

**Draft Minutes of TERENA Technical Committee Meeting
Monday 23 July 2007
TERENA Office, Amsterdam**

Valentino Cavalli
Version 1, 17 August 2007

Present

Christoph Graf, VP Technical Programme & TTC Chairman
Andrew Cormack
Diego Lopez
Martin Sutter
Karel Vietsch
Steve Williams

TERENA Staff

Valentino Cavalli
Licia Florio
Cătălin Meiroşu
Kevin Meynell
Guy Van Den Bergh

Apologies

John Dyer (TTC Secretary)
Jean-Paul Gautier

1. Review of Open Actions from Previous Meetings

Reference		Action	Status
20070201-01	MS	Organise meeting of E2E-CI steering group and decide if holding a BoF at TNC2007	DONE
20070201-02	SW	Try and organise a steering group for investigating TERENA lower-layer research activities	DONE
20070515-01	AC	Andrew to provide Licia with comments about the EARNEST middleware study	DONE
20070515-02	LF	Licia to circulate URL of REFEDS wiki	DONE
20070515-03	GvB	Guy to find out examples of Wiki publications	DONE

Table 1 Status of actions from previous TTC meetings

2. Approval of Minutes

The minutes of the TTC meeting of 15 May 2007 were approved.

3. Review of outstanding action list

The action list was discussed. The status of actions discussed at the meeting is reported in table 1 above.

Martin Sutter commented on action 20070201-01. Five people participated in a meeting he had organised in Lyngby and a few more individuals had expressed an interest in the issues. The group had defined tasks, but these had not been allocated to the relevant people yet. Martin was looking forward to more progress to be reported at the next TTC meeting.

Guy had shared a few links with TERENA staff and forwarded the information to TTC members. All of the examples given allowed the user to edit the text and it was remarked that this was not the intention with the GNRT. However it was clarified that the wiki document structure looked appropriate and that the GNRT in its final published form could inhibit edit by the end user. The TTC agreed on the suggestion made at the previous meeting to publish the GNRT as a wiki.

4. Recommendations from the EARNEST technical study

An initial version of the EARNEST technical study report including a first draft of the recommendations was presented at a recent EARNEST-panel meeting. Kevin and Licia, with contributions from expert from the TERENA community, had interviewed more than twenty vendors of networking equipment and middleware since the beginning of 2007. Kevin presented the main findings and conclusions from the report. The presentation focused on transmission technologies, control plane and routing, operation and performance, QoS and middleware.

The main findings concerning transmission technologies are related to the expectations by 2009-2010 for 40Gbit/s, though most vendors are heading towards 100GE. The study did not highlight any obvious path for SDH beyond 40Gbit/s, except that major Internet exchanges anticipate the need for 100 Gbit/s by 2010. Such capacity increase would also reflect an expected increase in reach and cost savings of 40% per port for 40/100GE over current SDH costs.

The findings highlight issues related to power consumption: all vendors are working on making optimal use of power.

Routing scalability is problematic for a number of reasons. Kevin had discussed these issues with the EARNEST panel; there was not a clear conclusion about how routing scalability would affect NRENs, but it appeared that probably this wouldn't be the case for the next five years.

Finally, a major highlight was the general trend in utilising virtualisation at all levels, including also UCLP.

The study shows that in the area of operation and performance NRENs are lacking suitable tools for managing layers 0-2 and this is mostly due to expensiveness of available solutions.

The TTC discussed the role and impact of middle-boxes on the network operation and performance. It would be easy to say that these are bad; however it is very important to take them into account and understand their behaviour. The main recommendation, following the TTC discussion would be for NRENs to be aware of the consequences of using them.

Andrew remarked that it would be unrealistic to recommend that the Internet should be open, particularly because on the contrary, regulators are currently debating about filtering information at various levels.

Kevin had interviewed DANTE staff members, who implemented a PERT (Performance Enhanced Response Team) service in GÉANT2. The service is currently based on a centralised model and had not been very effective, so that DANTE were now looking at promoting a federated model with a chain of referral to local PERTs. TTC members agreed with this and recommended looking at the way the CSIRT world has managed the same issues.

Steve said in his opinion the PERT should be part of the NOC; however it was observed that PERT teams should be able to look at problems in the end systems and this is not traditionally a task of NOC people. To make the PERT work there is a human communication issue to be solved, between the groups of people involved in research and in operation.

The report deals also with the debate about QoS vs. over provisioning. Andrew remarked that JANET had such a policy that its backbone would not be subject to QoS treatment because of sufficient bandwidth and router capacity to avoid congestion. On the other hand the JANET backbone should be transparent to any IP traffic marked at the edge even if it is not needed at the backbone level. Andrew, Christoph and Steve agree that such a policy should be recommended at large.

