

The Eleventh Silk and First OCCASION Board Meetings

Tbilisi, Georgia, March 12 – 16, 2006

Monday March 13

Session 0 9.30 – 10.30: Formal Opening of SB10

The eleventh Silk Board meeting was formally opened with speeches from Peter Kirstein (Chair of the Silk Board), Bela Tsipuria (Dept. Minister of Education), Chris Dewispelaere (NATO), Ants Work (Chair of NATO Information Security Panel) and Bernard Fabianek (European Commission)

Session 1 10.45 – 13.00: Administrative Matters, Current Status and Plans for Silk-1

1. Welcome to Silk Board Members

Kirstein welcomes the participants of the eleventh Silk Board meeting.

2. Acceptance of, or Changes to, the Agenda [Kirstein, [SB11-2](#)]

No changes were suggested.

3. Introduction of Participants

Besides the Silk Board members there were several guest participants to the meeting:

- Ihan Altunbulduk (EurasiaSat)
- Necati Aysin (EurasiaSat)
- Bernhard Fabianek (EU)
- Hadassa Jacobovitz (NATO)
- Mirjam Keune (ISOC)
- Kars Ohrenberg (DESY)
- Medet Tiulegenov (OSI)
- Dany Vandromme (RENATER)
- Ants Works (NATO panel)

As part of the introduction round De Wispelaere introduced various grant procedures of NATO. One of these was the reintegration grant for people who been abroad for at least six months in the last two years. Such people may apply for a grant of € 10.000. De Wispelaere requested the NREN representatives to make use of this grant procedure to reintroduce scientists, teachers and scientific support staff in the academia.

4. Minutes of Previous Meeting of the Silk Board in Almaty [Kirstein, [SB11-4](#)]

The minutes were agreed without any changes.

5. Actions Arising from previous meetings [Kirstein, [SB11-5](#)]

Action 9.7.2: The NRENs write report on their networks based on questions in

template by Berezhnev

Not done by most. Reports have been submitted and the information has been used for the status report. This will now be needed each quarter for OCCASION reports.

Action 9.7.3: The Silk ExCo (together with MSU) analyse the results of the reports

Not done (because 9.7.2. was not done).

Action 9.15: Janz initiate a DE working group (charter, chairman, etc.)

Aliev distributed a document with a draft charter later during the meeting.

Action 9.18: Janz publish workshop reports on the web and send formal report to ISOC.

A report has been completed; it was distributed during the meeting and will be put on the web.

Action 9.19: All NRENs provide names of contacts to be sent details of IPv6 training material.

Not done. As IPv6 will also be dealt with as part of the OCCASION project this action point has become obsolete.

Action 9.21: Kirstein distribute VoIP report and initiate a VoIP working group.

The report has been distributed and a working Group will be set up under OCCASION

Action 10.6: Kirstein discuss the hub Cisco problem with Jane Butler and try to find a solution.

This has been discussed and a GSR has been shipped.

Action 10.16: Gajewski produce a list of outstanding issues with regard to Cisco Academies

Not done

Action 10.17: Janz produce a document for an Education Plan (incl. costs).

Not done

Action 10.20.1: Am, Kz, Tj, Tm (and Af?) should have their own AS before the next Silk Board meeting.

Not done

Action 10.20.2: Gajewski produce a NIG proposal for investments and support of CSIRTs in the Silk countries.

Done and funded.

6. Status Report on Current Installations [Frese, Berezhnev]

On behalf of Berezhnev, Frese presented the status of the Silk infrastructure over the past 4 months. All the BUCs, except the one in Tbilisi, have been replaced. As a result the infrastructure has been very stable.

7. Status Report on Current Negotiations on Silk-2 [Kirstein, Frese]

Kirstein reported on the current status of the bidding process for the next phase of Silk. Since the previous Silk Board meeting, NC3A (a NATO Agency) has developed a tender document for Silk connectivity for two years. As the tender procedure is taking more time than expected, NATO is paying for the extended Silk-1 phase. It is expected that a Silk-2 contract will be signed in June before the next Silk Board meeting. If the contract is to go to another provider (e.g. not EurasiaSat) the new contract cannot be implemented before September 2006.

A communication has been received from Moldova requesting bandwidth from the Silk infrastructure. At this moment this request cannot be answered because it depends on the choice of the new provider. Furthermore it is a NATO policy decision whether non-Silk countries are allowed to make use of the Silk bandwidth. Gajewski further mentions that Moldova is also a part of the Porta Optica project. Kirstein will inform the Moldovan party of this standpoint.

Action 11.7-1: Kirstein will inform Moldovan of standpoint with regard to request for Silk bandwidth.

8. Policy on Subsidisation of communications during remainder of Silk-1 [Frese]

Up to March 2006 the policy was as follows:

- NATO central fund 18 MHz (\$60,000 per month)
- 12.150 MHz are distributed evenly free of charge as basic provision (9 countries each receive 350 Kbps uplink and 1750 Kbps downlink). This is a 1:5 ratio at the IP level (3.15:15.75); at the MHz level it is 1:3.67 (2.6:9.5). 5.25 MHz has been available as subsidised B/w; this is currently used by 4 countries; these get 1.313 MHz each and could use it for uplink or downlink as they prefer. UZ even gives back some uplink to obtain more downlink capacity. Since nobody quite used up their share, the rest has been lumped together for UZ who take it for downlink.

