

Illinois Century Network

Policy Committee Meeting Agenda

January 20, 2015
1:00 p.m.



**ILLINOIS CENTURY NETWORK
POLICY COMMITTEE
MEETING AGENDA
January 20, 2015
1:00 p.m.**

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Next Meeting
April 20, 2015
Community College Board, Springfield
James R. Thompson Center, Chicago

ILLINOIS CENTURY NETWORK

October 20, 2014 POLICY COMMITTEE MINUTES

Submitted for: Action

Summary: Distribution of the October 20, 2014 minutes for review by the Policy Committee.

Action Requested: Adoption of the October 20, 2014 minutes.

Recommended Motion: *The ICN Policy Committee adopts the October 20, 2014 minutes with any edits as noted.*

ILLINOIS CENTURY NETWORK

OCTOBER 20, 2014 POLICY COMMITTEE MINUTES

Greg Wass called the meeting to order at 1:00 PM.

Members Present (Springfield):

Lori Sorenson, Central Management Services	Todd Jorns, Illinois Community College Board
Bonnie Styles, Illinois State Museum	Kathleen Bloomberg, Illinois State Library
Brent Engelman, State Board of Education	David Antonacci, Illinois Board of Higher Education

Members Present (Springfield):

Greg Wass, Central Management Services	Sean Vinck, Office of the Governor
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Members on audio bridge:

Chet Olson, Mayor of Rochelle	
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Members absent:

Mike Dickson	Vicki DeWitt, Illinois Principals Association
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Staff and guests:

Robin Woodsome, Central Management Services	Tom Oseland, Central Management Services
Deborah Kelley, Central Management Services	Essam El-Beik, Central Management Services
Christ Balich, Office of the Governor	Judy Hessler, Central Management Services
Chima Enyia, Central Management Services	Carla Poani, AT&T

Greg Wass announced that he asked the Governor's Office of Management and Budget staff to attend to discuss the FY15 budget and rates. Due to timing, they were unable to attend. CMS staff will continue to work on the FY15 budget while preparing the FY16 budget.

Lori Sorenson announced there were a few staffing changes at Central Management Services. Kirk Mulvany left state government for a private sector job in September. Adam Ford, a senior network engineer was brought on to assist Frank Walters. Adam originally came from State Police and previously worked with the CMS LAN team.

Minutes

Greg Wass introduced the first item on the agenda, approval of the minutes from the July 21, 2014 meeting. A motion was made by Kathleen Bloomberg to accept the minutes with one change. In the second paragraph under budget, "Kathleen Bloomberg mentioned with the tight budgets, along with union mandated increases, there is no room available in the agency budgets to add another item." Kathleen wanted it to be changed to "It is an issue for agencies to add other budget items." The motion was seconded by Bonnie Styles. The motion carried.

IBOP

Lori reported the project officially closed on August 28th. NTIA is still reviewing the paperwork.

On August 1st, the Governor held an event at Illinois State University celebrating the completion of the project. Many constituents and contractors spoke at the event.

The US Office of Inspector General has been conducting reviews of the NTIA grant program. CMS was selected for a site visit in July where they reviewed contracts, purchasing, and equipment inventory. During the review the Inspector General staff also visited a customer site that was connected via fiber as a result of the grant.

E-rate

Tom Oseland reported that 2013 funding year requests are still being processed. A total of \$200 thousand has been reimbursed or passed through to customers to date. This is a good result for the first year as a service provider. Next year, the customers will be reimbursed directly.

The 2014 funding year has been successful. 152 applications listing ICN as the service provider have already been approved. We have made claims on 40 customer accounts resulting in a little over \$16 thousand in the first month.

