



Advanced Engineering Task Force Meeting Agenda

May 20, 2016
10:00 a.m.



1 Community Commons Building (CCB)

Academic Advising	Financial Aid
Admissions	Human Resources
Career Services	Next Step
Cashier	Student Records
Executive Offices	

2 Student Commons Building (SCB)

Adult Education	Library
Assessment Center	Disability Support
Bookstore	HALO
Café	Tutoring Services
Career Link	Security

3 Instructional Commons Building (ICB)

Academic Offices:
 Health & Human Services
 Liberal Arts & Social Sciences
 Math, Science & Engineering
McCaughey Gallery
The Writing Center

4 Instructional Commons North (ICN)

5 Physical Plant Building (PPB)

6 Receiving and Storage Building (RSB)

7 Workforce Development Center (WDC)

Academic Offices: Business & Technology Community Education Customized Training	Green Institute Pregracke Center Math Success Center Traffic Safety School
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8 Child Development Lab (CDL)

9 Fitness and Recreation Center (FRC)

10 Astroth Community Education Center (ACEC)

Auditorium	Challenger Learning Center
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11 Normal Readiness Center (IL National Guard)

12 Corn Crib Stadium



Advanced Engineering Task Force Meeting Agenda

Meeting Name: Advanced Engineering Task Force (AET) Quarterly Meeting

Meeting Date, Time, Location: May 20, 2016 - 10:00 a.m.
 Heartland Community College, SCB Room 1602 or connect via WebEx
[Join WebEx Meeting](#) Meeting #: 920 492 372
 Meeting password: icn
 Join by phone: **1-877-668-4493** Call-in toll free # **1-650-479-3208** Call-in toll #
 Access code: 920 492 372 [Global call-in numbers](#) | [Toll-free calling restrictions](#)

AET Members

	Jim Flanagan, Chair		Amin Kassem		Michael Shelton		<u>New Members</u>
	Andrew Bullen, Co-Chair		Rich Kulig		Raj Siddaraju		Tom Donovan
	Troy Brown		Joe Mambretti		Tracy Smith		Mindy Fiscus
	Mike Dickson		RJ McGarry		Glenn Trommels		Shannon Smith
	Robert Dulski		Brian Murphy				
	Brandon Gant		Anita Nikolich				

AET Staff & Guests

	Lori Sorenson		John Leonard		Robin Woodsome		Frank Walters
	Adam Ford		Essam El-Beik		Michelle Medley		Valerie Bolinger

“X” for Attendee “A” for Audio Attendee “V” for Video Conference

Topic	Presenter
1. Introductions/Roll Call	Jim Flanagan
2. Review Agenda, Approval of Minutes [Action] <ul style="list-style-type: none"> • March 18, 2016 Minutes 	Jim Flanagan
3. Old Business [Informational] <ul style="list-style-type: none"> • Software Defined Network (SDN) 	ICN Staff
4. New Business <ul style="list-style-type: none"> • E-rate Update [Informational] • K-12 Broadband Initiative [Informational] • Illinois Department of Innovation & Technology (DoIT) [Informational] • Network Update [Informational] • AET Membership [Action] <ul style="list-style-type: none"> - New Member Appointments 	ICN Staff Jim Flanagan
5. Other Items	Jim Flanagan

Next Meeting

September 16, 2016
 Heartland Community College
 ACEC Building, Room 2210

**ILLINOIS CENTURY NETWORK
MARCH 18, 2016 ADVANCED ENGINEERING TASK FORCE (AET) MINUTES**

Submitted for: Action

Summary: Distribution of the March 18, 2016 minutes for review by the AET

Action Requested: Adoption of the March 18, 2016 minutes

Recommended Motion: *The AET adopts the March 18, 2016 minutes with any edits as noted*

**ILLINOIS CENTURY NETWORK
MARCH 18, 2016 ADVANCED ENGINEERING TASK FORCE (AET) MINUTES**

Introductions/Roll Call

At 10:12 a.m. the Advanced Engineering Task Force meeting was convened by Jim Flanagan, AET Chairman who welcomed everyone. Jim proceeded with roll call.