For the remainder of Silk-1, the policy is as follows:

- NATO central fund 18 MHz (\$60.000 per month)
- 9*200 Kbps is set aside for H.323 return channel bandwidth
- 12.150 MHz are distributed evenly free of charge as basic provision (9 countries each receive 350 (+200 for H.323) Kbps uplink and 1750 Kbps downlink).
- Within the constraints of the B/w needs expressed so far, any additional B/w required will be provided at a subsidy of 50%. If, as a result, we exceed

the \$60,000 per month provided from NATO funds, then additional money will be found from the previous contribution of the NRENs to subsidised B/w. At the time of the meeting, there was about \$100,000 available in such funds.

9. Communications Distribution for the remainder of Silk-1

Current bandwidth plans Frese presented the current bandwidth distribution based on the policies mentioned above. The bandwidth distribution is divided into free bandwidth, subsidised bandwidth and unsubsidised bandwidth. Frese asked the NREN representatives to make any additional wishes for bandwidth (increase or reduce) known before Thursday, so that he can update this distribution proposal. As a result of the responses, the following are the plans for bandwidth for the remainder of Silk-1.

- 12.150 MHz are distributed evenly free of charge as basic provision (9 countries each receive 550 Kbps uplink and 1750 Kbps downlink. It is expected that each country will make available 200 Kbps of their uplink capacity for H.323 conferencing when this is required.
- In order to cover the subsidised bandwidth needs, the bandwidth total requested from Eurasiasat is raised to 24 MHz – making 9 MHz available as subsidised B/w. This will cost the central funds an extra \$20,000 per month (since NATO pays for only 18 MHz).
- Currently 6 countries may get 1.5 MHz each and can use it for uplink or downlink as they prefer.
- 1.3 MHz are allocated to the priority DVB channel for H.323 use. The H.323 bandwidth is available for general use while there is no H.323 traffic.
- The co-funding currently guaranteed by the 6 countries requiring subsidised B/w is shown below:
 - March '06 \$8.750,00
 - April '06 \$14.666,67
 - May '06 \$15.000,00
 - June '06 \$15.833,33
 - July '06 \$14.166,67
 - August'06 \$14.166,67
 - September'06 \$17.166,67

Thus the total co-funding of B/w March-September 2006 is \$100,000, compared to an expenditure on extra B/w of \$120,000. The difference between the two is covered from the H.323 NATO grant.

Videoconferencing and VoIP [Frese]

Once the video-conferencing equipment is in place, special channels will be reserved for video conferencing. If there is no video conference, then the reserved bandwidth falls back into the general bandwidth pool as stated above. With the figures quoted

above, the cost of the B/w for which H.323 has priority is \$9K/mo. However, with the small amount of video-conferencing currently being used, to charge that grant \$20,000 up to September 2006 for communications seems reasonable.

IPv6 [Kirstein]

If IPv6 actually becomes an OCCASION user application then bandwidth will be reserved for this, in the same way as described for video conferencing..

Session 2 14.00 – 18.00 Preparation for Silk-2

10. The funding prospects

Normally we have representatives from various NGOs like the World Bank and the University of the Mountains. Both of these organisations need detailed information of the costs of communications under Silk-2. Since the choice of Carrier and the costs are not yet known, we have proposed that these organisations attend only SB12.

NATO De Wispelaere explains that the funding from NATO depends on the contract that will be signed. NATO will continue funding to at least the current level of bandwidth. However the exact budget for 2007 and 2008 is not determined yet. As far as other support De Wispelaere urges the NRENs to submit grant proposals for workshops and infrastructure. In 2006 there is significant budget available, but for the coming years there will be more competition

OSI [Tiulegenov] The situation with OSI funding has remained unchanged since the last SB meeting in Bishkek: OSI is withdrawing support for infrastructure, but continues to support the NREN organisations within the countries. The decision for this support is done locally and not at OSI headquarters.

University of the Mountains [Janz] This organisation is waiting for a quote. They still plan to start operations in September 2006 in three campuses: Khorug (Tj), Tekele (Kz) and Naryn (Kg).

World Bank [Janz] The World Bank has once again expressed interest in obtaining bandwidth to the Central Asian countries through Silk. Recently a quote was given based on the current EurAsiaSat. In April there will be a follow-up discussion between Janz and Fine (GDLN initiative) regarding future cooperation.

ISOC [Keuhne] Keuhne gave a presentation of what ISOC is and what it could mean for the Silk community. The presentation is available on the Silk web site (under SB11 documents). Proposals for support should be submitted well before the budget is necessary because ISOC determines budget allocation on a yearly basis. This does not apply for small grants (maximum \$10,000, with 50% own funding). ISOC can react to such grant applications on a shorter time frame.

The NRENs

Babayan (**ARENA**): a NATO NIG is being implemented. A new NIG for connection of technical universities is being prepared. There is no government support for the NREN.