Andrew shared a pointer to a JANET statement about QoS with TTC member. The URL of the document is <http://www.ja.net/development/qos/statement.html>.

Licia is the person responsible for the middleware section of the EARNEST technical study. She briefly reported on the recommendations for NRENs to move towards identity federations. The report explains this in great detail and discusses the main alternative options to support trust. One major remark was that one should try and minimise the number of PKIs.

Andrew observed that it would be a good opportunity if the report could clarify what a trust infrastructure really is and what is its reach: from login up to where the authorisation comes from.

The report was also touching on eduroam, pointing at the issues related to eduroam not being implemented in the same way everywhere.

Finally, Licia mentioned the main approaches to the User Centric Identity Model: card space and OpenID.

5. New TF-NGN/lower-layer workshop

At their meeting in Lyngby the Technical Advisory Council had proposed TERENA to hold a series of workshops in lower-layer areas to fill a gap left after the end of TF-NGN. The TERENA Executive Committee had discussed this suggestion and had agreed to organise a set of workshops built around defined topics. The feedback from such workshops may later on lead to the creation of a task force similar to TF-NGN.

Steve had initiated the discussion around this subject and said the people he had spoken with were enthusiastic at the idea of a forum for discussing matters, which are not covered in other NREN forums or are covered only in closed groups or projects. He had proposed an initial set of topics in a message that had been sent to the TTC email distribution list. During the meeting it was remarked that the range of topics should be open and therefore focusing on lower-layers only would probably be a bit too narrow. The NGN banner would be more appropriate and, for example, would enable the inclusion of virtualisation.

Kevin raised the issue of TERENA having a clear view of the expected achievements and goals. The aim of the set of workshops could be, for example, getting information exchange only, feeding requirements and ideas into GN3 or lead to a defined task-force work programme. Each of these objectives would be a valid one in its own right, but they would require different approaches and he stressed the importance of being clear from day 1. Steve and other TTC members thought all these goals were of great interest to TERENA and all what was needed was well structured meetings with good topics and material. Christoph was wondering if we should not look at more operational topics.

Karel said in his view the most important aspect of the set of events would be to re-establish contacts between NRENs industry and universities/research labs, which were lost in the past few years of TF-NGN. Christoph agreed with this view.

Christoph concluded the discussion by suggesting organising each event around a specific topic or a small set of topics. For the first event, the best option would be to focus on the findings from the EARNEST technical study in the area of transmission technologies and let the participants discuss how to get prepared for the expected changes. All TTC members agreed with the suggestion and found that the workshop could benefit from the industrial and research contacts established by Kevin in the EARNEST study. It was agreed that the first event should last one day and take place at a major European airport at the end of October.

ACTION 20070723-01; Kevin to follow up with the organisation of the first NGN workshop at the end of October.

6. Review Progress in Task Forces

6.1. TF-CSIRT

Cătălin reported the progress of TF-CSIRT. He mentioned that the next meeting was scheduled on 20-21 September, registration was open and a call for presentations had been issued.

Christoph observed that TF-CSIRT meeting are no longer very attractive and there was a need to plan the agenda carefully not to lose attention/interest from the participants.

Cătălin agreed and started to discuss a few options to make the meetings more interactive, such as inviting people to some thought-provoking presentations and/or promote more work in between meetings. Karel had started some discussion on the issue with the TF-CSIRT chairman. There was indeed scope for discussion, but he said he prefers to discuss things informally, maybe involve a small group of people, rather than having this as a meeting agenda item.

The pros and cons of various options were discussed. It was remarked that TF-CSIRT participants are quite interested in operational aspects and it was worth investigating whether they would be interested in test beds as well.

Cătălin suggested a 20mins "lightning talks" session like happens at NANOG: short two-slide max five-minutes presentations to be prepared up to one week before the meeting to spark discussion.

Karel proposed to send questions to the TF-CSIRT email distribution list in advance of the meetings. Andrew agreed but suggested to keep the list of questions very short. Diego suggested Activity Leader should be involved too.

It was agreed to formulate a maximum of five questions to be proposed to the TF-CSIRT email distribution list and to be addressed at the meeting.

ACTION 20070723-02; Cătălin to draft questions, discuss with Karel, Andrew and Christoph and share the agreed questions with other TTC members, then send to TF-CSIRT distribution list.

6.2. TF-EMC2

Licia reported that TF-EMC2 is progressing well. The next meeting was scheduled to take place on 4-5 September in Prague. Half day on the 5th of September will be held jointly with the TF-ECS task force. This was a way to follow up from the workshop in Lyngby. In fact there was a good feedback about that workshop, but unfortunately the time for discussion was too short.

The day before the TF-EMC2 meeting there will be an "International Federation Peering" meeting. The meeting will be by invitation only. Licia said all NRENs have been invited plus some relevant vendors. The outcome of that meeting would be discussed openly during the TF-EMC2 meeting.