Essam El-Beik reported that in July, the FCC released a Report and Order for E-rate that provided a set of rule changes for the program. These changes take effect in funding year 2015 and focus on upgrading internal connections within schools and libraries. There is an additional \$1 billion available for 2015 and \$1 billion for 2016. The requirement of having a technology plan has been removed. For schools and libraries that apply in funding year 2015 or 2016, there is an internal connection budget of \$150 per student for a school or \$2.30 per square foot for a library applied over a 5-year period. Basic maintenance continues to be funded and managed Wi-Fi is a new service that is eligible for E-rate support. This allows for an outside party to install and operate the internal connection network.

It is important that every school and library be aware of these changes and additional funding. If they do not apply in 2015 or 2016, they will not be subject to the \$150/\$2.30 budget in 2017 unless there are future rule changes. Support for voice is being phased out.

Lori mentioned the staff held a webinar to provide constituents with information on the e-rate rule changes. More than 100 callers participated. One of the library systems requested a follow up conference call with its member libraries.

Brent Engelman asked if a communication has been sent to the K-12 schools. Lori responded that the communication went to all ICN customers and anyone who has signed up on the website to receive email updates.

Greg asked if other states are coordinated in the way they are applying for this funding. Lori believes it varies by state. The North Carolina version of Central Management Services and its State Board of Education work together to submit a consortia application. Greg replied that we need to think about that and align our efforts to get the most funding as possible.

Sean Vinck commented that if this is a typical federal program, most states don't take full advantage. It is a significant amount of money. At a minimum, we should strive to get our share.

Sean asked if there is any way we can generate a match for hospitals for tele-health purposes. Essam responded that about a year ago, there was focus on the rural healthcare fund through a separate program and funding. Historically, healthcare funds have more money for requests. The rural versus urban is very important on the healthcare side. Urban hospitals can only receive partial funding. If there is a partnership, they could receive funding. We could work with the Illinois Rural Healthnet and apply for a partial reimbursement. Lori mentioned the healthcare fund does reimburse for operating or ongoing costs and ICN is a registered service provider. There are hospitals that use our services and receive reimbursement from E-rate.

Brent Engelman asked if there was a list of who has applied. Essam stated we do have the information for 2014.

Services and Rates

Robin Woodsome reported that staff have been working to update rates and services since they have been in place for four years. Staff have spent time interviewing constituents to understand broadband demand and price points. This has also been discussed with the AET to seek their input and approval. As a result of the fiber project, there is a large amount of on-net bandwidth available so we want to develop rates and services that enable schools and libraries to take advantage of the capacity.

Essam requested that members refer to the handout and explained that slide 2 described the current landscape. Slide 3 is a summary of recommendations that include removal of the free allocation when the appropriation is \$1 million or less, Internet egress price reduction, establish a minimum purchase, and enhanced service for traffic that stays on-net. CMS would also act as the end-to-end supplier of broadband connections for the primary customers and update commercial pricing for Internet egress.

Remove of the free allocation will have the greatest impact on the small schools and libraries. CMS will encourage all schools and libraries to take advantage of E-rate.

CMS is also proposing an Internet egress price reduction to bring pricing in line with the market. The goal is to remain competitive with market prices and retain the large customers that are purchasing bandwidth above the state funded credit. Pricing would also be simplified by removing the port fee.

Various pricing scenarios were analyzed. Staff looked at the potential revenue from the current customer base and predicted the revenue based on the percentage of customers that stay with CMS if these recommendations are adopted.

Kathy Bloomberg asked if both the bandwidth and subscribers will go up? Lori replied that we think it will be a combination. Based on the feedback from the customers that buy bandwidth, our pricing is less competitive. We have the capacity, so we want to drive usage.

Sean asked if by adopting the recommendation, the new rates are locked in for future years. Lori replied that the rates can and should be adjusted in the future as appropriate.

Sean asked if we could vote for each recommendation individually. Lori responded that we could and the recommendations could be implemented separately.

Kathy asked if the AET endorsed all of the recommendations. Lori replied that they did.

Sean made a motion to approve the recommendations as a package. Todd Jorns seconded the motion. Discussion on the recommendation continued.

