**TF-Mobility Meeting Minutes**
**6 September 2005**
**Barcelona, Spain**

The meeting started with a round table of the participants, followed by an update about the national implementation of eduroam as follow:

### - Norway
Nothing really new has happened since last time. Nordunett is raising awareness about eduroam.

### - Germany
No news since last time

### - Slovenia
2 new organisations joined eduroam. ARNES is working on the local eduroam in a box, to ease the deployment of eduroam. Rok presented what they have developed and also reported that Arnes registered the eduroam name in Slovenia one year ago.

### - Switzerland
SWITCH has joined eduroam. Some work is ongoing to try and connect CERN.

### - Portugal
In Portugal there are several universities connected and the aim is to connect the remaining by the end of October.

### - USA/ESnet
ESnet is currently working with the I2 to connect to eduroam. ESnet main scope is to get the grid community into eduroam. Tony gave a presentation about his idea to connect via ESnet the grid community. The presentation is reported in these minutes.

### - France
RENATER connected to eduroam in the spring and since then has tested the infrastructure. They plan to become operational before the end of the year.

### - USA/Internet2
The lack of a single American NRENs (like it happens in the European countries) causes some problems for the American universities to get connected to eduroam. Various solutions have been proposed, but nothing has been agreed so far. Work is ongoing to fix this.

### - Spain
In Spain universities use nowadays domains different from the standard .es, like for instance .edu. The problem of how to deal with these special cases was brought up. Also Holland has the same problem. The topic was discussed further more under the agenda item “eduroam issues”.

### - Holland

In Holland eduroam is used by many universities. SURFnet is now focusing to explain the technologies, as many people seem not to understand the difference between A-Select, Shibboleth and eduroam. For this purpose SURFnet has made a flyer to describe the differences between these three systems.

### - Denmark

Denmark is investing in promotional material. There is still the open issue of web-based redirection that is still accepted as part of eduroam. Due to the security issues that this method raises many universities in Denmark are concerned that their students while roaming might be requested to enter their credentials in a web page.
Because web-based redirection is used in some countries (for instance UK and Finland) it is not possible to band this method immediately.
Discussion took place on the list, during the summer, on how to secure web-based redirection. Some of the proposed solutions are:

- the use of an eduroam PKI
- the use of certificates (which would raise the problem of how to trust all the certificates)
- the use of TACAR in case multiple CAs were used
- an IETF internet draft that basically proposes to have 802.1X over web

Unfortunately although this was initially an item in the agenda it could not be discussed for lack of time.

## Review and approval of deliverables – Licia Florio

During the meeting held in June 05, a revision of the deliverables list took place.
In the meanwhile some deliverables have been finalised and circulated to the mobility list. These deliverables have been discussed during the meeting and the following was agreed:

### - SSID standardisation deliverable

This deliverable was produced by Tomasz and circulated over the list in July.
The document is a proposal to standardise the SSID that are used for eduroam.
The proposed solution relies on the access point used, therefore it was agreed to perform some more tests before closing the deliverable.
Tomaz and Stefan will make some further tests in the next couple of months and will report to the group.

**ACTION**: Tomasz and Stefan to report about the possibility of setting up multiple SSIDs.

### - XML schema for RADIUS weather map

In June 05 Miro circulated over the mobility list an XML schema, based on which they have started building a structure to provide information about the status of the RADIUS servers that constitute the eduroam infrastructure.

**ACTION**: Miro to send an email to the list to include the XML schema as well as the description of the structure for the RADIUS weather map.

**- Eduroam in a box** ‘eduroam-in-a box’ solution implemented by Ralf to reports the steps that led to such a conclusion. Juergen on behalf of Ralf (who could not make the meeting) reported that it is possible to download the software, although the web page is available only in German.

**ACTION**: Licia to contact Ralf to produce a document about eduroam in a box. Hansruedi should also be involved as he initially worked on this task.