Diego forwarded some initial information to the TTC email distribution list about a proposal for a DAME2 project in FP7. Diego explained he had been approached and been asked if TERENA would be interested in participating. The proposal would be submitted in response to the second call, open until the 22nd of September 2007.

It was mentioned that the proposal could involve some operators. The role of TERENA could be similar to the one in NoAH or LOBSTER.

ACTION 20070723-03; TERENA secretariat to acquire detailed information about the DAME2 proposal.

6.3. TF-MOBILITY

The mobility email distribution list has significant amount of traffic; however Licia felt the focus of the current task-force work is a bit too narrow. In addition, task-force participants who used to be the most active ones had been working hard in GN2 JRA5 and as a result the task force activity had suffered a bit. In order to revive interest Licia was trying to explore other things besides eduroam and she had started a discussion with the task-force co-chairs.

The next meeting of TF-Mobility was scheduled in Zürich on 28 September 2007, Licia was getting the programme in shape; Network Access Control (NAC) would be on the agenda among other topics. There was some talk between Licia and Andrew about NAC. Andrew will approach potentially relevant speakers.

In reporting a discussion from the NREN Policy Committee Karel remarked that more work would be needed to effectively deploy eduroam than is possible to do under the remit of JRA5 and NA8. These activities seem to be appropriate in ensuring a good take up of eduroam among NRENs, but they do not seem to be suitable enough to reach out to the universities and institutions, which are essential components of a wide eduroam deployment in Europe at all levels. TERENA may have a role in promoting this wider deployment for instance by promoting the eduroam cookbooks and organising educational training and hands-on courses on eduroam.

It was felt that this was a good idea and was agreed that the next TF-Mobility meeting should include an agenda item on what should be done to deploy eduroam at European institutions.

6.4. TF-ECS and TF-VSS

TF-ECS met at TNC and will meet again in Prague in September. The work was progressing well.

The TF-VSS proposal for a Europe-wide videoconferencing service had finally successfully been incorporated in the GN2 project as a Service Activity (SA6). The NREN PC at their last meeting had approved the proposed contract amendment.

The mandate of TF-VSS was due to end in September. Work in the summer months would be devoted to refine the architecture document and to detail the service.

Christoph asked if there would be space for TF-VSS outside of GN2 SA6. Diego said tests were ongoing at some Spanish universities in using eduroam to authenticate SIP. TTC members thought it would be interesting to get these people involved in TF-ECS and suggested these they could be invited to the Prague meeting or maybe Cătălin should try to have a videoconference with them.

ACTION 20070723-04; Cătălin to follow up on bringing people interested in testing eduroam and SIP in TF-ECS.

7. External Projects

7.1. GN2 - EARNEST Update

Karel said all EARNEST reports were in the process of being finalised. Many were expected to be ready for submission to the EC starting from the end of July. The EARNEST panel had started a brainstorming about the project summary report.

The final workshop, by invitation only, was scheduled on 25-26 September in Brussels.

7.2. GN2 - Development Support Update

Valentino reported briefly on a recent mission, which was carried out by him, Kevin Meynell and GRNET's Yannis Mitsos to Bosnia and Herzegovina. The team had held meetings with all universities and with a few stakeholders of research and education networking in the country, including the Ministry of Education, the Ministry of Telecommunications of the Federation of Bosnia and Herzegovina, the Office of the High Representative and the European Commission representation. Ultimately, the mission had two goals: a) the short term goal was to facilitate matching the objectives of the SEEREN2 project, which provides an international dark fibre link to the university of Banja Luka and should also connect at least two other sites: the university of Tuzla and the university Sarajevo; b) the longer term goal is to ensure that all universities in Bosnia and Herzegovina could be interconnected and the network managed and funded in a sustainable way. Initial feedback about the SEEREN2 objectives seemed positive. The next step towards matching the longer-term objective may be the organisation of a policy workshop in Bosnia and Herzegovina before the winter of 2007.

A major ongoing task for the development support activity was the organisation of a 2-day event to promote collaboration in e-infrastructures between the EU and Mediterranean countries. This "EU-MED Event", by invitation only, is jointly organised by participants in GN2 NA4, the EUMEDCONNECT and EUMEDGrid projects and is scheduled to take place in Brussels on 23-24 October.

Valentino mentioned a number of knowledge transfer events to support less advanced countries that were organised since 2006 by TERENA. These include events on eduroam and identity Management in Romania, Cyprus, Turkey, Moldova and Morocco and a TRANSITS workshop, which was held in July in

Bulgaria. Valentino asked TTC members to suggest other technical areas for TERENA to focus on in the future. It was observed that security was an interesting topic but probably hard to sell at an early stage. Monitoring tools could be a start at the stage when signing up sites, but a CSIRT team would be needed first.

