

**Draft Minutes of Annual CCIRN Meeting
17-18 May 2008
Bruges, Belgium**

AttendeesAsia-Pacific Delegation

Guido Aben	AARNet	Australia
Jie An	CERNET	China
Hee Chang Chung	KOREN	Korea
Yasuichi Kitamura	APAN	Japan
Xing Li (Co-Chair)	CERNET	China

European Delegation

Erik-Jan Bos	SURFnet	Netherlands
Dai Davies	DANTE	-
David Foster	CERN	Switzerland
Vasilis Maglaris	NTUA/GN2 project	Greece
Kees Neggers (Co-Chair)	SURFnet	Netherlands
Dorte Olesen	TERENA/UNI-C	Denmark
Karel Vietsch (Scribe)	TERENA	-

Latin American Delegation

Claudia Cordova	CLARA	Peru
Javier Martinez	Innova-Red	Argentina

North American Delegation

Heather Boyles (Co-Chair)	Internet2	United States
Jacqueline Brown	Pacific Northwest Gigapop	United States
John Silvester	NLR	United States
Eric Tsang	CANARIE	Canada
Doug Van Houweling	Internet2	United States

1. Welcome and Round of Introductions

Kees Neggers, as the co-chair from the continent hosting the meeting, opened the meeting.

2. Approval of Agenda

At the request of Heather Boyles, the OECD Ministerial Meeting on The Future of the Internet Economy was added as a new sub-item under agenda item 11. With this change, the agenda was approved.

3. Minutes of the last CCIRN meeting (Xian, 26 August 2007)

The minutes were approved without change, with thanks to the author, Andrew Howard. The minutes are available at www.ccirn.org/CCIRN2007_minutes.pdf.

4. Optical Networking - Presentation about GLIF technical and control-plane working groups

Erik-Jan Bos gave a presentation on the basis of slides that had been prepared by Gigi Karmous-Edwards and himself. Those slides are available from www.ccirn.org/ccirn2008/index.html.

Yasuichi Kitamura asked about the 1-Gb/s link between Europe and India that was shown on the GLIF map. Two weeks before this meeting, a demonstration had been tried between Japan, Korea and India, but

DANTE had been able to offer only 45 Mb/s to India. Erik-Jan Bos clarified that the link on the map was CERN's. Dai Davies said that DANTE was upgrading its link to India from 45 Mb/s to 155 Mb/s. David Foster explained that CERN was planning to renew the contract for its 1-Gb/s link to India and to increase the capacity, and that CERN was willing to share that capacity with others.

Heather Boyles raised the question where GLIF was going. Would GLIF only be accommodating demonstrations or would it also provide an infrastructure carrying production traffic? She quoted a recent request for both a two-day demonstration and a two-month period of production traffic. Kees Neggers replied that GLIF's work with lightpaths was in an early, experimental phase, and that an infrastructure for production traffic was not something being offered by GLIF.

Vasilis Maglaris asked about the progress on network-to-network Service Level Agreements. Erik-Jan Bos replied that GLIF participants each had their own Service Level Specifications, and that a lot of work still needed to be done in this area.

There followed a general discussion about the technical and policy challenges of lightpath provisioning.

5. Foresight Study – Presentation about the results of the EARNEST study

Dorte Olesen gave a presentation on the findings of the EARNEST study. Her slides are available from www.ccirn.org/ccirn2008/index.html.

Doug Van Houweling commented that the findings and recommendations from the EARNEST study were very much in line with the current thinking in national research and education networking organisations that he had observed recently. He said that the United States had always been surprised that the national research and education networking organisations in Europe had not paid much attention to the higher layers. He supported the shift in emphasis suggested by EARNEST.

Vasilis Maglaris underlined that in Europe research networking was highly federated.

6. Strategic Plans

Doug van Houweling spoke about Internet2's current strategic planning, using slides from the recent Internet2 Spring Member Meeting. Those slides are available from www.ccirn.org/ccirn2008/index.html.

Doug Van Houweling explained that there had been a change in Internet2 governance; consequences were, among others, that also regional networks were now Internet2 members and that all boards were elected. There was now a draft of an Internet2 Community Strategic Plan, and he expected that a new draft would be published this week. The report was to be approved early July 2008.

David Foster asked about the bridge to the corporate sector. Doug Van Houweling replied that companies were members of Internet2 for three reasons: because of the visibility of the company, because companies wanted to learn by participating in Internet2, and because companies got capabilities from Internet2 that they not get elsewhere. He explained that Internet2 had no problems with competition issues when collaborating with industry, because Internet2 never runs public tenders.

Vasilis Maglaris gave a presentation about the vision of GÉANT2 and the planning of the GN3 project. His slides are available from www.ccirn.org/ccirn2008/index.html.

Doug Van Houweling asked if GN3 would result in more visibility of national research and education networks or less. Erik-Jan Bos said that there would be more visibility, because more information was being made available (e.g., iSHARE). Kees Neggers expressed the view that national research and education networking organisations were becoming more prominent in Europe compared to the European level of networking, because they were the ones who had the contacts with the users and because there was a lot of cross-border dark fibre.