Aliev (**AZRENA**): a project for the connection of schools with OSI, UNDP and government is being implemented. A second project (Min. Education and UNDP) is providing content for distance education.

Kvatadze (**GRENA**): Various project aim to connect schools to the infrastructure (more than 800 schools are to be connected). GRENA is part of the Porta Optica project. Currently they are implementing a connectivity project with funds from the Chairman of Cisco. There is no direct support from government; universities get money from government and should decide for themselves which ISP they use for their connectivity.

Japarov (**KAZRENA**): the NREN wants to expand to five other cities in Kazakhstan, but needs budget for the NOC equipment and satellite dishes. An application has been sent to NATO but the decision is being delayed until the details of the new Silk-2 contract are known. There are plans to support VoIP over the network enabling universities to communicate with each other.

Karabukaev (**KRENA**): there is no government support for KRENA, all funds are coming from the connected universities and institutes.

Sadikov (**TARENA**): A joint UNDP/OSI project has just started with support for NREN training and staffing. A schools project has just started in Tajikistan, striving to have 1 PC for every 30 children. Government funding for Internet connectivity as part of this project is envisaged.

Amansakatov (**TURENA**): various NATO NIGs are in the implementation phase giving TURENA regional expansion. There is no government funding for bandwidth yet, but limited provision will be made from 2007.

11. Technical activities to be discussed at the Silk Board

The technical issues regarding Silk were divided over the two parts of the meeting (Silk and OCCASION). Under the Silk umbrella all international issues and the status of the earth stations were discussed.

12. The Technical NIGs

Silk CSIRTs Gajewski is responsible for the implementation of a NATO CSIRT NIG. In each of the Silk countries a CSIRT will be established, with equipment and a small budget for salaries of the CSIRT officers. The equipment will be delivered in June and the CSIRTs will be operational before the end of the year.

H.323 Conferencing Frese stated that all the equipment was being shipped that

week. The frequency distribution will be changed to support video-conferencing. The technical details of the project are something for the OCCASION part of the meeting.

Setting up Silk and National IP Registration Authorities Frese presented an overview of the address allocation per country (see SB11 webpage for this document). AF, AM, KZ, TJ and TM do not have their own AS number. AM is applying for an AS number as soon as the ARENA has the obligatory backup link. KZ is in the process of applying for the AS number. TJ and TM have only started the procedure a few weeks ago. All four NRENs state that they will have an AS number by the next SB meeting.

The decision of the SB-10 meeting was reiterated: the NRENs are to use their own funds for the AS application.

Action 11.12-1: AF, AM, KZ, TJ and TM will have their own AS before the SB12 meeting.

13. Other Current NIGs

Armenia Vandromme reported that the project in Armenia had only just started and little can be said at this moment.

14. Other Funding Opportunities from NATO

De Wispelaere asked the Silk Board to assess how NATO can improve their support of the NRENs in the Silk countries, especially where political influence is required. If the Silk Board were to express concerns formally, De Wispelaere will put these concerns onto the political table.

For example the situation in Armenia is something that could use political support. The monopoly position of the national TelCo (ARMINTEL) is paralysing new IT developments in the country. Kirstein promises to write a letter to the IST panel expressing his concerns with regard to the Armenia situation. [The situation in Armenia may have changed. The OTE, the Greek major shareholder in ARMINTEL, has announced they are withdrawing from Armenia. Kirstein will try to ascertain the current plans before writing his letter]

Action 11.14-1: Kirstein will write a letter to the IST panel expressing his concerns with regard to the Armenia monopoly situation (but see above)

15. Future Meetings Structure

Kirstein suggested that the Silk Board and OCCASION meetings be kept as closely coupled meetings. It was also suggested that the frequency of the meetings stays the same as hitherto (three times per year).

16. Future Meetings Calendar

SB-12: June 26 – 30, Baku Azerbaijan

SB-13: November, Istanbul, Turkey

17. Any Other Business

18. Summary of Actions

Action 9.7.2: The NREns write report on their networks based on questions in template by Berezhnev

Action 9.7.3: The **Silk ExCo** (together with MSU) analyse the results of the reports

Action 10.16: Gajewski produce a list of outstanding issues with regard to Cisco Academies

Action 10.17: Janz produce a document for an Education Plan (incl. costs).

Action 10.20.1 and 11.12-1: Af, Am, Kz, Tj, Tm should have their own AS before the next Silk Board meeting.

Action 11.7.1: Kirstein inform Moldovan of standpoint with regard to request for Silk bandwidth.

Action 11.14-1: Kirstein will write a letter to the IST panel expressing the Board's concerns with regard to the Armenia monopoly situation.

Tuesday March 14

Joint Silk Board (SB11) and OCCASION Board (OB1) Agenda
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Session 1 9.00 – 13.00 The Objectives, Experience and Performance Of the EC Programmes

19. Introduction, Background and Related Projects

The first part of this meeting was designed to make clear how the OCCASION project fits into the EC Research Infrastructure programme, and what both the EC and the Project Partners expect to get out of it.