## Eduroam trademark

Licia briefly reported about the eduroam trademark, which was registered by TERENA in June 05. The trademark is valid for Europe and USA.
All academic organisations connected to eduroam are invited to use the logo for the national eduroam web site or to produce documents or for other promotional material.

## SSID database

Klaas reported about the status of the SSID database.
The purpose of having such a database is to provide roaming users with information about the closest eduroam access.
The proposed structure was circulated at the beginning of 2005 by Klaas. In the meanwhile Klaas contacted some commercial operators to understand which fields should be included in such a database, but he has not got an answer up to now.
Milan proposed to demand that each institution maintains a list with the SSID, the cipher used and all kind of information that might help a user to connect to eduroam.
Klaas will report to the list about further progresses.

## Eduroam client

David presented the idea of having an eduroam client, which would ease the eduroam configuration process for end users. He also reported that Josh got in touch with some companies to discuss the possibility of getting such a client.
The pros and cons of a possible client were discussed.
Having the client would make eduroam easier for the end users, which should be the main target. The maintenance of the client might however be a problem.
Furthermore the development and the maintenance of the client would require some funding that is currently not available.
Proposed solutions to fund the development of the client were:

- to make a proposal and submit it to TERENA. This way would be the easiest and the lighter from an administrative point of view. Each NRENs would pay a certain amount for the development. The maintenance of the client could be managed in the same way.
- To submit the proposal to the NORDUNET3 framework. The deadline to send proposal is Oct 15. Due to the fact that the requirements for such a client have not been agreed yet, it seems unlikely to match this deadline.
- To apply for funding to GEANT2. Juergen might investigate with DANTE the possibility of getting some funds to finance the client, but also this will require some time.

It was agreed to prepare the specification for the client, but unfortunately due to lack of time this could not be done during the meeting. A videoconference was scheduled on Thursday September 15 at 2pm.

## Monitoring

The monitoring function, as Milan presented it, would look at the RADIUS servers only and would provide a function similar to “ping”.
All institutions would need to provide a test account, plus information about the SSID.
It was agreed to mandate a test account for all the new comers and to get the other institutions already connected to provide a test account.

As CARNET is working to produce a static weather map of the RADIUS server, Miro suggested integrating the weather map with the monitoring function.
Each NRENs would publish the information about the institutions and the searchy tool (developed by RedIRIS) might be used to gather the information.

**ACTION**: Milan and Miro to finalise the task of monitoring.
**ACTION**: All eduroam NRENs to provide a test account on their RADIUS servers.

## Eduroam policy

David presented the policy document that he has prepared.
A policy document is due for eduroam-ng in October, but it was agreed to have a first version that maps the current eduroam infrastructure and which will be update to fit the evolution of eduroam to eduroam-ng.
The policy document comprises four parts, namely a ‘eduroam minimal security requirements’, a ‘eduroam federation charter’, ‘eduroam service level agreement’ and a document for the definition of the terms used.
Due to lack of time it was not possible to discuss the complete document.
Some issues should be considered such as:

- Q: Can European academic institutions that are not TERENA members join eduroam?

A: To date any academic institution in Europe and beyond can join eduroam. Being a TERENA’s member is not a requirements to join eduroam (see Australia for instance).

- Q: Eduroam is not a legal entity, so who will be signing the policy on the behalf of eduroam?

A: It is unclear how this will work. If the policy becomes operational before eduroam-ng is in place, then TERENA might be the signer (this should be discussed further more).

- Federations are allowed to connect to eduroam. A list of requirements that a federation should match to be allowed into eduroam should be agreed and included in the policy. Nevertheless there might be cases that might require a vote of the other eduroam members. How will this be dealt? Should the vote be unanimous or the majority would be sufficient?

A: So far all the discussion took place in the TF-Mobility group. It was agreed that until a committee is in place, all decision should be taken by all eduroam members.