Members via Video Conference (Springfield & Chicago):

Jim Flanagan, Chair, Illini Cloud	Andrew Bullen, Illinois State Library
Mike Dickson, Western Illinois University	Robert Dulski
Brandon Gant, Consortium of Academic & Research Libraries	

Members via Audio Bridge

Troy Brown, IL Heartland Library System	Raj Siddaraju, Spoon River College
Amin Kassem, ICCCA Technology Commission	Tracy Smith, University of Illinois
Rich Kulig, College of DuPage	
Joe Mambretti, Northwestern University	
RJ McGarry, Kishwaukee Community College	

Members absent:

Herb Kuryliw, Northern Illinois University	Glen Trommels, City of Rockford
Brian Murphy, Eastern Illinois University	
Anita Nikolich, National Science Foundation	
Michael Shelton, Southern Illinois University	

Staff & Guests:

Valerie Bolinger, Central Management Services	John Leonard, Central Management Services
Adam Ford, Central Management Services	Robin Woodsome, Central Management Services
Michelle Medley, Central Management Services	Kenneth Sem, Chicago Zoological Society
Essam El-Beik, Central Management Services	

Meeting Minutes - Jim Flanagan, AET Chairman

Jim Flanagan introduced the first item on the agenda, approval of the March 18, 2016, meeting minutes. A motion was made by Andrew Bullen to accept the minutes. The motion was seconded by Robert Dulski. The motion carried.

Old Business

Software Defined Network (SDN), Frank Walters, Central Management Services

Frank Walters reported that we have permission to participate in a pilot for SDN. Based on the group consensus, we would provide the dark fiber and pilot SDN with three organizations. In addition, there is possible grant funding opportunities to assist with the project. Anita Nikolich and Joe Mambretti commented that there may be funding available through the National Science Foundation (NSF) to assist with the hardware piece of the project. Additional discussion regarding SDN conducted among members. Tracy Smith volunteered to take the lead on the SDN initiative.

CMS Surplus Property, John Leonard -Central Management Services

John Leonard referred members to pages 7 and 8 of the meeting packet and described the different types of surplus programs offered by CMS and explained the process. Items are sent to CMS Surplus is made available by priority to state government entities on a “first come, first serve” basis. After a period of time, the items are available for local governments and non-profit organizations. If the items cannot be re-distributed by Surplus Property to other state entities, local governments, non-profit organizations, the public may view the available surplus at the central warehouse in Springfield, Illinois. A nominal fee is charged based upon the age and condition of each item of property to cover overhead. Frank Walters provided information and process regarding the State Surplus Public Auction (iBid), the online auction website. iBid allows users to browse and bid on items currently available for sale at public auction. Auctions are held weekly and interested bidders can find vehicles, office furniture, electronics and much more.

E-rate Update – Robin Woodsome, Central Management Services

Robin Woodsome reported that the ICN team continues to work on responding to E-rate bids for school and library broadband connections (E-rate Form 470). The E-rate filing window closes April 29, 2016. The filing window is the final date for the school to submit their funding request to the FCC.

Thus far, ICN has responded to over 500 bids. ICN reviews all sites for possible ICN fiber builds. Bandwidth requests have tripled in comparison to last year. As we are responding to E-rate Form 470's, the biggest issue found is how USAC lists the different service options. For example, when a bid request specifies only “Transport/Internet bundled” we have to contact the site and request that they submit another bid request and specify “Internet only”. In most cases we do not handle customers “last mile” transport. The RFP responses for Category 2 Internal Connections are undergoing evaluation.

K-12 Broadband Initiative – Robin Woodsome, Central Management Services

Robin Woodsome provided report. We have been working with Education Superhighway (ESH) on understanding broadband connectivity in Illinois and planning the next steps. ESH issued a draft Connectivity Report on March 11, 2016. The report will first undergo internal review. Future steps include the development of an action plan for Illinois. ESH has created an online pricing tool which allows customers to view what other school districts are paying for broadband. In January, the National Governors Association Center for Best Practices (NGA Center) in partnership with Education Superhighway issued an RFP soliciting states to take part in the K-12 Broadband and Digital Learning Academy. Illinois responded to the RFP and we were selected to participate in the Policy Academy.

Network Update – Frank Walters, Central Management Services

Frank referred members to page 13 of the meeting packet.

Egress – John Leonard provided report and stated that we are working with vendors regarding payment on past due invoices. Due to the State of Illinois budget issue, some vendors have not been paid for past services. Payment for our egress service was recently sent to Cogent. We are working with federally funded state agencies via an intergovernmental agreement and the vendor assistant program to assist with vendor payments. We will continue to communicate and work with vendors to ensure that services are not shut off due to non-payment. Joe Mambretti asked if it was possible to pay the Internet2 invoice via the vendor assistant program. The invoice has been pending since last summer. John stated that he will

check on the status and send him an update. Additional discussion held regarding the status of the state budget.

