

Mobility Task Force

Terms of Reference



1. A Task Force is established under the auspices of the TERENA Technical Programme to investigate roaming for mobile devices using access technologies already deployed (or planned) in the national research and education networks (NRENs) involved in the task force. It will be known as TF-Mobility.

2. The aims of the Task Force will be:

2.1. to provide a forum for exchanging experiences and knowledge, and to make the results of the work of the Task Force available to the research networking community and promote the benefits of the technology;

2.2. to identify requirements to address security aspects and regulatory issues as well;

2.3. to define and test an inter-NREN roaming architecture by:

2.3.1 evaluating possible authentication and authorisation techniques in mobile environments (e.g Web-based, RADIUS+802.1x, VPN) for the research community in Europe;

2.3.2 identifying the most suitable techniques, which will be standards-based, platform independent and use whenever possible infrastructures currently deployed in the NRENs;

2.3.3 describing the elements for a possible inter-NREN WLAN architecture based on these selected technologies;

2.3.4 implementing and testing the proposed architecture amongst the participant NRENs; Quality of Service will also be considered;

2.4. to evaluate mobile equipment and software;

2.5. to evaluate next-generation mobile technology for handovers and roaming (Mobile-IP(v4 and v6)); in this area TF-Mobility will work closely with TF-NGN and the 6NET working group on IPv6 and Mobility.

3. The Task Force will be open to any individual or representative of an organisation that can offer appropriate expertise, manpower, equipment or services. Participation will be on a voluntary basis.

4. The co-chairs of the Task Force will be Carsten Bormann and James Sankar. They will be responsible for preparing the agenda of each meeting, and for co-ordinating the work of the Task Force. They will also be responsible for ensuring that all the agreed deliverables are produced.

5. The secretary of the Task Force will be appointed by TERENA. He/she will be responsible for taking the minutes at each meeting, and for making logistical arrangements as necessary.

6. The Task Force will operate with a 1.5 years mandate, starting 1 January 2003.

A report on the progress of the Task Force and the results achieved will be made at the TERENA Networking Conference 2003. 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 co-chairs resign and no replacement can be found.

7. The Task Force will meet approximately three times per year (although this may be via telephone or videoconference). Physical meetings will be held at the TERENA Secretariat offices in Amsterdam or at other locations, taking care to reduce overall costs to participants.

8. Reports and other results of the Task Force will be placed on the public domain, with the exception of information that is subject to a commercial Non-Disclosure Agreement.
9. The Task Force will have a mailing list for communication between the participants.

LIST OF DELIVERABLES

Code	Deliverable title/description	Deadline	Leader
A	Establishing the Task Force Information site on the TERENA server, containing links to information on mobility related issues, reports and presentations	15-1-03	LF
B	Creation of glossary of terms for: mobility/roaming/authentication and authorisation technologies Contributions from all	15-1-03	RS
C	Requirements definitions for inter-NREN roaming: - security levels, - regulatory issues Contributions from all	1-3-03	JR
D	Inventory of 802.1x based solution for inter-NREN roaming: - access technologies (performance), - cross-institutional authentication/authorisation, - scalability/security - interoperability between architectures and technologies Contributions from SURFnet + TUT + UK	1-4-03	ED
E	Inventory of VPN based solution for inter-NREN roaming: - access technologies (performance), - cross-institutional authentication/authorisation, - scalability/ security - interoperability between architectures and technologies Contributions from SWITCH, DFN	1-4-03	UK
F	Inventory of Web-based solution for inter-NREN roaming: - access technologies (performances) - cross-institutional authN/authZ - scalability and security - interoperability between architectures and technologies	1-4-03	SK
G	Preliminary selection for inter-NREN roaming, comparison with authentication solutions in other task forces and/or projects, if possible. If a solution can be independent of the physical layer it would be preferable. Contributions from all	15-6-03	JS
H	Design of the test-bed and creation of the test-plan based on the roaming concepts selected out of Del G	1-10-03	KW
I	Based on the lessons learnt from the testbed, a recommended technical design document for inter-NREN roaming Contributions from Uninett, SWITCH, DFN, SURFnet	1-12-03	KW
J	Create product-testing matrix about WLAN devices (802.11b /a products, user-friendliness, configurability, throughput, security and interoperability)	1-3-04	JL
K	Product testing in other NRENs Contribution from all	1-5-04	JL
L	Test new technology for mobility (MobileIP (v4 and v6) studies (Southampton/Lancaster)). This deliverable will be updated throughout the Task Force lifetime, but the final summary will be ready at end of the Task Force's mandate	1-5-04	all

KEY:

ED = Erik Dobbeltstijn (SURFnet)
LF = Licia Florio (TERENA)
JL = Jardar Leira (UNINETT)
JR = Juergen Rauschenbach (DFN)
JS = James Sankar (UKERNA)
SK = Sami Keski-Kasari (TUT = Tampere University of Technology)
KW = Klaas Wierenga (SURFnet)
RS = Roland Staring (SURFnet)
UK = Ueli Kienholz (SWITCH)