- The policy introduces an eduroam Assembly that would be in charge of changing the policy. It was suggested the member of this assembly to be representatives of the NRENs (or equivalent) that are connected to eduroam

**ACTION**: David to produce a new version of the policy document and circulate it to the list by the end of September.

### Eduroam in a box – Rok Papez, ARNES

To reduce and facilitate the configuration time for system administrators, ARNES has developed an eduroam configuration interface, where all the parameters (such as Ethernet, access point, RADIUS, LDAP, etc) are entered.
Rok presented the software which seemed really interesting.
The basic system is ready, although some further tests are needed. Only CISCO access points are supported at the moment.

**ACTION**: Rok to circulate more information about the software.

### ESnet RAF and Eduroam -Tony Genovese

ESnet established a couple of years ago a one-time password roaming system based on a RADIUS infrastructure, called RAF.
ESnet would like to extend this infrastructure to connect the grid community to eduroam either via Internet2 or directly to the international RADIUS server.
The model that Tony proposed is based on giving access to grid virtual organisations, whose members would use certificates instead than username and password. The virtual organisation would act as the users' home institution, but because the users would use certificates issued by a CA, the trust would be between the visited institution and the CA that has issued the certificate.
The idea that Tony proposed seemed quite interesting, although some changes in the current eduroam infrastructure would be needed, should be decided to go for Tony's proposal.

### Rafael Marin Lopez – University of Murcia

Rafel presented a solution to use Diameter to manage the tree structure upon eduroam is based. They offered to provide their experience to make some tests on Diameter for eduroam.

### Eduroam current issues - Klaas Wierenga

Eduroam RADIUS servers shared secrets, which has security implications. The solution to this problem would be to allow the leaves of the eduroam tree to pear each other instead than using the hierarchy.

New domains, such as .net, .edu, .com, come along and there should be a way to deal with them and to ménage them. At the moment there is not a solution.
Diego proposed as a temporary solution to use a top level country domain to manage the .net domains.
Another solution could be to use DNSsec, although is not been tested yet.

### International updates – Juergen Raushenbach DFN

Juergen briefly reported about the international eduroam working group that see the participation of Americans and Australians. The idea behind this working is to discuss technical issues especially concerning the American approach to eduroam.

## Summary of actions

| Action | Description | Deadline |
|---|---|---|
| **ACTION 1** | Tomasz and Stefan to report about the possibility of setting up multiple SSIDs. | End of 2005 |
| **ACTION 2** | Miro to send an email to the list to include the XML schema as well as the description of the structure for the RADIUS weather map | 3 October |
| **ACTION 3** | Licia to contact Ralf to produce a document about eduroam in a box. Hansruedi should also be involved as he initially worked on this task. | 3 October |
| **ACTION 4** | Milan and Miro to finalise the task of monitoring. | End 2005 |
| **ACTION 5** | All eduroam NRENs to provide a test account on their RADIUS servers. | Milan and Miro to define this deadline |
| **ACTION 6** | David to produce a new version of the policy document and circulate it to the list by the end of September. | 3 October |
| **ACTION 7** | Rok to circulate more information about eduroam-in-a-box for administrators developed by Arnes | 3 October |

## *Participants list*

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|---|---|
| Kristof Bajnok | MTA-Sztaki |
| Kolbjørn Barmen | UNINETT |
| Hansruedi Born | SWITCH |
| Vincent Carpier | CRU |
| John DYER | TERENA |
| Licia Florio | TERENA |
| Tony Genovese | LBNL/ESnet |
| Luis Guido | FCCN |
| Karri Huhtanen | Tampere University of Technology |
| Avgust Jauk | ARNES |
| Diego Lopez | RedIRIS |
| Maurizio Molina | DANTE |
| Miroslav Milinovic | Srce |
| Rafael Marin Lopez | University of Murcia |
| RL 'Bob' Morgan | Internet2 |
| Rok Papez | ARNES |
| Juergen Rauschenbach | DFN-Verein |
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| Gyula Szabó | MTA-SZTAKI |
| Klaas Wierenga | SURFnet |
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| Maja Wolniewicz | PIONIER |
| Tomasz Wolniewicz | PIONIER |