Procurements & Contracts - Frank reported that the Cisco contract was posted just recently and the Locate RFP contract is in progress.

Backbone & Related Projects – Frank informed members that the distribution consolidation project is still progressing and work for the DeKalb pop site has been completed. Frank provided information about the IDOT CTA Eisenhower build and stated that CTA is working on a break that just recently happened. Pending the splice work and repair of the break, we are very close to completion.

Services – Adam Ford stated that we are working on an economical form of communication between ICN customers for Layer 2 and Layer 3. The plan is to offer a low-cost way to connect and share information with other schools, healthcare and government entities by building private networks.

Cloud – Adam reported the state is committed to moving some of our services out of the Data Center and into the Microsoft Azure Cloud.

New Service Offerings – Robin Woodsome, Central Management Services

Robin reported that we have several new service offerings SIP services and discounts on technical training. BCCS offers full VoIP services for state agencies and has the infrastructure in place. Initially the ICN will begin by providing SIP Trunking. Over time, we will extend the service to include full IP voice call manager service and support. By using SIP service, organizations may use their ICN connection to access the public switched network for both local and long distance services and eliminate the need to maintain a separate PRI service. The service is redundant out of Springfield and Chicago.

Stormwind, a professional training provider, will now offer discounts on technical training for ICN customers. They have an extensive library of technical courses. Areas of training and certifications include Microsoft, Cisco, VMware, Project Management, Security, Microsoft Office 365 and much more. Classes are streamed live and are self-paced.

T1 Circuit Sunset Date – Robin Woodsome, Central Management Services

Robin reported that the ICN has begun the process of moving all customer connections to Metro Ethernet service with an objective of terminating T1 service by June 30, 2017. For over 15 years, ICN has supported T1 service as a cost effective last mile option available in all parts of the state. T1 service was the primary way the majority of our constituents connected to the ICN. However, with the development and widespread adoption of Metro Ethernet service over fiber, T1 connectivity has declined significantly since it no longer meets the demands for higher levels of broadband service. The cost of maintaining a highly underutilized fixed capacity T1 infrastructure is now costing more than the revenue it is generating.

Marketing & Outreach – Valerie Bolinger, Central Management Services

Valerie reported that the ICN will focus on several traditional marketing and outreach strategies in 2016. Our goal is to increase general knowledge and awareness about new services, value-added services and customer support. We plan to utilize social media opportunities to supplement and enhance existing relationships with our customers and reach new audiences. Twitter will be used to build interest and “buzz” around timely events, build connections with current and potential new customers and to disseminate prepared key messages.

Conferences offer a rare opportunity to talk face-to-face with active and dedicated member from a specific customer group. We will continue to actively leverage speaking opportunities, negotiate free or discounted booths, and partner with businesses and organizations.

Work is currently underway to revitalizing the ICN brand and identity to enhance our reputation and strengthen customer loyalty. We have started work on redesign of templates, web content, brochures and marketing materials to increase awareness and educate customers regarding services. Rejuvenating and focusing on value-add service offerings is an area where we will generate the greatest return and may serve as an antidote for customers opting out. In addition, we will continue to host free live webinars to provide customers an opportunity to learn about current and future services, share information and provide feedback.

AET Membership – Jim Flanagan, AET Chairman

Jim referred members to pages 20 and 21 of the meeting packet. Page 20 contains a listing of AET members whose term will expire June 30, 2016. The AET is seeking reappointment for Mike Dickson, Western Illinois University, Tracy Smith, University of Illinois Champaign and Andrew Bullen, Illinois State Library. We are not seeking reappointment of Brian Tobin, DeKalb Community Unity SD #428 and Jim Peterson, Bloomington SD #87.

In addition to membership reappointments, we have recommendations for three new members; Mindy Fiscus representing Learning Technology Centers (LTC) 6, Tom Donovan, CTO for Advocacy School District Lake County and Shannon Smith, Technology Director for Tuscaloosa School District. We are also asking for approval on the appointment of Andrew Bullen to serve as co-chairman of AET. Jim asked for a motion for approval of the membership revisions. A motion was made by Raj Siddaraju. The motion was seconded by Rich Kulig. The motion carried.