Sean asked how the affected parties react to the \$140 minimum. Kathy reported there are 200 public libraries not paying anything. If they pay \$140 per month or \$1,680 per year, the impact would be large and they may not need more bandwidth. Lori replied that the removal of free bandwidth for small libraries will be painful.

Robin shared that without state funded credit for eligible customers, the port fee is \$55 plus the bandwidth cost or \$76 for 1.5 meg. E-rate eligible customers can purchase a 10 meg metro-ethernet circuit for \$277 per month from AT&T as compared to the \$235 and \$280 they are currently paying for a T1. The cost to increase the circuit capacity is nominal.

Kathy voice concerned that commercial customers are benefitting from the upgraded network but not the schools, libraries and museums for which the network is intended to serve. Greg mentioned there is a lot of unused capacity and if commercial providers purchase bandwidth, it will help the schools and libraries as it is a new revenue source to the state. Commercial rates are 30% higher than what we charge the anchor institutions.

Staff is recommending changes to the commercial service rates as well. There has been a good response from customers leasing dark fiber, but the feedback is the 10 gig Ethernet service price is not competitive. Staff has reviewed market pricing as well as sought feedback from AET members to develop the recommended rate changes. Currently, ICN has generated more than \$3 million in new revenue from approximately eight commercial providers.

Brent asked how many of the 1,000 anchors that receive free services are schools? Kathy replied there are over 300 K12 schools or over 700 school districts.

Todd questioned what would happen if funding is restored. Lori responded the rates would stay the same, but the free bandwidth would return. Greg mentioned the money could go to entities to spend how they see fit.

Brent asked about the reaction from the schools. Robin replied, most agree that any cost to some schools would be difficult. Most schools that already have the connection are happy about on net bandwidth, the lower cost and some of the new services – VoIP and SIP services.

Greg mentioned we could make another motion to exclude the \$140 to phase it in over 4-quarters. Kathy suggested phasing in the \$140 over years not quarters. She also believes libraries tried to apply for E-rate in the past but gave up because it was too difficult. Now it is easier, but they can't apply for voice service as the voice subsidy is being phased out over 5-years.

Todd asked if we changed the rates over a couple years. Greg agreed 2-years would be a compromise and could be done in 4-increments.

Todd mentioned we need constituents to send a letter of support for the ICN budget. Lori reported that Brandon Gant with CARLI, a member of the AET, provided a sample letter used by CARLI to communicate the financial and programmatic value/benefit of CARLI to items members. Sean withdrew his motion and asked for leave which was granted by Greg. Sean made a motion to adopt the listed recommendations with the minimum \$140 monthly fee phased in every six months starting at \$35 on 7/1/2015 and increasing \$35 ever six months until it reaches \$140. The motion was seconded by Todd Jorns. Kathleen Bloomberg abstained. Motion carried.

2015 Meeting Schedule

Greg presented the 2015 meeting schedule. Meetings are scheduled for January 20th, April 20th, July 20th and October 19th. Sean Vinck made a motion to approve the meeting schedule. Brent Engleman seconded the motion. The motion carried.

Meeting adjourned at 3:04 PM

ILLINOIS CENTURY NETWORK

E-RATE UPDATE

Submitted for: Information

Summary: This item provides an update on ICN E-rate funding request.

Action Requested: None

Recommended Motion: None

ILLINOIS CENTURY NETWORK

E-RATE UPDATE

All activity related to the 2013 E-rate funding year has essentially been concluded. Reimbursements for the 2013 funding year totaled \$265,630.45. Of that total, \$150,957.45 was distributed to applicants via the "BEAR" Form 472 reimbursement method. The remaining amount of \$114,673 was collected by ICN via the Service Provider Invoice Form 474 to recoup discounts given to customers on their monthly invoice.