The Background of the EC Framework Programme for R & D Fabianek gave an informative presentation about the EC Framework Research Networks Programme. This presentation is available on the web site [[sb-12-19](#)]. The OCCASION project fits in with other similar initiatives of the EC in the European Neighbourhood Programme: Balkan, Russia, China, India and Africa.

20. The Objectives and Status of the OCCASION Project

The Objectives as in the Description of Work (DoW)

Kirstein stated that the main objectives of the OCCASION project are as follows:

- Manage Silk
- Make tools for research collaboration available
- Create Silk user groups that collaborate with European peers
- Create state of the art communication facilities
- Move towards sustainability

These objectives are represented in the deliverables of the project and will have to be fulfilled in the final report.

The SPONGE Review and moves to sustainability

At the last SPONGE review in November 2005, the reviewers were very critical with regard to the efforts that are being put into having the NRENs reach full sustainability. Their view was not completely shared by Kirstein and Janz; nevertheless, the NRENs are relying too much on external funding and should put more pressure on their own governments for support. The conclusions of that review have found their way into the expected deliverables of the OCCASION project. The big difference between SPONGE and OCCASION is that the NRENs are now also receiving funding for local support and travel. This EU support in return obliges the NRENs to make their efforts in sustainability more visible.

Porta Optica in relation to OCCASION

Gajewski gave an overview of the Porta Optica project. Porta Optica is a study into the possibility of extending a fibre optic infrastructure from GeANT into the following regions: Balkan, Baltic States and the Caucasus. The project has just started and will be concluded on January 31 2007. The overlap with the Silk countries is particularly interesting. Although Porta Optica is primarily concerned with fibre optic infrastructure, the inventory of user groups can also be of help for OCCASION. Gajewski stated that if his Board allows him to share information he is most willing to do so. In return he hopes that the information coming out of the OCCASION project is also made available for Porta Optica. Kirstein stated that the reciprocal provision of information would certainly be made – to the extent that the information was not in commercial confidence from an outside body.

21. The impact of Reporting and Reviews [Fabianek]

Fabianek gave an overview of the reporting mechanisms in the EU projects. The presentation is available on the web site.

Two reviews are planned, the first one after the first year of the project and the second one at the end of the project. Especially the first review is important for OCCASION as a negative review will mean that financial support to OCCASION will be stopped. At the time of the meeting, it was thought that the first period was a full year. In practice it is 9 months (i.e. July 31, 2007). This means that the first Review should be not later than October 2006 (but see below).

22. The first OCCASION Review and its expectation [Fabianek, Kirstein]

Fabianek stated that in OCCASION a more technical outcome of the deliverables is expected than was the case in SPONGE. At the first review this will be reviewed critically. Also the reporting discipline from the NRENs and the extent in which they demonstrate that there are active national and international user groups supporting the NRENs will be reviewed. Discussions following the Review between Fabianek and Kirstein indicated that the Review will be in Istanbul during the first two weeks of November. It will be arranged to be adjoining the SEEREN Review (SEEREN is the EC project providing Internet connectivity to the Balkans). The date cannot be later than November 17, because of the contractual conditions, and because during the week of November 20 there is a major EC meeting.

Since the first period ends July 31, the project is contractually bound to send its reports to the Commission not later than September 15. This means that all contributions from the partners must reach the Coordinator not later than the third week of August. This must include the Deliverables due by Month 9 on Status of NRENs, User Groups, VoIP, Video-conferencing and Video-conferencing. It must also include the report from

each of the partners on their work throughout the first period.

23. Funding through DESY and RUG of Partners' Activities

Staff and Travel via RUG

RUG has advanced the total costs of the SB-10 and SB-11; both meetings will be accounted to OCCASION. It is expected that the contract procedure will be finished with a few weeks so that the NRENs (except TM and UZ) will receive their own budget for travel. With the budget they can also hire extra staff for the support of the project activities.

Janz warned that the SB-meeting are becoming more costly than was expected during the writing of the project proposal. If the expenditures continues at the current level there will not be enough budget. Kirstein suggested that some budget may be transferred from equipment to meetings. There are donors who can contribute budget for equipment that might be needed. Janz should give an estimate for the next OCCASION Board on how much he feels will be required. The estimate will be required at SB12, because it is the last before the 1st Review, and any requests for shift in budget should be made as part of the Review.

Action 11.23-1: Janz provide estimate in advance of SB12 of the costs of Silk/OCCASION Board meetings, and hence of the budget transfers that may be required

Equipment via DESY

All equipment will be paid for and delivered through DESY, as has been done until now in the Silk Project. At the moment there are no explicit plans or wishes for equipment. It would be desirable to have such plans for SB12. However, since this depends partly on the considerations arising after the Silk-2 bid has been evaluated, this may be difficult to achieve.

Action 11.23-2: Frese provide estimate in advance of SB12 of the equipment needs of the OCCASION partners – and of others funded from the same source.

Payment to other partners

As soon as UCL receives the EU budget it will transfer the budget to the NRENs. This requires first information on how much Janz has already paid on behalf of the OCCASION partners for SB11.

Action 11.23-3: Janz provide all with a statement of the payments he has made on behalf of the OCCASION partners for SB11. This amount will be subtracted from the advances to be received by these partners.