Diego asked if there was any plan to support activities in Latin America, Valentino clarified that this is out of the scope of the GN2 activity, but in principle TERENA was open to collaborate with CLARA for instance on related initiatives although this needed to be considered on a case-by-case basis.

7.3. LOBSTER

Kevin reported that the project was finished and the final review would take place in September. Only a few more bits of work, basically concerning the publication of a few articles on the LOBSTER website, had still to be done by TERENA.

7.4. NoAH

NoAH had a EC review in June: the review went well, although there was a red flag for one participant. The matter that concerned TERENA was the limited number of hits to the website. Cătălin had a plan to increase that, which included a slight revamp of the website and the possible addition of interactive functionality, like a blog for example. He was going to discuss this with TERENA IT support staff. The remaining pieces of work in the project, which was extended until fall 2008, were related to web presentation of the NoAH data results, to be ready by September 2007 and the organisation of a final workshop in 2008.

7.5. SEEREN2

The only work of TERENA on SEEREN2 since the last TTC meeting had been the organisation of a distributed workshop on South East European networking at TNC. Valentino had written a deliverable reporting about the event, which had been submitted to the EC on schedule.

7.6. 6DISS

6DISS participating organisations had organised recently a training workshop in Plovdiv, Bulgaria.

Kevin reported that there had been some talks among the project partners about a follow up project to be submitted to the EC later on. Kevin was wondering if TERENA was interested in being involved in the organisation of additional events and if it was interesting to have these events focusing on IPv6 only. The general feedback was that it would be interesting to follow up with various events in other world regions but not necessarily on IPv6 only.

8. Other Activities and Workshops

8.1. PEACHES

No progress was reported, except that the ARCA portal had been installed and was running on a Virtual Machine at the TERENA office. Cătălin said that some work was needed to customise the portal to fit the requirements of the arts and humanities community. The portal was demonstrated at a TF-PR meeting and it was currently being discussed whether the task force participants would be interested in working with it.

8.2. NRENs and Grids workshops

The date of the next NRENs and Grids workshop was finalised: it will take place in Malaga on 29-30 November. The topics were agreed and would be published on the website soon. These topics include usage of attributes in the NREN and Grids communities (mainly VOMS).

8.3. Server Certificate Service (SCS)

Guy reported that PIONIER and FCCN were close to join the SCS. He had also started to talk with IUCC about their possible subscription.

Christoph reported that some colleagues from SWITCH were not fully happy with the service, in particular concerning the responsiveness of the supplier. It was mentioned that other NRENs were experiencing the same issues.

Guy reported about the status of the promised features: the Post and the OCPS profiling functionality. These features were late but Guy had been told they were ready and he was expecting them to be delivered within one week after the meeting and then he could start testing them immediately. Christoph expressed concerns about the delay and suggested exploring appropriate measures to avoid this happening in the future.

Christoph added that it would be good to have some sort of reporting from TERENA to the SCS email distribution list, about how many certificates have been provided, the implementation of new features, etc. It was observed that not all this information would be easy to find out by the secretariat staff and should be asked to the customers of the SCS service by addressing questions to the mailing list and then issuing a report twice a year. This was agreed.

ACTION 20070723-05; Guy to formulate a procedure for requesting updates from SCS subscribers and providing a six-monthly newsletter.

8.4. TERENA Guide to Network Resource Tools

Guy reported that there were a number of delays in contributions to individual chapters of the new version of the GNRT; in particular the delays concerned chapters 2 and 3, which were due from Dave Hartland and chapter 5 from Dan Mønster.

As already mentioned in section 3 of this report the TTC agreed that the GNRT should be published as a wiki. The day after the TTC meeting Valentino and Guy would discuss in detail with PR staff issues such as customisation of the wiki space, handling of graphics etc. Proofreading by a native English speaker should also be taken into account.

9. Date of Next Meeting

The next TTC meeting will be held on Monday 5 November at the TERENA office in Amsterdam.

Summary of New and Open Actions

As of 19 September 2006

Reference		Action	Status
20070723-01	KM	Kevin to follow up with the organisation of the first NGN workshop at the end of October	NEW
20070723-02	CM	Cătălin to draft questions, discuss with Karel, Andrew and Christoph and share the agreed questions with other TTC members, then send to TF-CSIRT distribution list.	NEW
20070723-03	VC	TERENA secretariat to acquire detailed information about the DAME2 proposal.	NEW
20070723-04	CM	Cătălin to follow up on bringing people interested in testing eduroam and SIP in TF-ECS.	NEW
20070723-05	GvB	Guy to formulate a procedure for requesting updates from SCS subscribers and providing a six-monthly newsletter.	NEW

Table 2 Open actions