All but two of the 162 E-rate 2014 funding year applications submitted by ICN customers have been reviewed and have had a funding decision made regarding them. A total of 155 applications have been successfully approved for funding. These represent a total of approximately \$1,887,282 in ICN services. After the E-rate discount is applied the total committed E-rate funding support is approximately \$1,274,740. To date, only a small amount of these funds have been claimed. ICN staff are in the process of preparing a reimbursement request via the Form 474 for invoice discounts given based on approved E-rate funding support for the first quarter of fiscal year 2015.

The E-rate 2015 application filing window has been scheduled to open on January 14, 2015. It is scheduled to close on March 26th which gives applicants a total of 72 days to complete and submit their 2015 Form 471 application. ICN RTC staff have been actively responding to Forms 470 posted by applicants as they begin their application process.

The chart below summarizes activity for the ICN as a service provider in the E-rate program beginning with the 2013 funding year; the first year in which ICN participated as an Internet service provider.

Service Provider Activity

Funding Year	Total apps listing ICN	Total apps approved for funding (to date)	Total dollar amount approved (to date)	Total dollar amount claimed for support (to date)
Year 16 (2013)	119	110	\$1,252,908	\$265,630
Year 17 (2014)	162	155	\$1,887,282	\$25,630
Year 18 (2015)				
Totals	N/A	N/A	\$3,140,190	\$291,260

The chart below summarizes ICN E-rate application history for each funding year up to 2012.

Applicant Activity

Funding Year	Received
Year 3 (2000)	\$2,137,765
Year 4 (2001)	\$2,522,559
Year 5 (2002)	\$4,996,227
Year 6 (2003)	\$4,644,171
Year 7 (2004)	\$2,497,427
Year 8 (2005)	\$2,424,567
Year 9 (2006)	\$982,392
Year 10 (2007)	\$953,998
Year 11 (2008)	\$799,251
Year 12 (2009)	\$1,339,032

Year 13 (2010)	\$2,982,199
Year 14 (2011)	\$2,561,151
Year 15 (2012)	\$2,520,377
Totals	\$31,361,116

E-rate Program Rule Changes

- On December 19th 2014 the Federal Communications Commission (FCC) released a 2nd Report and Order (Order) on E-rate modernization
- The Order provides additional funding for the E-rate program and introduces significant rule changes for funding years 2015 and 2016
- Rule changes include increasing schools' and libraries' options for purchasing affordable high-speed broadband connectivity

Increased E-rate funding and New E-Rate rules released 19th December 2014

On 19th December 2014, the FCC released a second Report and Order on E-rate modernization building on the first Report and Order released 23rd July 2014. The second Order aims to close the gap in high speed broadband connectivity to schools and libraries and increases the E-rate funding cap to \$3.9B indexed to inflation. Illinois Department of Central Management Services (CMS) contributed to the record and comments provided by CMS are referenced by the FCC in this Order.

The FCC has recognized a substantial lack of broadband infrastructure exists, particularly in rural areas, to connect schools and libraries to high-speed broadband. The rules detailed in the Order aim to address this by providing additional options for schools and libraries to connect to high-speed broadband that include purchasing dark fiber and self-construction. The rules also include changes to how broadband construction is funded by E-rate, with the effect of easing the financial burden on applicants.

The Order also increases the E-rate cap to \$3.9B indexed to inflation, allowing all category 1 requests to be fully funded and targeting \$1B for category 2 requests.

A bulleted list of the key rules in the Order is listed below followed by further detail on the rules. A section on how CMS can help schools and libraries is provided followed by a call to action for schools and libraries in Illinois. The year specified in each bullet below is the E-rate funding year from which the rule change applies.