24. Current OCCASION Status [Kirstein]

The contract has left the legal part of the EC and is now in the process of being signed by the EC management. The draft consortium agreement has been sent around for comments and these are being processed at the moment. DESY still has to make its comments known. After these comments are received Kirstein will send out a new, final, draft of the consortium agreement.

Session 2 14.00 – 16.45 The OCCASION Activities and Impact

25. The Work Packages

WP1 OCCASION Management

Objectives WP1 should manage the OCCASION project itself.

WP2 Silk Project Management and Information Services

The management of the Silk project remains mainly the responsibility of the Western members of the Silk Exco; this area will be discussed further at the OCCASION meeting. A second activity is the drive towards sustainability; this is discussed further in Section 26 below. Finally, it is as part of this project that information services are provided – both of the status of the NRENs and on the project itself.

WP3 Silk Network Management

Description of work. From the beginning of the Silk project, the Silk Network Operations Centre both managed the Silk network, and collaborated with the SPONGE experimental activities. However this collaboration was on a best-efforts basis, and showed the disadvantages of this form of working. Certain activities, like those of A3.2 and A3.3 below, took a long time to have effort allocated to them. It is the intention of this work-package to ensure that some of the DESY staff is directly at the disposal of the OCCASION project, to ensure that the OCCASION management has a greater say in the priorities of the total activity. In addition, it has become clear that the SNOC is not really staffed adequately to undertake the extra activities required by OCCASION – hence this substantial activity in the project.

A3.1 The Silk Network Operations Centre (SNOC). In the set-up of the Silk infrastructure, and its connection to the NRENs, there is a requirement to manage and monitor the central network, and liaise with the NREN operators, Cisco and Eurasiasat contractors. The SNOC is already operational, and is run by DESY. This activity will extend the SNOC as needed, and co-fund its operations. It will also be necessary to configure the dual-stack operations required for the work of A4.3.

A3.2 Bandwidth adjustment for specific user communities and applications. The satellite equipment, the Satellite Router and the NREN routers all have the capability of

providing both short-term and long-term statistics, and extensive configuration capabilities. It is part of the SNOC function of A3.1 to provide statistics on the Silk satellite subsystem to the Silk Board, and to optimise the Silk Network's performance according to guidelines set by the Silk Board and ExCo. However in the context of the needs for User Group collaboration and Distance education, there will be need for sophisticated bandwidth re-configuration. It is the function of this activity to determine the configuration parameters needed to meet specific User Group needs, and to monitor their impact on total system performance. To minimise the impact on the others users when a re-configuration is required, additional equipment and procedures are needed. The requisite reconfiguration mechanism, measurements and optimisation will be co-ordinated, evaluated, and partially carried out, under this activity.

A3.3 Caching configuration To assist the caching experiments, there will be need of assistance from the SNOC. The SNOC is the principal conduit to Cisco, so that much of the burden of updates falls on this group. It is hoped to persuade Cisco to modify the software in the Cache Engines to allow updates to occur even if pages are requested from other Silk sites.

WP4 Technical Activities

VoIP and H.323

Here the main activities at first will be the progress in VoIP and H.323. As a lead in to this work, there was first a description of the DESY work.

Ohrenberg gave an overview of the implementation of VoIP at DESY. This VoIP implementation is based of the SKINNY client (proprietary) protocol of Cisco and in a next version will also support SIP. This will make it possible to connect to the SIP environment used at UCL.

Cisco has offered to provide support for the further expansion and use of VoIP and video conferencing in Silk. Once the infrastructure is in place Cisco experts can be consulted for workshops and support,

IPv6

IPv6 does not yet have a high priority within the Silk countries as other technical problems demand most of the available technical capacity.

WP5 User Groups

Sustainability is best achieved when there are enough active, well-defined, user groups active on the various networks. Therefore a substantial part of the work to be done in OCCASION will be the identification and support of user groups. The NRENs will be receiving funds to have staff working on this and they should report on progress in this are. An inventory of existing and potential user groups produced the following list:

- **Distance Education:** already existing in many countries. What needs to be done in to structure the user groups.
- **On-line Libraries:** on-line libraries are important for education and research and will become even important in the coming years. It is therefore within the scope of OCCASION to identify the use of on-line libraries and structure the user group. The first action is to identify the existing user groups.

Action 11.25-1: The OCCASION partners will identify what access there is to electronic journals from their countries.

- GRID activities: research is no longer an institute-based activity, it is being executed by national and international consortia. For the communication and the sharing of data and resources Grid technology is an essential.
- Astrophysics and Seismology
- E-health

Action 11.25-2: The OCCASION partners will try to locate people active in the user group communities mentioned above.

WP6 Dissemination

Dissemination of the activities and results of OCCASION is something that needs active attention. The EU is very sensitive to let it be known that it is supporting NREN activities such as Silk/OCCASION. Any papers or presentations within the countries should be mentioned in the quarterly reports.

The TERENA and IST meetings are the European stage where results of EU projects are publicised. The TERENA meeting is in (Italy, 15-18 May) and would also be a suitable meeting to bring the NRENs in contact with European peers. The high costs for travel, lodging and fees keep NRENs from attending such meetings. The next IST meeting is in Helsinki (November 21-23).

