

INFORMATION TECHNOLOGIES COMMITTEE  
MINUTES OF MEETING  
DECEMBER 2, 2008

[In these minutes: Research Cyberinfrastructure Alliance (RCA) Update, PEL Project - *Implementing Cyberinfrastructure for 21<sup>st</sup> Century Research*, Regional and National Networking Initiatives Related to Research, Student Technology Fees, Statement in Support of OIT Compact]

[These minutes reflect discussion and debate at a meeting of a committee of the University of Minnesota Senate; none of the comments, conclusions or actions reported in these minutes represent the views of, nor are they binding on, the Senate, the Administration or the Board of Regents.]

PRESENT: Mark Sanders, chair, Craig Gjerdingen, Dale Swanson, Sue Van Voorhis, Paul Rubenis, John Butler, Danielle Tisinger, Lee Anderson, David Arendale, Ted Higman, Brent Larson, Josephine Lee, Stuart Speedie, Bonnie Westra, Ben Franske, Ben Kucera

REGRETS: Aaron Doering, Michael Korth, Dan Garon, Ann Hill Duin

ABSENT: Stephen Cawley, Billie Wahlstrom

OTHERS ATTENDING: Bernard Gulachek, Simin Hickman, Myron Lowe, John H. Miller

I). Mark Sanders called the meeting to order and welcomed those present.

II). Members unanimously approved the November 4, 2008 minutes.

III). Mr. Sanders welcomed a new member to the committee, Craig Gjerdingen. At the request of Mr. Sanders, Mr. Gjerdingen introduced himself to the committee and noted that he works in the Carlson School of Management (CSOM) as an applications development manager.

IV). Mr. Sanders turned to Bernie Gulachek and requested he provide the committee with an update on the status of the Research Cyberinfrastructure Alliance (RCA) charge, and other relevant information concerning the RCA.

Mr. Gulachek stated that in support of the University's goal to become one of the top three public research universities in the world, the decision to form a strategic alliance to support research cyberinfrastructure was made in the fall of 2007. The vision of the Research Cyberinfrastructure Alliance (RCA) is to facilitate access to high quality, high-end, effective and efficient research computing systems and services, which would serve to enhance interdisciplinary research. The RCA, however, is not a service bureau, emphasized Mr. Gulachek. The RCA has been established to create an environment

where high-performance computing, storage and networking systems are better coordinated.

An impetus for the RCA was the National Science Foundation (NSF) and the National Institutes of Health (NIH) statements and recent practices of investing in research projects where there is a coordinated institutional cyberinfrastructure. The goal of the RCA is to coordinate and align components of the University's distributed strategic research cyberinfrastructure and related services to aid researchers.

Initial sponsors of the RCA include the Office of the Vice President for Research (OVPR), the University Libraries, and the Office of Information Technology (OIT). Senior administrators in each of these offices are crafting the RCA charge, which should be finalized within the next 30 days.

Is there any relationship between the RCA and the NIH's Institutional Clinical and Translational Science Award asked a member. Mr. Sanders stated that to the best of his knowledge this specific grant was submitted prior to the formation of the RCA. Having said this, an objective of the RCA is to make it easy for researchers to effectively and efficiently work together with technologists and professionals who have expertise in wide-ranging areas in order to plan, coordinate and conduct research projects.

Mr. Sanders thanked Mr. Gulachek for his update, and requested that the RCA charge, once finalized, be brought back to the committee for review.

V). Next, Mr. Sanders introduced two participants in the President's Emerging Leaders (PEL) Program, Craig Gjerdingen and Tracy Anderson. This program, noted Mr. Sanders, provides a structured leadership development opportunity for selected high-potential P&A, Civil Service and Bargaining Unit employees. PEL is a 12-month program with both educational and experiential components.

The PEL administrative team each year identifies University-wide projects that are designed to address a strategic question facing the University. After indicating their project preference, PEL participants are assigned to a project team. The purpose of the group project is to enhance participants' understanding of University issues and operations, and to offer a team experience.

Mr. Gjerdingen and Mr. Anderson are on the PEL project, *Implementing Cyberinfrastructure for 21<sup>st</sup> Century Research*. A brief overview of the project deliverables was shared with the committee. The sponsors for this project are Ann Hill Duin, associate vice president and associate chief information officer, Office of Information Technology, and Bernie Gulachek, senior director, Office of Strategy Management, OIT.

Tracy Anderson and Craig Gjerdingen began by distributing a handout, which outlined the project team's goal statement, project plan, project benefits, project scope, and team members. Mr. Anderson noted that the project will address the innovation and

infrastructure pillars of the University's strategic positioning effort. Currently, technology is outpacing the information infrastructure needed to support it. There are no University-wide standardized systems in place to support its research infrastructure; current systems are siloed. The RCA project will create University-wide dialogue and build a plan to address data storage planning capacity, and data sharing (internal and external to the University). The project is expected to create efficiencies and foster interdisciplinary efforts. Mr. Anderson went on to share more detail about the project with the committee.

A member asked whether the RCA project would analyze the policy and budget implications/pressure points of a research cyberinfrastructure. It was noted that the team will undoubtedly take these factors into consideration, but it will not be the major focus of the project. Mr. Sanders noted that SCIT is in a position to recommend policy with respect to the RCA. He added that based on what he heard from Mr. Anderson and Mr. Gjerdingen that he was happy to hear that outreach will be key to this project.

Mr. Sanders asked about the timeline for the project. It was noted that the assessment should be completed by January 2009, and recommendations should be ready by April. The poster will be done sometime around June – July 2009 timeframe.

Mr. Sanders welcomed Mr. Anderson and Mr. Gjerdingen's participation in all future SCIT meetings, and offered up any resources the committee has available to it to help gather information the project team may need.

