



## 29<sup>th</sup> TF-Mobility and Network Middleware Meeting – Thursday 22<sup>nd</sup> November 2012

Belgrade, Serbia. The meeting was hosted by AMRES.

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### 1. Welcome and Apologies

Klaas Wierenga welcomed everyone to the meeting. Attendance and Apologies were recorded on the event registration page: [https://www.terena.org/events/details.php?event\\_id=2335](https://www.terena.org/events/details.php?event_id=2335)

### 2. Approval of Agenda, Minutes of Last Meeting and Update of Action List

The agenda was modified as the meeting progressed with a final version available online:

<http://www.terena.org/activities/terena-mobility-meetings/29/>

The minutes of the last meeting held on the 26<sup>th</sup> & 27<sup>th</sup> June 2012 were approved without further corrections and are available at:

<http://www.terena.org/activities/terena-mobility-meetings/28/minutes.pdf>

### Summary of Actions

Reference	Who	Action	Status
<del>20120209-02</del>	Gunnar, Wenche	Report back on the discussion with a view to forming a work item covering Best Practice documents.	<i>Regarded as closed. As GN3+ evolves it will become apparent whether this needs to be reopened.</i>

<del>20120626-01</del>	Mark, David	"Location awareness" text for next ToR.	<i>David will liaise with Mark on an updated version of the text. Completed post meeting.</i>
<del>20120626-02</del>	Paul, Kurt	"New mobile technologies" text for next ToR.	<i>Wrong Kurt cc'd which delayed the text. Update provided post meeting.</i>
<del>20120626-03</del>	Joost, Roland	"Scalable 2-factor AuthN" text for next ToR.	<i>Text provided.</i>
<del>20120626-04</del>	Leif, Roland	"Next Generation Trust Infrastructures" text for next ToR.	<i>Text provided.</i>
<del>20120623-05</del>	Stefan, Licia	"Standardisation and outreach" text for next ToR.	<i>Stefan waiting on feedback from Licia. Updated expected soon.</i>
<del>20120623-06</del>	Alan, Hideaki, Miro, Brook	"eduroam" text for next ToR.	<i>Collaboratively written online.</i>

### 3. Joint OpenSpace Event with TF-EMC2

The taskforce held a joint OpenSpace event with EMC2 preceding this meeting. Summaries of the topics are available on the TERENA wiki:

<https://confluence.terena.org/x/GwFYAg>

There were 3 topics raised within the OpenSpace event in the area of mobility and network middleware that failed to gain sufficient interest. These topics will remain on the wiki and can be raised at a future point if there is increased interest.

Topics of specific interest to the MNM audience are: 0-sign-on, 2-factor AuthN-as-a-Service, DANE and Federations, Security architecture for 4G. The OpenSpace event concluded with a Translate Fest of tiqr <http://tiqr.org/>, which resulted in boost in the quality and range of language translations supported.

### 4. Progress and Review of Work Items

All Work Items were asked to highlight their work plans in their respective areas:

#### 4.1. Location Awareness

David provided a summary of the work that Janet has planned regarding Location Awareness and the need to consolidate the databases that have diverged regarding eduroam hotspot locations as a result of the Android and iPhone versions of the "eduroam Companion" app. David called on interested parties to contribute ideas for the work item to explore.

#### 4.2. New Mobile Technologies

Neither Paul Dekkers nor Kurt Baumann were able to attend the meeting physically. Paul provided an update via video conference on the intention of this area and the current investigations that SURFnet is carrying out (some of which had been reported at previous meetings but further progress has been made).

#### 4.3. Scalable 2-factor AuthN

Roland van Rijswijk, SURFnet provided an update on SURFnet research in the area of 2-factor authentication. Slides available at: [http://www.terena.org/activities/tf-mobility/meetings/29/20121122\\_TF-MNM\\_Scalable\\_2-factor\\_AuthN.pdf](http://www.terena.org/activities/tf-mobility/meetings/29/20121122_TF-MNM_Scalable_2-factor_AuthN.pdf)

There was also an update on the 2-factor authentication app (tiqr) and the Step-Up as a Service offering to be released shortly (SURFsure). This service will provide Step-Up Authentication implemented as a Proxy Hub within the SURFfederatie environment (also a Proxy Hub). Additional authentication services (beyond tiqr) will also be able to be integrated into this environment. Discussion on how this will apply to mesh federations was raised and interest from mesh federations on deploying a similar setup is encouraged.

[**ACTION**] Roland to publish an announcement to the mailing list.

#### 4.4. Next Generation Trust Infrastructure

Roland summarised the discussion of the DANE and Federations OpenSpace topic held yesterday. This was to highlight existing work to the community and define the current state. <https://confluence.terena.org/display/EMC2/DANE+and+Federations>

[**ACTION**] Roland to ensure the the DANE and Federations topic is updated.

#### 4.5. Standardisation & Outreach

Stefan Winter, RESTENA, presented on the current progress of work in the standardisation of technologies that impact the task force. As a result of the GN3 Symposium there was an interest in ensuring sufficient coverage for current endeavours as well as investigating the range of other standardisation groups could be engaged.

Stefan recounted that work on Hotspot 2.0 and Next Generation Hotspot are of particular interest to the eduroam deployment and research communities and it is by luck rather than active participation and planning that this technology is compatible with current deployments of eduroam. Work is needed in this area to ensure that continued compatibility isn't by dumb luck but by mutual development.