26. Sustainability

Sustainability is an important objective, some feel the only important objective, of the OCCASION project. The meaning of sustainability has various dimensions. First there is the financial aspect: NRENs should be working towards the situation that they are not dependant of external (=international) funding for their operational expenses. Kvatadze reported that in most of the countries this is very hard to achieve as there is little to no national funding available. In his country (Georgia) the government refuses to allocate budget directly to the NREN. The universities and institutes should decide for themselves if they wish to make use of the services of the NREN (or go to a commercial provider). In this competition it is very important that the NREN can provide cheap solutions for their users, as this is the main driving force in the choice of

provider. Contrary to European countries state of the art technology is less important. Other aspects of sustainability that were mentioned are well trained staff and active support from the users within the connected institutes.

Vandromme gave a short overview of how various aspects of sustainability were dealt with in the European countries, including the countries that had just joined the EU. One of the most important aspects is to have a broad user base.

Janz has updated the NREN status overview. A paper version was distributed during the meeting. The NRENs have should comment on this version, after which it will be finalised and be viewed as the initial overview of the status of the NRENs.

Action 11.26.1: Janz will finalise the NREN status overview.

27. The mechanisms for moving towards sustainability

The sustainability aspect was discussed at various moments during the meeting. In general it may be stated that most of the Silk countries are moving towards sustainability, although the pace in which this is happening differs significantly. KAZRENA expects to be fully (financial) sustainable in 2007, if government keeps to its promise to support the NREN with central funding. In Tajikistan sustainability might become better in reach by the government programme to connect primary and secondary education to the network. In countries such as Armenia and Kyrgyzstan government funding is still a long way off. The main limitations that were mentioned with regard to reaching sustainability are:

- Poor government support
- Insufficient international connectivity
- Limited regional connectivity

28. The organization of technical activities and meetings in OCCASION vs Silk

This was discussed during the Silk Board part of the meeting.

29. The Schedule of Future OCCASION Board meetings

It was already decided that the OCCASION meetings should coincide with the Silk Board meetings. The dates of the next two meetings are therefore:

OCC-2: week of June 26, Baku, Azerbaijan

OCC-3: 1st or 2nd week of November, 2005, Istanbul

Wednesday March 15

The OCCASION Board (OB1)

9.00 – 13.00 OCCASION Board 1 Session 1

30. Welcome to any new members

There were no new members to be greeted.

31. Changes to the Agenda

The agenda was approved.

32. Membership of OCCASION Board and Committees

The OCCASION Board (OB)

The OCCASION Board consists of representatives of the partners mentioned in the OCCASION contract. Besides these formal partners there will also be seats on the Board for representatives from Turkmenistan and Uzbekistan. Afghanistan is a special case, its formal status will be decided on at a later time (in the presence of an Afghan Silk representative).

OCCASION Executive Committee (OEC)

The day to day management of the OCCASION project will be done by the OCCASION Executive Committee. For the time being this will be the same as the Silk ExCo, in due time it will be replaced by a separate group that will have their own teleconference meetings.

33. Management Activities

The contract has been approved and is now in the final leg towards signing. The project consists of several work packages that each have their own activity leader:

WP1 OCCASION Management: Peter Kirstein

WP2 Silk Project Management and Information Services: Peter Kirstein

WP3 Silk Network Management: Hans Frese

WP4 Technical Activities: Peter Kirstein

WP5 User Groups: Robert Janz

WP6 Dissemination: Robert Janz

In the overall management the following roles are defined for:

- Kirstein: Chair of the meetings

- Frese: technical manager
- Janz: service manager

The relationship between the various partners, with their rights and duties, is described in a consortium agreement. A draft for the consortium agreement has already been distributed before this OCCASION meeting and comments have been made. After the meeting a final draft will be distributed that can be sent to the legal representative of the partner organisations for signing.

Action 11.33.1: the OCCASION partners will have the consortium agreement signed at the shortest possible notice.

34. Meetings

Besides the three OCCASION meetings there will be regular teleconferences. In order to have these conferences work it is necessary that the participants of the meetings speak and understand English. It is allowed to have a replacement for the teleconferences. Given the time difference the best time to have the meetings is at 11.00 (CET), it was decided that Friday would be the most suitable day for the meetings.

As long as there is no working VoIP teleconferencing system available at UCL or DESY the Cisco teleconferencing system will be used.

35. Attendance at outside conferences

The outside meetings were already discussed at 11.25.

14.00 – 17.00 OCCASION Board 1 Session 2

36. Technical Activities

Providing bandwidth for conferencing

Conferencing needs priority channels as the network is mostly saturated in the periods that conferencing might take place. The NRENS need to agree with giving up part of the bandwidth for the priority channels. After some discussion on this issue the NRENS agreed to this proposal. It was essential in the discussion that the bandwidth will only be missed if a conference is taking place. At all other times the bandwidth falls back into the general pool.

H.323 conferencing

In order to provide technical support for H.323 multi-casting will be necessary. None of the NRENS have experience with multi-casting over their network. Therefore tests and some extra support will be necessary.

