus on how we can better collaborate and communicate amongst the higher education institutions within Connecticut, as well as with regional peers amongst the NEREN network in MA, ME, NH, NY, RI, and VT.
 - Discussed challenge and preliminary lessons learned through the COVID crisis.
 - Reviewed cloud connectivity options and security enhancements to the CEN network.
- CEN Member Town Halls
 - Town halls meetings to further engage with the membership, present new options for 1:1 initiative, cloud offerings, conference update, etc.
 - Virtual Conferences held May 15 (73 Participants) & May 22 (15 Participants)



- Engagement and Development Advisory Council (EDAC)
 - Chairs: Karen Warren (Wesleyan); Rebecca Osleger (Suffield)
 - 2020 CEN Annual Conference: Oct 6-7, Hartford CT - **CANCELLED**
 - New UN-Conference program in development. <https://ctedunet.net/engagement-events/>
 - Member driven topics covered once or twice a month through Fall 2020.
 - Topics: Keeping Students Safe at home, Summer Educational Programming, Data Privacy and Contact Tracing, Remote Learning Network Recommendations.
 - Members and Supporting Vendors welcome to submit. All subject to EDAC approval.
 - CEN Cyber Corps and Mutual Aid Pact in scope development, currently on hold due to COVID-19
 - Framework for technical mutual aid & training amongst the membership.
 - Communicating and Collaborating with DESPP Region 3 where participants overlap.
 - Layered approach based on incident scale and response needed.
 - Focused on training, assessments, remediation if/when incidents happen.
 - Compliment forensic analysis efforts by public and private companies.
- Service Management Advisory Council (SMAC):
 - Chairs: Matt Ross (Farmington Public Schools), Jonathan Garbutt (SCSU).
 - Survey for additional services and prioritization complete.
 - Procurements groupings complete for RFP prioritization and development.
 - Second CIPA filtering option decided. Under contract negotiations now.
 - Service lifecycle draft complete, presenting to larger group FY21 Q1.
- Technical Advancement Advisory Council (TAAC)
 - Chairs: Kevin Ross (Plainville Public Schools and town), Tim Sheets (Yale)
 - Developing technical criteria for NextGen CEN network
 - Second CIPA filtering option decided. (collaboration with SMAC)
- Quilt
 - CEO Roundtable - Director Kocsondy is the Chair for Calendar year 2020.
 - Roundtable in-person summer meeting in Hartford is **CANCELLED** due to COVID-19.

4. Promote Advocacy

- CEN Statement on COVID-19 - March 10
 - <https://ctedunet.net/2020/03/10/cen-assistance-during-covid-19-crisis-2/>
 - <https://ctedunet.net/covid-19updates/>
- CT Association of School Board Officials (CASBO) - March 13
 - Director Kocsondy presentation on future services defined by SMAC survey and partnership approach to consortia services.
 - May present again virtually due to COVID related attendance issues
- CEN Assistance Pledge During COVID Crisis - March 18
 - <https://ctedunet.net/2020/03/18/cen-assistance-during-covid-19-crisis-2-2/>
- Spring Newsletter - April 27
 - Opening welcome here: <https://ctedunet.net/2020/04/27/from-the-director-2/>
- ACES Webinar - May 6
 - Director Kocsondy presented to ACES on new services and considerations during COVID pandemic and beyond.



5. Enhance Core Resources

- CEN Staff
 - CEN currently has 10 full-time staff members, 6 part-time student workers, and 1 volunteer (1 day /week).
 - Network Engineer 3 search failed; re-posting as a Network Engineer 2/3 to broaden the pool.
 - Financial Assistant 2 Search failed; re-posting as a Fiscal Manager 1.
- Server Infrastructure Replacement Project
 - New compute infrastructure acquired to replace ageing and save staff management time, increase capacity, lower power consumption, and reduce rack space.
 - Nutanix solution implemented and server migrations nearly complete.
- Policy Review (hold)
 - Incremental progress. Plan is to revise / update as needed, circulate to CEN Advisory councils for comment, submit to CET for the June meeting.
- Funding: \$1.5M Bond authorized & allocated to CEN
 - Monies to target the distribution layer of the network that is end of life/end of support
 - Final designs being put together for procurement towards summer acquisition of hardware.
 - Note: Federal tariff on network hardware products manufactured in China resulting in a 10-25% increase in hardware equipment costs.
- Extranet Projects
 - NEREN Collaboration (MA, ME, NH, NY, RI, VT) for increased connectivity into NYC and Boston areas as the busiest telco areas in the Northeast, increasing CEN's capability and reach.
 - Will result in more diverse options and lower commodity Internet rates, increase commercial peering to reduce costs, backhaul opportunities to Ashburn (VA) and Chicago, and peering partnerships with other Regional Optical Networks (RONs) within the research and education network space.
 - Will align a Tier 1 Carrier/Backbone Internet Service Provider and Internet2 to each of the 3 Core sites at 100Gbps handoff each.
 - Massachusetts – Boston and Cambridge
 - 2x100 Gbps link turned up in Cambridge, Ma (300 Bent Street)
 1. 3x10 Gbps peering to Mass-IX
 2. Direct peering with NEREN partners
 - 2x100 Gbps link turned up in Boston, Ma (1 Summer, Markley Building)
 1. GTT (Tier 1 Backbone Internet Provider) – 20 Gbps Commit on 100Gbps Handoff
 - New York - Manhattan -32 Avenue of the Americas
 - 2x100 Gbps connectivity online as of Feb 28, 2020
 - DE-CIX Global peering exchange, 40G commit on 100G handoff, online as of March 15
 1. 10G to Apple – April 8th
 2. 10G to Microsoft – April 27th
 - Second Internet2 link - 100G commit and handoff – online as of April 28th
 - RFP for IP transit still in progress. Reviews complete, all proposals evaluated and scored, moving to contracting with individual companies.