Maximizing schools' and libraries' options for purchasing affordable high-speed broadband connectivity

The rules in the 2nd E-rate Report and Order:

- facilitate the construction of broadband infrastructure by removing the requirement that construction cost over \$500,000 has to be amortized (2015)
- ease the burden on schools and libraries to pay the non-discounted portion of construction cost, by allowing this to be paid in installments over 4 years (2016)
- equalize the treatment of dark fiber with lit fiber, allowing schools and libraries to purchase dark fiber and have the electronics required to light the fiber funded by E-rate (2016)
- allow schools and libraries to self-construct their own broadband network where this is the most cost effective solution (2016)
- support state contributions to the non-discounted portion by providing an FCC match on a one-dollar-to-one-dollar basis, with the FCC discount level increasing up to an additional ten percent (2016)
- require recipients of high cost universal service support to offer high speed broadband in response to a posted form 470 at rates reasonably comparable to services in urban areas (2016)

Adjusting the E-rate Cap to meet the program's connectivity goals

- increase the E-rate cap to \$3.9B (2015)

Maximizing schools' and libraries' options for purchasing affordable high-speed broadband connectivity

The rules now allow schools and libraries to purchase dark fiber or self-construct if this is the most cost effective option. Any special construction required to build the dark fiber network as well as the modulating electronics required to light the dark fiber becomes an eligible cost. The combination of these rule changes allows the school or library to choose the

most cost effective option, whether this be ordering traditional lit service from a provider, purchasing dark fiber from a provider and lighting the fiber themselves, or self-constructing the broadband network.

The burden on applicants is reduced by allowing the full discounted portion of the construction to be funded by E-rate in the first year while allowing the applicant required match to be paid in installments over 4 years. Previously, construction cost over \$500,000 had to be amortized over multiple years.

State match – The FCC will increase the applicant’s discount rate, up to an additional 10% in order to match a state contribution on a one-dollar-to-one dollar basis. Thus if the E-rate funded portion is 60%, and the state provides 10% funding, the FCC will provide an additional match of 10% thus meaning the applicant required match has reduced from 40% to 20%.

Eligible Telecommunications Carriers (ETC) in High Cost Areas - ETC’s receiving universal service funds in high cost areas are mandated by the FCC to respond to form 470 requests by schools and libraries. The broadband service rates in the response should be comparable to those the ETC offers their customers in urban areas. This will result in increased competition and additional choice for the schools and libraries as they evaluate their options.

Increase in E-rate Funding Cap

The FCC has increased the E-rate funding cap from \$2.4B to \$3.9B indexed with inflation. The FCC expects this increase to fully fund category 1 requests together with \$1B of funding for category 2 requests.

How CMS can help

CMS is well positioned to help schools and libraries benefit from E-rate modernization as detailed in the two E-rate Modernization Report and Orders released last year.

CMS can help by:

- Providing advice and expertise on internal Wi-Fi architecture for schools and libraries
- Sell dark fiber in addition to lit services currently sold to E-rate applicants
- Construct a direct fiber connection to the school or library and making available either dark fiber or lit service
- Lighting school owned dark fiber
- Leading an E-rate consortium of schools and/or libraries

Action plan for Schools and Libraries

The combination of the two E-rate Modernization Report and Orders released in 2014 should provide a new impetus to look at applying for E-rate funding. Some of the valid reasons for not applying prior to funding year 2015 no longer exist. For example:

- Previously only the schools and libraries at the highest discount level (89%, 90%) received funding for internal connections. With the increased E-rate funding cap at \$3.9B, effective from funding year 2015, and the additional \$1B of funds available for 2015 and \$1B for 2016, together with the phase out of voice services, the FCC predicts to be able to fully fund all category 1 requests, including category 1 special construction, and target \$1B for category 2 requests. The FCC targets all schools and libraries in the country having their category 2 internal connections upgraded over the coming five years.
- The form 470 for category 2 connections can now be submitted without a technology plan. This removes a significant administrative burden.
- USAC are gradually making improvements to the administrative burden of applying for E-rate. The USAC website has training material and CMS Regional Technology Staff for the Illinois Century Network (ICN) are available to answer questions.
- Joining a consortium can further ease the E-rate administrative burden and a consortium can often provide cost savings due to bulk purchases. An applicant can join a consortium for category 1 and/or category 2 requests.