The H.323 conferencing will be possible with the Tandberg units and as well as with

software solutions. Cisco has some solutions available.

Network monitoring

Janz mentions that little is known about the kind of traffic that is to be transported over the network. All that is known are the raw bit rates provided by DESY. It would help to understand the use of the network better if the type of traffic is known. Recently he saw an example of NTOP statistics and would like to have something similar in Silk.

Caching

Several of the NRENs are using caching even though the Content Engines are out of order at the moment. UzSciNet claims an overall gain of 3 – 5%. It was decided that Cisco should be pressed more to solve the deadlock Silk is in with regard to the not functioning Content Engines. The encryption problem should be solved as soon as possible.

IPv6

No plans at this moment

Security

NATO has provided budget for the creation of CSIRTs in all of the Silk countries, including a small budget for staffing of the CSIRTs. Gajewski is implementing this grant.

Before the summer two workshops will be given and the CSIRTs will be operational before the end of 2006.

37. Distance Education

Cisco gave two presentations:

Granchova: an overview of what Cisco can offer with regard to ICT support in education

Akbarov: the role of the Cisco Academies and the current status in Silk countries

TM, TJ and KG do not have a Cisco Academy, of the other countries UzSciNet is the only NREN with its own Academy. The question was raised what it would cost to set up a Cisco Academy:

- Basic equipment: \$ 9,000
- Security module: \$ 4,000
- Wireless module: \$ 8,000
- IP-telephony module: \$ 13,000
- Shipping costs: p.m.

- Training costs: p.m.

It was decided that a NIG should be prepared in order to have NATO fund the creation of Cisco Academies in countries where NRENs are willing to support this activity. Given the total amount necessary for a full blown academy (\$ 35,000) it is not certain how many Cisco Academies might be supported by NATO.

Action 11.37: Gajewski will write a NIG for the creation of Cisco Academies in Silk countries.

38. Technical Infrastructure

Besides the facilities for normal use of the Internet OCCASION has following technical infrastructure at its disposal:

- VoIP - with hardware and softphones
- H.323 conferencing – with Tandberg units and software ones, including servers, MCUs, and gatekeepers
- Mbone conferencing

The NRENs are requested to provide contact points for technical arrangements with regard VoIP and H.323 issues. Also it would be helpful if the NRENs provide maps of the local network between dish and video conferencing system.

Action 11.38.1: NRENs provide contact points for VoIP and H.323 technical issues

Web site

Janz will set up an OCCASION website for the OCCASION documents and dissemination of the project results. This web site will have its own domain name and identity (i.e. OCCASION logo).

Action 11.38.2: Janz will set up OCCASION web site.

Distribution and mailing lists

There is already an OCCASION distribution list. The necessity of a second list for the administrative procedures was discussed. Although there might be need for such a list, the addition of yet another list might be confusing. It was decided to first see if the current list is sufficient, if not then a separate list will be set up.

Thursday March 16

Joint Silk Board and OCCASION Board Meeting
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Session 1 09.00 – 13.00: Distance Education, Training and Technical

39. Progress on Distance Education**The EC Initiative**

Schramke gave a lengthy presentation of the EC Distance Education project that had just started in the Caucasus region. This project will have a relationship with the Silk/OCCASION project.

The Silk/OCCASION Working Group

After presenting his views on Distance Education in Azerbaijan, Aliev unfolded his plan to set up a Distance Education working group. A document outlining the ideas was distributed. The NRENs will send their comments with regard to the ideas that were presented to Aliev.

Action 11.39.1: Aliev will produce a new proposal for a distance education working at the next meeting.

The Virtual University

Schaumburg gave an update of the progress of the Distance Education platform known under the name Virtual University. About 22 universities in Central Asia and the Caucasus have formed an informal union that makes use of the courses that have been developed. Connectivity to European countries is essential for this project.

40. Progress on Workshops

Various workshops are in preparation. Gajewski gave an overview of what is in the pipeline:

1. The Security Workshops:
 - a. April: Vilnius (ES)
 - b. April: Istanbul (TK)
2. Sustainability Workshop: Istanbul (TK), a workshop for the financial managers

As follow up on the ISOC presentation an inventory was made of the educational needs within the Silk countries. The following list was the result:

- Distance education workshop
- The use of video-conferencing equipment
- CSIRT-2 (continuation of the April workshops)
- Global structure of academic network organisations
- Cisco academy management
- New satellite equipment (once the new contract is known)
- Transition studies to use of fibre (if applicable after new contract)

- Wireless technologies (especially WiFi and Wimax)
- EU FW7 (support in applying for grants from this programme)

It was decided that these needs are to be described in somewhat more detail in an educational plan for 2006 – 2007. This document will be presented to various donors for financial support.

Action 11.40: Janz will produce education plan 2006-2007.

41. Other workshops planned

In June three workshops will be held in Almaty as part of the meeting of the Science Committee there (Liquidation of Radioactive waste, Management of Water Resources, Information Security)

14.00 – 17.00 OCCASION Board 1 Session 3

42. User Groups

The organisation of user groups is one of the work packages and was discussed at 11.25.