IlliniCloud – Jim Flanagan, AET Chairman

Jim reported that there are two initiatives that IlliniCloud is focused on at the present time. A new website named Another Districts Treasure (ADT) has been created to assist schools in their search for low cost equipment. The website includes a “Treasure Chest” tool, an area for posting donated materials such as computers, iPads, monitors, switches, etc. that might be useful to Illinois schools. The “Projects Incubator” is a place for schools to propose projects and include a list of needed items. The “Second Opinion Service” is an area on the website to share wisdom and information from the EdTech Community. The information exchange will be kept private to encourage frankness.

Jim shared information regarding the K-12 Federation collaboration between IlliniCloud and various partners from Nebraska, Nevada and New York to share a range of tools that have been developed to support K-12 learning around the Federated Service Stack for K-12. These services primarily focus on how we are collectively taking a standards based approach that aligns with district need for ownership and security of their identity, data and presentation and the policy implications for districts.

Adjournment

Jim Flanagan moved to adjourn the meeting. Motion by Mike Dickson and seconded by Andrew Bullen. Motion passed and meeting adjourned at 11:53 a.m. The next meeting is scheduled May 20, 2016.

**ILLINOIS CENTURY NETWORK
E-RATE UPDATE**

Submitted for: Information

Summary: This item provides an update on the E-rate program.

Action Requested: None

Recommended Motion: *None*

ILLINOIS CENTURY NETWORK E-RATE UPDATE

The E-rate filing window has been extended. For schools, the window has a new closing date of May 26th 2016. For libraries and consortia there is a second closing date of July 21st 2016. The extension is due to unexpected complications with the implementation of USAC's new IT system. Consortia and libraries rely on discount rate information from their members/related school districts, hence, the reason for the second closing date. Application review has begun. USAC states there should be sufficient funding for all plausible demand scenarios for funding year 2016, so filers should not be worried about losing funding as a result of the second window.

The ICN team continues to work hard responding to E-rate bids. Thus far, ICN has responded to 597 bids. ICN reviews all sites for a possible ICN fiber build. Bandwidth requested is 2 – 3 times the level of last year.

As we are responding to E-rate Form 470's, the biggest issue found is how USAC lists the different service options. For example, when a bid request specifies only "Transport/Internet bundled" we contact the site requesting they issue another bid request specifying "Internet only". (When ICN provides a school or library Internet from an ICN POP, it can only respond to "Internet Only" bid requests).

As of May 16th 2016 there are 226 filed E-rate applications with ICN listed as the service provider, with a total funding request of \$2,268,772.

The responses for Category 2 Internal Connections RFP are still undergoing evaluation. We expect award announcement 2nd quarter 2016.

ILLINOIS CENTURY NETWORK K12 BROADBAND INITIATIVE

As communicated at the last AET meeting, Illinois was selected to participate in the National Governors Association effort to expand K-12 broadband and digital learning. As part of this effort, Illinois representatives from ICN, ISBE and the Governor's office attended a 2 day policy academy with the NGA and Education Superhighway (ESH) on March 31 – April 1 2016.

A 30, 60, 90 day action plan resulted from the meeting. Milestones include:

- Illinois State Board of Education (ISBE) issues press release regarding expanding access to K-12 broadband and participation in the Digital Learning Policy Academy
- Connectivity report approved and released isbe.net/ed-technology/pdf/illinois-connectivity-report160331.pdf
- Program overview, Compare and Connect and Fiber Project brochures released and made available on ICN website illinois.gov/icn/news/Pages/ILConnectivity.aspx
- Presentation to ISBE board and Illinois education stakeholders on June 16th. Working group meeting on June 17th.
- The Learning Technology Centers (LTC) and ESH will begin to reach out to school districts to provide fiber consultancy support (for example, build versus buy for fiber).
- Produce Affordability case studies.
- Award Category 2 RFP and hold workshops for E-rate category 2.

A second Policy Academy Meeting will be held late summer/early fall with the Policy Academy concluding October 31, 2016.

**ILLINOIS CENTURY NETWORK
NETWORK UPDATE**

Submitted for: Information

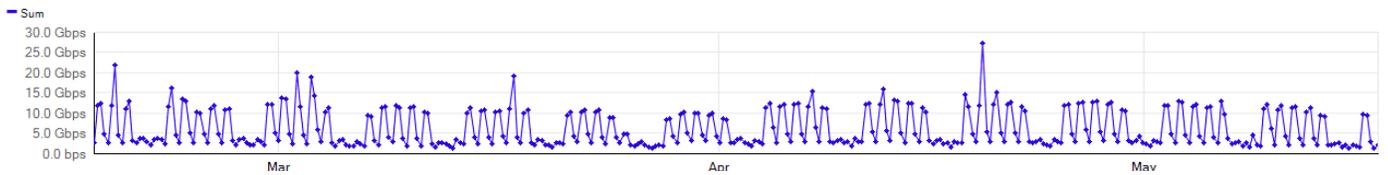
Summary: This item provides an update on the Network