There followed a discussion about cloud computing and storage. The general feeling of meeting participants was that in this area research networking organisations could not compete with companies like Amazon and Google.

Doug Van Houweling told that there was controversy in the United States on the question whether it would be appropriate for a national research networking organisation to go ahead and invest in a new generation of technology before the campuses were ready for it. The European meeting participants recognised this problem from their own experiences: it was the discussion between technology-push and demand-pull. Some research networking organisations might be conservative because of lack of resources, and by some meeting participants that was seen as a danger. Xing Li said that in China the ranking of universities by quality was the same as the ranking by network traffic; this fact was very motivating for research networking.

7. Asia Future Internet Initiative

Xing Li presented the Asia Future Internet Initiative, using presentation slides prepared by Kilnam Chon, who was leading the initiative. Those slides are available from www.ccirn.org/ccirn2008/index.html .

Answering to a question from Karel Vietsch about the funding model, Xing Li said that each participant in the Asia Future Internet Initiative was paying its own costs.

Doug Van Houweling briefly reported on the current status of the GENI initiative in the United States. The plan for a large-scale testbed was no longer there. The first GENI grants were expected to be awarded in a few months' time. Part of those awards would be for a few national testbeds.

Jacqueline Brown asked about the relation between the Asia Future Internet Initiative and APAN. Xing Li replied that there was discussion about that relation, but that the Asia Future Internet Initiative was independent. One reason for that was that APAN covered a large range of countries and could therefore not concentrate too much on the most advanced ones like Japan, China and Korea.

8. Support for International High-Performance Applications

Jacqueline Brown gave a presentation about international health science communities. Her slides are available from www.ccirn.org/ccirn2008/index.html .

Vasilis Maglaris enquired about the acceptance of network and applications technology by doctors.

Responding to a question from Heather Boyles about the involvement of national research networking organisations with the healthcare sector, Dorte Olesen and Karel Vietsch referred to one of the EARNEST reports (available at www.terena.org/publications/files/EARNEST-OthersUsers-Report.pdf) that contained much information and many views about this topic.

David Foster gave a presentation about the future of networking in the science context. His slides are available from www.ccirn.org/ccirn2008/index.html .

The presentation touched on a number of fundamental issues and led to a discussion about the very principles and objectives of research networking. In the debate, David Foster maintained that the times for research networking were changing and that there was a need for flexibility. He felt that in the research networking environment management decisions were taken too often to control a situation; in a more positive environment management decisions should be taken so that people would behave in the right way.

9. IPv6

Xing Li gave a presentation on the current rollout and use of IPv6, concentrating on the situation in APAN countries and in particular in China. His slides are available from www.ccirn.org/ccirn2008/index.html .

10. Portfolio of Services; Operations

Dai Davies gave a short presentation on portfolio and operations issues, mentioning the various issues and challenges. His slides are available from www.ccirn.org/ccirn2008/index.html .

The presentation led to discussions on a number of general issues.

One of the topics of discussion was about problems caused by subsidiarity, where there were different rules and different changes happening in different countries.

In this context, Doug Van Houweling referred to a speech by the Chair of the Internet2 Board of Trustees at an Educause event recently, who had made a plea for a new governance model for high-performance networks.

Another topic of discussion was the added value that research networks offer compared to the commercial Internet. That added value was thought to be absolutely essential. Examples were quoted of researchers choosing to use commercial services (e.g., for videoconferencing) because those were better than what was being offered by research networking organisations.

In this context, John Silvester expressed the general concern that research networks were not innovating fast enough. The pace of innovation in most of the Internet was getting faster and faster, and if research networking organisations would not increase their own pace of innovation as well, there was a real danger that they would lose their added value.

11. Continental updates

Claudia Cordova gave a presentation on the status and plans of RedCLARA. Her slides are available from www.ccirn.org/ccirn2008/index.html .

Heather Boyles gave a presentation on the US Federal Plan for Advanced Networking Research and Development and Trusted Internet Connections, using slides from Grant Miller. Those slides are available from www.ccirn.org/ccirn2008/index.html .

Heather Boyles drew the attention of the meeting to the OECD Ministerial Meeting on the Future of the Internet Economy that would take place in Seoul on 17-18 June 2008. More information was available at www.oecdministerialseoul2008.org .

Eric Tsang gave a brief overview of current developments in CANARIE, using slides from Andrew Bjerring. Those slides are available from www.ccirn.org/ccirn2008/index.html .

12. Date and location of Next CCIRN Meeting

A year earlier, it had been suggested that the 2009 CCIRN meeting might be held in Latin America. However, the Latin American participants in the 2008 meeting had received no briefing from CLARA for making a concrete proposal. After some discussion, it was agreed that the 2009 meeting would be held somewhere in the western hemisphere and that Heather Boyles, Eric Tsang and Florencio Utreras would consult with each other to find a convenient place and date, adjacent to a major research networking event.