43. Dissemination

Dissemination was discussed at Agenda Point 11.25.

One extra aspect of dissemination was mentioned here: the TERENA NREN compendium. It was pointed out that it is important for the visibility of the Silk countries to have an entry in the compendium and update the information on a yearly basis.

44. The Deliverables over the next 6 months

There are several OCCASION deliverables that need to be finalised before September 2006. These deliverables (and persons responsible for them) are:

D1 Project description: will be sent out before March 23, 2006 (Kirstein)

D2 Education programme: an overview of the workshops will be sent out after further discussion with ISOC (Janz)

D3 VoIP installation (Kirstein)

D4 Status report: will be sent to NRENs for comments and then finalised (Janz)

D5 User group definition: will be picked up when Porta Optica deliverable is made. Countries should send input for user group deliverable. The questionnaire of Porta Optica might be used, although the focus of this project is different. (Janz)

OCCASION consists of various sub-activities. In order to share the work load evenly (in relation to the funding) amongst the NRENs the following division of work was agreed

on:

ARENA: grid activities,

AZRENA: migration to fibre optic infrastructure

GRENA: support of user groups, fibre optic migration, video-conferencing

KAZRENA: video-conferencing, user groups

KRENA: specific user group support, distance education

TARENA: user group identification, educational issues in broader sense

TURENA: support known user groups within Turkmenistan

UzSciNet: Cisco Academy, video-conferencing

UCL: management, user groups, video-conferencing

DESY: network management, video

RUG: management, user groups, dissemination

45. Future Meetings

Future meetings and the meeting structure have been discussed at an earlier moment.

46. Summary of Actions

Action 11.23-1: Janz provide estimate in advance of SB12 of the costs of Silk/OCCASION Board meetings, and hence of the budget transfers that may be required

Action 11.25-1: The OCCASION partners will identify what access there is to electronic journals from their countries.

Action 11.25-2: The OCCASION partners will try to locate people active in the user group communities mentioned above.

Action 11.37: Gajewski will write a NIG for the creation of Cisco Academies in Silk countries

Action 11.38.1: NRENs provide contact points for VoIP and H.323 technical issues

Action 11.38.2: Janz will set up OCCASION web site.

Action 11.40: Janz will produce education plan 2006-2007

Action 11.44.1: Kirstein send out Project description before March 23, 2006 (D1)

Action 11.44.2: Janz will provide D2 – an overview of future workshops will be sent out after further discussion with ISOC (Janz)

Action 11.44.3: Kirstein will send out D3 - VoIP installations

Action 11.44.4: Janz will send out the D4 Status report - first as a draft for

NRENs to provide further input and then be finalised from their comments

Action 11.44.5: All partners send in their input for the user group deliverable according to the Porta Optica questionnaire.

Action 11.44.6: Janz update deliverable based on the above.

Attendees

ExCo

S. Bereznev	– MSU	sfb@RADIO-MSU.NET
H. Frese	– DESY	hans.frese@DESY.DE
J. Gajewski	– CEENet	gajewski@ceenet.org
R. Janz	– RUG	R.F.Janz@RC.RUG.NL
P. Kirstein	– UCL	kirstein@cs.ucl.ac.uk
C. De Wispelaere	– NATO	science.sfp@hq.nato.int

Guests

E. Arikan	– Superonline	earikan@superonline.com
B. Fabianek	– EC, OCCASION Project Officer	Bernhard.Fabianek@cec.eu.int
E. Fleischer	– IM-C Caucasus DL Project??	info@uhlberg-advisory.de
D. Grancharova	– Cisco	dgrancha@cisco.com
G. Lalahy	– Cisco	glalahy@cisco.com
R Akbarov	– Cisco	rakbarov@cisco.com
O. Reisner	– EC Delegation	Oliver.Reisner@cec.eu.int
I. Khomeriki	– ISTC	Khomeriki@istc.ru
M. Kuehne	– ISOC	mir@isoc.org
K. Ohrenberg	– DESY	Kars.ohrenberg@DESY.de
H. Schramke	– IM-C Caucasus DL Project	helmut.schramke@care-bg.org
M. Tiulegenov	– OSI	medet@soros.kg
D. Vandromme	– Renater	vandrome@renater.fr
H. Jakobovits	– NATO	
A. Work	– NATO ICS Panel	aw39@hot.ee
H. Schaumburg	– TU Hamburg	h.schaumburg@tu-harburg.de

NRENS

N. Nehan	– Afghanistan	nehan_nargis@YAHOO.COM
G. Babayan	– Armenia	grigor.babayan@ARENA.AM
E. Aliev	– Azerbaijan	elchin@azrena.org
R. Kvatadze	– Georgia	ramaz@grena.ge
B. Japarov	– Kazakhstan	bjaparov@kazrena.kz
K. Karabukaev	– Kyrgyz Republic	karabukaev@AKNET.KG
K. Sadykov	– Tajikistan	khisrav@tarena.tj
C. Amansakhatov	– Turkmenistan	amansakhatov@YANDEX.RU
V. Navotny	– UNDP, UZScinet	navotny@UZSCI.NET