CMS encourages all schools and libraries in Illinois to apply for E-rate funding for both category 1 and category 2 services for funding year 2015. With the increased options available to schools and libraries for the construction of broadband CMS encourages schools and libraries to develop a strategy for bringing high speed broadband to their premises, preferably via a fiber connection and apply for E-rate funding for this in either funding year 2015 or funding year 2016.

Further Reading

A summary of the second E-rate modernization report and order has been produced by the FCC and is available at <http://www.fcc.gov/page/summary-second-e-rate-modernization-order>. The 2nd E-rate Modernization Report and Order is available at <http://www.fcc.gov/document/fcc-releases-order-modernizing-e-rate-21st-century-connectivity>. The first E-rate Modernization Report and Order including a summary, as well as other useful E-rate Modernization information is available at <http://www.usac.org/sl/tools/modernization-order/default.aspx>.

ILLINOIS CENTURY NETWORK

PROPOSED RATE CHANGES

Submitted for: Information

Summary: This item is a summary of the rate changes approved at the October 20, 2014 meeting.

Action Requested: None

Recommended Motion: None

ILLINOIS CENTURY NETWORK

PROPOSED RATES CHANGES

The rate changes approved at the last Policy Committee meeting are pending approval with the Department of Central Management Services Director. Below is a summary of the approved changes.

1. **Remove the free allocation – if fiscal year 2016 state appropriation is \$1M or less** – the reduction in state appropriation does not provide sufficient funds for an equitable free allocation scheme. For customers purchasing a large quantity of bandwidth the impact should be minimal or zero, due to the price reductions we are proposing. To minimize the impact, we strongly encourage K-12 schools and libraries to apply for E-rate reimbursement. ICN is assisting customers with E-rate by offering training and assistance in broadband connection architectures.
2. **Internet egress price reduction** – the proposed changes to our Internet egress pricing is in line with market pricing. The price reduction is more significant as customers purchase at least 100 Mb. This encourages customers to pay more for significantly more bandwidth - in line with the desired goal of ICN to promote high bandwidth use amongst customers

ICN Broadband Service with Internet Egress		
Service Level (Mbps)	Current Pricing per Mbps	Proposed Pricing per Mbps
10	\$14.00	\$14.00
20	\$13.50	\$12.00
50	\$11.50	\$9.00
100	\$10.00	\$6.00
200	\$9.75	\$5.50
500	\$9.50	\$5.00
1000	\$9.00	\$4.50

3. **Introduce minimum purchase amount of \$140 for 10 Mb** – a minimum purchase amount of \$140 for 10 Mb is introduced. This moves many customers paying less than \$100 per month to at least \$140. This approach also encourages customers to move from T1 circuits to high speed metro Ethernet circuits. The minimum will be phased it on the following schedule:
 - \$35 effective July 1, 2015
 - \$70 effective January 1, 2016
 - \$105 effective July 1, 2016
 - \$140 effective January 1, 2017
4. **Introduce on-net service offering providing increased bandwidth (5x)** – customer data that stays on-net (i.e. remains within the ICN network) will have more bandwidth available than customer data exiting the ICN network. This enables customers to take advantage of on-net cloud services without purchasing more bandwidth.
5. **Allow ICN to act as the end-to-end supplier of broadband connections to primary customers** – allowing ICN to act as the end-to-end supplier of broadband connections to primary customers simplifies the ordering and support process for customers, simplifies the E-rate process and consolidates invoice processing and contract management across customers.
6. **Updated commercial pricing** – pricing updated for commercial customers to remain in-line with market.

ICN Commercial Broadband Service with Internet Egress		
Service Level (Mbps)	Current Pricing per Mbps	Proposed Pricing per Mbps
10	\$25.00	\$18.00
20	\$24.00	\$15.50
50	\$21.00	\$11.50
100	\$19.00	\$8.00
200	\$18.00	\$7.00
500	\$17.00	\$6.50
1000	\$16.00	\$6.00

Current Pricing for 10GE circuit	Proposed Pricing for 10GE circuit
\$8,750.00	\$3,500.00