Action Requested: None

Recommended Motion: *None*

ILLINOIS CENTURY NETWORK NETWORK UPDATE

Interface Aggregate Chart - Max bps In
Last 3 Months



Egress

- Order placed for 10G burstable Cogent pipe, cross connect being placed now
- Egress RFP started
- Higher peaks due to DDoS Attacks on constituents

Procurements & Contracts

- Cisco Maintenance & Hardware – finalized in review
- Locate RFP – cost savings, in progress
- Construction RFP – more diverse vendors for competition, in progress

Backbone & Related Projects

- Distribution Consolidation in progress
- Dekalb POP Site - complete
 - Route Reflector Migration - complete
- IPv6 project - supporting IPv4 and IPv6 only customers
- ASR Deployment – 7600 sunset
- BGPless Core Est. Completion 8/1/2016
- IDOT/CTA Eisenhower Construction almost complete, pending splicing work, working with Meade for date

Services

- Multipoint Customer Network
 - ICN as a NAP
- CMS/State of Illinois moving to Equinix Cloud "bridge" access to Azure (and others, order being processed)

Other Notes/Projects:

- Macomb to Moline via Galesburg
- Galesburg ILA Site move (!!!)
- Moline POP Site move
 - Permitting issues resolved, work almost complete, target mid-March
- FYI significant Tollway intrusive work being done March through June
- E-rate work

Fiber Work/Customer Adds

- SIUE Build - complete
- NIU 10G Internet Service – ready for service
- Chicago REP Turn-up is on schedule, waiting on Eisenhower path to complete the ring
- Steady stream of splice and new customer work

**ILLINOIS CENTURY NETWORK
DoIT UPDATE**

Submitted for: Information

Summary: This item provides an update on the establishment of the Illinois Department of Innovation and Technology

Action Requested: None

Recommended Motion: *None*

ILLINOIS CENTURY NETWORK DoIT UPDATE

On January 25, 2016, Governor Bruce Rauner signed Executive Order 2016-01 creating the Illinois Department of Innovation and Technology (DoIT).

The new state agency is tasked with transforming the state's information technology functions into one agency to provide better service to Illinois residents and businesses. DoIT is responsible for delivering statewide, consolidated innovation, information technology and telecommunications services to state agencies, boards and commissions, local governments and educational institutions. Their mission is to deliver best in class innovation and technology to client agencies, foster collaboration among client agencies, empower client agencies to provide better service to residents of Illinois, and to maximize the value of taxpayer resources.

The Bureau of Communications and Computer Services (BCCS), currently within Central Management Services (CMS) will be consolidated into DoIT on July 1, 2016. The Illinois Century Network will be included in the consolidation.

DoIT will be led by Hardik Bhatt, the Illinois State CIO and Secretary Designate of the Department of Innovation and Technology.

Information can be found at the following links:

1. illinois.gov/sites/cio/Pages/default.aspx
2. illinois.gov/sites/cio/ILFirstStrategy/Pages/default.aspx
3. illinois.gov/Government/ExecOrders/Documents/2016/ExecutiveOrder2016-01.pdf

**ILLINOIS CENTURY NETWORK
ADVANCED ENGINEERING TASK FORCE MEMBERSHIP**

Submitted for: Action

Summary: This item seeks approval for a new member for the Advanced Engineering Task Force

Action Requested: That the AET approves the new member for the board

Recommended Motion: *That the AET appoint Matthew Pennell as a new member with a term to expire in June 2019*

**ILLINOIS CENTURY NETWORK
ADVANCED ENGINEERING TASK FORCE MEMBERSHIP**

The Advanced Engineering Task Force (AET) serves a critical role in shaping the services, rates and policies for the Illinois Century Network. Membership consists of technical staff representing the diverse community anchor institution categories connected to the network. AET members are appointed by the Policy Committee and serve staggered three year terms which begins on July 1st.

The AET is seeking approval on the appointment of the following new member:

1. Matthew Pennell, Technology Coordinator Regional Office of Education #20

The staff recommends adoption of the following resolution:

That the AET appoint Matthew Pennell as a new member with a term to expire in June 2019.