

Task Force Mobility

Terms of Reference

Final Version

September 2006

1. The mandate of Task Force mobility is renewed under the auspices of the TERENA Technical Programme to continue its efforts in promoting the development and deployment of mobile technologies, open and interoperable roaming services among NRENs and academic and research institutions.

The Task Force will continue to be known as '**TF-Mobility**'.

2. The aims of this Task Force will be:

- a. to provide a forum for exchanging experiences and knowledge in the field of mobile technologies;
- b. to promote development and testing of innovative mobile technologies;
- c. to foster the further development of the eduroam service also at the campus level;
- d. to liaise at the international level, with other relevant standardisation bodies such as the Open Grid Forum (OGF), Internet2 and the Internet Engineering TaskForce (IETF) on mobility related activities;
- e. to co-ordinate and provide support to other TERENA activities and task forces and, more specifically, to continue to work in close cooperation with Task Force EMC2 on common federated network resource access goals;
- f. to liaise and support other relevant joint initiatives and projects, such as GÉANT2 and in particular the Joint Research Activity 5 (JRA5) "Roaming and Authorisation"

The Task Force will focus its activities predominantly in Europe. It will collaborate with organisations outside the European area or on a broader scope whenever opportunities to collaborate assist in achieving the aims of the Task Force.

3. Over the last years we have been confronted with an increased demand for middleware services, due also to a variety of technologies available.

Giving the high degree of synergy among the activities of TF-EMC2 and those of TF-Mobility (both task forces address middleware issues albeit in different context), a common Steering Committee will be established consisting of members of these task forces. This committee will be known as **ECAM** (European Committee for Academic Middleware). TF-EMC2's representatives in ECAM will be its chair and work item leaders.

ECAM will act as a leadership group dedicated to promote innovative and open middleware technologies and infrastructures. Additional members may be added to ECAM by unanimous agreement of its current members.

ECAM will meet (approx.) every two weeks, using telephone or videoconference. Face-to-face meetings will be held adjacent to regular meetings of TF-Mobility and TF-EMC2. Reports on the activities of the steering committee and proposals for actions will be presented at TF-Mobility and/or TF-EMC2 meetings.

4. The Chairs of the Task Force will be Klaas Wierenga (SURFnet) and David Simonsen (UNI-C), who will be responsible for preparing the agenda of each meeting, and for coordinating the work of the Task Force. They will also be responsible for ensuring that the agreed deliverables are produced. Work items can additionally have activity leaders who will be responsible for ensuring the timely completion of deliverables to an anticipated quality/standard are produced, and preparing the agendas of any sub-group meetings.

5. The Task Force will operate on a 2-years mandate, starting 1 September 2006. A report on the progress of the Task Force and the results achieved will be made at the TERENA Networking Conference 2007. The mandate of the Task Force may be renewed by the TERENA Technical Committee (TTC). If the mandate is not renewed, the Task Force will be dissolved. The Task Force may also be dissolved if the TTC considers that it is making insufficient progress or that its activities are no longer useful or relevant, or if the Task Force chairs resign and no replacement can be found.

6. The Task Force will meet approximately three times per year (this may be either in person or via telephone or videoconference). Physical meetings will be held at various locations, taking care to reduce overall costs to the participants. Videoconferencing facilities will be made available whenever possible for these meetings. Videoconferencing or phone meetings shall be the preferred method for any other intermediate meetings, when necessary.

7. The secretary of the Task Force will be appointed by TERENA. He/she will be responsible for taking minutes at each meeting, for logistical arrangements etc. The secretary of the Task Force will act as secretary of ECAM as well.

8. TF-Mobility will liaise with TF-EMC2 through **ECAM**. Once per year a joint meeting with JRA5 and TF-EMC2 will be organised to exchange information and disseminate results and experiences. Guests from other environments may be invited depending on the items to be discussed.

9. The Task Force will be open to any individual who can offer appropriate expertise, manpower, equipment or services. Participation will be on a voluntary basis.