A member encouraged the PEL team members to be mindful of the culture of science when looking at the issues related to research cyberinfrastructure as the needs assessment phase of the project moves forward. It is important to remember that the culture of science is quite different from many of the IT cultures on campus. Mr. Anderson and Mr. Gjerdingen assured the committee that this will definitely be taken into account.

Bernie Gulachek, a project sponsor, publicly recognized the work of the project team thus far. This is challenging work. The approach taken with the research community will be extremely respectful. To date, there have been several conversations with the project team having to do with being sensitive to the needs of different disciplines and researchers.

VI). Mr. Sanders welcomed Myron Lowe who was invited to provide the committee with information concerning the regional and national networking initiatives related to research. Mr. Lowe began by stating that this is a very exciting time for the University, and researchers, and it is like no other time before. Using a PowerPoint presentation, Mr. Lowe provided the committee with a brief overview of some of the University's network initiatives related to research, and information technology architecture and infrastructure.

Mr. Lowe emphasized that the University's network initiatives are cooperative and collaborative in nature. These initiatives extend, enhance, and enable progress in the University's investment in information technology and infrastructure to support

researching, teaching, and service. These initiatives are on a statewide, regional, national, and international level.

Mr. Lowe stated that the initiatives he is most involved with have to do with high performance access, and services to regional and national sites. For example, Northern Lights GigaPoP, noted Mr. Lowe, is a connection point to Internet2 (<http://www.internet2.edu/>). Northern Lights, provides high-performance access and services to the campus and other Northern Lights participants. In addition, it provides redundant and diverse paths to these services. The Northern Lights network and its related activities connect over 212 university research-oriented institutions. More information about Northern Lights GigaPoP can be found at <http://www.northernlights.gigapop.net/>.

Next, Mr. Lowe shared information on BOREAS-Net (Broadband Optical Research Education and Sciences Network). BOREAS' founding members include Iowa State University, University of Iowa, the University of Wisconsin – Madison, and the University of Minnesota. BOREAS is made up of 1,500 miles of fiber that is long-term leased by these four institutions, and its goal is to have a Regional Optical Network that is able to service the advanced network requirements of research and education institutions in the upper Midwest. Optical network capability is essential in order for researchers to be able to move large amounts of data around the world and to promote collaborative research activities. BOREAS members are part of the Northern Tier Network Consortium, which is a group of universities, research labs, network organizations, and some state network organizations across the northern part of the U.S. from Michigan to the Pacific coast. BOREAS requires more than simply infrastructure if it is to be effective, stated Mr. Lowe. There is a research component, a business collaboration component, and an economic develop component. This network is only valuable as it enables the cyberinfrastructure element to come together.

Mr. Lowe noted that when he meets with various consortiums that connect researchers, and advanced networks that support research universities, the focus centers on large-scale, collaborative, interdisciplinary, multiple site projects. The University has clearly stated its intention to participate in the top tier of these projects. Being able to transport data for projects to researchers is very exciting. Mr. Lowe cited several examples of different types of large-scale, collaborative projects - the Large Hadron Collider (LHC), the University of Nebraska-Lincoln's High-Energy Physics dynamic circuit network, the University of Minnesota's Multi-Axial Subassemblage Testing (MAST) Laboratory (<http://nees.umn.edu/>), the Quilt (<http://www.thequilt.net/>), Biomedical Informatics and Computational Biology program ([http://www.r.umn.edu/19\\_BICB.htm](http://www.r.umn.edu/19_BICB.htm)). All these projects require advanced network services, and cooperation on a regional and national basis.

Mr. Lowe emphasized that as one would expect, security will play a significant role in the University's cyberinfrastructure. He added that it is his observation that funding from outside agencies such as NSF and NIH are increasingly being directed to large-scale, collaborative projects.

Questions and comments from members following this presentation included:

- In terms of participation in Internet2, does the University actually lease or purchase fiber optic lines or does the University provide resources and funding to this initiative? Mr. Lowe stated that there is a local component that the University must have in order to provide Internet service on a day-to-day basis, which includes a multitude of networking functions and operations for this to occur. The University has taken advantage of partnerships, which it has benefited from and allows the University to take advantage of resources that are already in place. Bernie Gulchek added that the University provides support to the Office of Information Technology (OIT) to make investments to build these networks. The process is somewhat convoluted and requires many partners sitting down at the table and agreeing to how different aspects of the various initiatives, and projects should work.
- Who is Northern Lights GigaPoP? Is this a virtual group or is it possible to visit their office? Mr. Lowe stated that Northern Lights GigaPoP is a University resource with statewide and regional participants. This networking consortium is not a separate facility, but is housed in two places on campus. Mr. Gulachek added that the consortia that supports and funds Northern Lights GigaPoP could be considered a virtual organization because it does not have a storefront per se.

Mr. Sanders thanked Mr. Lowe for his presentation.

VI). Other business:

a). Mr. Sanders stated that the student technology fee agenda item would be tabled until the February meeting. In the meantime, Mr. Sanders will share electronically with the committee a link that outlines current technology fees and tuition.

Mr. Sanders solicited three volunteers who would be willing to collect information from their respective colleges on student technology fees. Volunteers included Craig Gjerdingen from the Carlson School of Management, and Lee Anderson from the College of Design. Mr. Sanders stated that he would identify the third person.

b). Mr. Sanders reported that he drafted a statement supporting the OIT compact. This statement will be sent out electronically via email for member's comments and approval. The goal is to bring this forward to the University Senate for information in a timely fashion.

c). Mr. Sanders solicited recommendations for next year's chair for SCIT.

VII). Mr. Sanders announced that the next meeting is Tuesday, February 3<sup>rd</sup>. Hearing no further business, Mr. Sanders adjourned the meeting.

Renee Dempsey  
University Senate

