



Global Lambda Integrated Facility Technical Working Group
8-9 February 2006
University of New Mexico, Albuquerque, United States

Attendees

<u>Name</u>	<u>Organisation</u>	<u>Country</u>
Pieter de Boer	SARA	The Netherlands
Erik-Jan Bos (Co-Chair)	SURFnet	The Netherlands
Lars Fischer	NORDUnet	-
John Graham	UKLight	United Kingdom
René Hatem (Co-Chair)	CANARIE	Canada
Dongkyun Kim	KISTI	South Korea
Jonguk Kong	KISTI	South Korea
Joonbok Lee	KAIST	South Korea
Jun Matsukata	NII	Japan
Kevin Meynell (Scribe)	TERENA	-
Alfred Neumann	Mid-Atlantic Crossroads	United States
Mark Prior	AARnet	Australia
Dave Reese	CENIC	United States
Bob Riddle	Internet2	United States
Paul Schopis	OARnet/TFN	United States
Rick Summerhill	Internet2	United States
Christian Todorov	Internet2	United States
Alan Verlo	StarLight/TransLight	United States
Arien Vijn	Amsterdam Internet Exchange	The Netherlands
Linda Winkler	Argonne National Labs	United States
Charles Yun	Internet2	United States
Matt Zekauskas	Internet2	United States

1. Actions from last meeting

- 20050930-1 Erik-Jan Bos to send scheme for intercontinental meetings to the mailing list.
- Done.
- 20050930-2 Kevin Meynell to suggest suitable date for first GOLE teleconference, and set-up this up before 24 October 2005.
- Done.
- 20050930-3 Kevin Meynell to set-up GOLE mailing list.
- Done.
- 20050930-4 René Hatem to circulate CA*net4 Fault Management Guide on the mailing list.
- Done.
- 20050930-5 Erik-Jan Bos to develop GLIF resource template.
- Done.

20050930-6 GLIF operators to send contact, resource and policy information to the mailing list.

- Done.

20050930-7 Kevin Meynell to re-circulate BCP table-of-contents.

- Done.

2. GOLE Teleconferences

Erik-Jan reviewed the status of the monthly GOLE teleconferences which had been established at the San Diego meeting. These were organised by the GLIF Secretariat, and provided GOLE operators with an opportunity to update each other about service improvements, modifications and planned outages. The plan was to rotate the chairmanship on a quarterly basis, with Christian Todorov (Internet2) and Erik-Jan Bos (SURFnet) taking on the role so far.

It was agreed the monthly teleconferences were useful and should continue. However, another chairman still needed to be found for the second quarter for 2006.

3. Fault Resolution

René presented a document that had been drafted by CANARIE and SURFnet (<http://www.glif.is002Fmeetings/2006/winter/tech/hatem-fault-resolution.pdf>), which proposed a fault resolution process for multi-domain lightpath connections between GLIF organisations. Inter-domain operations were currently performed on an ad-hoc basis, but as demand and usage increases, there needs to be a recognised fault resolution process for operational management.

Two distinct models were defined, The first model is where an end-user requesting a lightpath (the so-called sourcing organisation) contracts all the necessary lightpath sections across every domain, and incorporates a Service Level Specification (SLS) for each of these under which the operational conditions are laid down. The second model is where each lightpath section is sub-contracted to another organisation, which means that the sourcing organisation is not necessarily in formal contact with every intermediate network domain. With either model, there not only needs to be a mechanism that establishes when there is a fault with a lightpath, but also to trace where this fault lies. Usually end-users will notice problems first, so after checking their own equipment, the problem must be escalated to the organisations operating the intermediate domains.

The traditional GLIF mechanism of simply using bi-lateral contacts will not scale as lightpath usage increases, so a formal contracting process needs to be established. This includes the establishment of a ticketing system for tracking and ensuring that faults are satisfactorily resolved. The aim is that recognised Service Level Agreements could eventually be established between different optical domains.

4. Security process base-lining and improvement

Charles Yun gave a presentation on potential security problems within optical networks (awaiting presentation). He also mentioned that a high-level report had also been

produced by the EDUCAUSE/Internet2 Security Task Force website, and was available on its website (see <http://security.internet2.edu/>).

John agreed that whilst operators should not be complacent about the security of optical networks, it was less of a concern than for production IP networks. IP networks were longer established, more widely understood, and were generally subject to greater public access, whereas optical networks were inherently more private and less automated.

Erik-Jan thought the working group chairs should develop a document outlining the security issues in optical networks that needed to be addressed, although he needed to read the Internet2 report first. It was agreed to revisit this issue at the next Technical Working Group meeting.

5. Date of next meeting

The 6th Annual Global Lambda Workshop would be held on 11-13 September 2006 in Tokyo, Japan. This would include a meeting of the Technical Working Group.