10. Reports and other results of TF-mobility will be placed in the public domain, with the exception of information that is known to be commercial in confidence and subject to Non-Disclosure Agreements.

10. TF-mobility will continue to use the existing mailing list (**mobility@terena.nl**) for communication between participants. The mailing list archive will be public available.

List of Work Items and Deliverables

The following working items are relevant to this task force:

- 1) **Standardisation process** (*Leif Johansson, Stockholm University - Klaas Wierenga, SURFnet*)

One of the aims of the task force is to promote the usage of standards technologies in the field of mobility. To achieve this, the group will liaise with other relevant projects as well as international bodies exchanging results and ideas.

One of the tasks of this item includes reports from IETF meetings as far as mobility standards are concerned.

- 2) **Support for the development of the next generation eduroam** (*Stefan Winter, RESTENA*)

a. RadSec RFC

In order to address a number of potential short comings of the present eduroam infrastructure, new technologies that may overcome these will be monitored and trialled.

One important technology in this area is RadSec. An initial implementation has been tested in JRA5 and deemed useful but not sufficiently mature. One of the TF-Mobility activities will be to write a requirement specification for the use of RadSec in eduroam for submission to the IETF "Request for Comments" (RFC) process.

Other protocols to be considered include Diameter and the various efforts in combining eduroam with generic identity federation technologies (eg. EAP-SAML/DAMe, Lichen etc.)

b. eduroam minimal technical requirements specification

To support the installation of eduroam using different networks components the group will agree on a list of requirements that will constitute the elements to verify to define a 'eduroam compatible device'. The list will contain both mandatory and optional features.

- 3) **Metering and statistics** (*Miroslav Milinovic, SRCE/CARNet*)

Due to its distributed nature it is hard to gather the relevant usage statistics for eduroam. Reports will be developed on the number of successful sessions and users using eduroam on a regular basis to track use trends, to identify best practice and issues to address, will be developed.

- 4) **New mobile technologies** (*Josh Howlett, University of Bristol*)

Upcoming mobile technologies that may become important in the roaming and mobility environment are a natural part of TF-Mobility's area of interest. When deemed appropriate these will be evaluated for their relevance and usability. Among the new technologies that will be evaluated is Mobile IPv6 (MIPv6).

5) **Sensor nets etc.** (*Philippe Hanset, University of Tennessee*)

The acceptance of 802.1X technology in general (and eduroam in particular) has brought with it problems related to that fact that not all (wireless) networked devices (IP-phones, wireless camera's, sensors) are capable of supporting 802.1X standard. In this work item the possibilities to leverage the eduroam or eduroam-like infrastructure for securely transmitting the data from these devices will be explored.

6) **Dissemination** (*David Simonsen, UNI-C - Licia Florio, TERENA*)

The task force will be a forum where the results of the task force itself as well as the results of JRA5 in field of eduroam will be promoted.

TF-Mobility will also work to encourage and support new ideas and (whenever possible) transform them into new joint activities, which can ultimately be embraced by the GEANT2 project.

TERENA as the responsible party for the content of the eduroam Website (<http://www.eduroam.org>) will use the experience and know-how of the people involved in the task force to upgrade the information and create a well-presented and informative eduroam website.

TERENA's task force TF-PR will be involved in order to provide promotional advice and experience.

7) **Cooperation with other initiatives** (*Klaas Wierenga, SURFnet and David Simonsen, UNI-C*)

The growth of eduroam has brought on board other countries, like Australia, Taiwan, Hong Kong and China. Some preliminary tests to join eduroam have also been performed by Internet2. The Grid community has expressed a lot of interest in using eduroam and some studies are ongoing to verify the possibility of using Grid collaborative environment (managed by Virtual Organisations) to provide users authentication.

If this makes eduroam attractive and successful, it opens other problems related to the way the trust is build among the various parties and how the policy model should work.

TF-Mobility is working closely with the Asia-Pacific, the American and Grid research networking communities in order to build a model that could allow different eduroam confederations to peer with each other.

New deliverables and work items may be added as the Task Force sees fit.