[**ACTION**] Paul Dekkers to investigate WBA participation by SURFnet.

#### 4.6. eduroam

alan buxey remarked that the current description for eduroam within the terms of reference are lightweight and don't detail all the necessary activities within this area. This is expected and those interested in extending the activities should flag their participation in this area. Two presentations were covered on current activities surrounding eduroam.

Stefan also presented the most recent release of the Configuration Assistant Tool.

Stefan presented on some collaboration between the eduroam Research Activity of GN3 and Motorola Mobility with one of their handsets for the Hong Kong market not correctly connecting to eduroam. This was due to a narrow EAP implementation that expected EAP-SIM as a precursor to further EAP conversation. The issue of support for handset manufacturers was raised and while eduroam supports EAP (as does Hotspot 2.0/NGH) as support expands to networks offering alternatives to EAP-SIM there might be an increased demand on support.

Scott Armitage presented on 802.11u research at the University of Loughborough.

<http://www.terena.org/activities/tf-mobility/meetings/29/802.11u-Belgrade-2012.pptx>

This is an attempt to fix the "Russell Square Problem" which is defined by multiple institutions that surround a particular square and each broadcast the SSID "eduroam". User devices associate and re-associate to different networks and the hand off and connection time can be significant.

In summary pinning to a network is bad as it slows down the connection for all users by delaying the devices natural desire to switch to a network based on improved signal strength. Stefan stated that the preference happens with SSID recognition – and now with a SSID/realm combination it could also prefer that network and when it receives change to SSID/realm.

## 5. Mobility and Network Middleware Activities

### 5.1. New Activities

Licia Florio presented on the impact of the cessation of the GN3 project and the lack of a research activity on mobility and network middleware within GN3+. Slides are available:

<http://www.terena.org/activities/tf-mobility/meetings/29/2012-11-tf-mnm.pptx>

The gap created by GN3+ allows the task force to fulfil that role. Funding is available by NREN contributions, TERENA Technical Programme or GN3+ open calls.

### 5.2. OpenFlow

Hideaki Goto presented on work integrating OpenFlow into an eduroam network. The technology is workable but the difficulty is presented in expressing the varying combinations of services that a user can access. It was suggested to include some of this research into the "New mobile technologies" work item. The slides are available at:

<http://www.terena.org/activities/tf-mobility/meetings/29/TF-MNM-29th-HGoto.pdf>

## 6. National and Community Updates

Sweden Anders provided an update on The Cloud, teething problems, first time they have had an 802.1x deployment. SUNet had run out of IPv4 address so they are using carrier grade NAT. They are attempting to offer IPv6. Sometimes very old equipment and home/domestic is deployed. Statistics will be made available. First accounting packet is proof that an end user devices is working. Access-Accept doesn't provide sufficient information that a user has received an IP address and is transmitting data.

Norway Tom provided an update on Gunnar's request for TF-MNM knowledge to be turned into documentation and the Best Practice work within GN3, Monitoring realm status, Best practice on RADIUS configuration. IPv4 shortage is starting to impact institutions. AAA override to give addresses.

- Luxembourg Stefan – branches of American universities (Miami University of Ohio in Luxembourg), Sacred Heart University (.lu), Luxembourg Study Group... () 2/4 universities now connected.
- UK Rhys provided an update on Janet and the development require for the eduroam Companion App. The Android/iPhone versions of the App have separate databases and work is underway to consolidate them. Asked for input on the Cultural Heritage Identity Project (EU Funded) ISO18000-7 which will be investigating Active air interface over RFID. (<http://www.eu-chic.eu/>) Generally an area focused on Asset management but could be of interest to Location Awareness.
- Netherlands Paul stated that SURFnet was working with Kennisnet to broaden eduroam to the schools sector. DNSSEC caused an outage of the .nl domain.
- Japan Hideaki updated that eduroam penetration was at 3.5% of institutions. EAP-TLS + account linking service with GakuNin + Shibboleth is problematic and doesn't work in some instances. Anders stated that EAP-TLS is popular in Sweden and there is a need to ensure sufficient bandwidth is available for the large payload of the keys. The Distributed Authentication Service has been commissioned. Its need was highlighted by the Tsunami.
- Serbia Marko stated that 6 more institutions were added to eduroam with 60 hotspots in Serbia. Splunk is being used to provide statistics on the usage of the service.

## 7. Date of Next Meeting

The next middleware taskforce meetings have been scheduled for:

- European Workshop on Trust and Identity – 12<sup>th</sup> – 13<sup>th</sup> February 2013, Vienna.
- TF-EMC2 – 14<sup>th</sup> February 2013, Vienna, Austria
- TF-MNM – 14<sup>th</sup> & 15<sup>th</sup> February 2013, Vienna, Austria

## 8. AOB and Close

The meeting closed at 15:30 on Thursday 22<sup>nd</sup> November 2012 and the participants took the opportunity to visit the Nikola Tesla Museum.

## 9. Summary of Actions

Reference	Who	Action	Status
29-01	Roland	Publish an announcement to the mailing list regarding Step-Up Authentication Service.	
29-02	Roland	Ensure the the DANE and Federations topic is updated.	
29-03	Paul	Investigate WBA participation by SURFnet.	