



**Joint TERENA Task Forces Meeting between TF-MSP and TF-PR  
Monday 8<sup>th</sup> June 2009  
University of Malaga, School of Law, Malaga, Spain**

Minutes by John DYER  
TERENA

## **1. Introductions**

The joint meeting of the TERENA task forces TF-MSP and TF-PR was co-chaired by the two task force chairmen: Alberto Pérez Gómez (TF-MSP) and Goran Skvarc (TF-PR). During the introduction round more than 30 delegates explained their interests and affiliations.

## **2. Report of previous TF-MSP meeting - Alberto Pérez Gómez, Red.es/RedIRIS**

Alberto reported that the previous meeting of TF-MSP had taken place 15/16<sup>th</sup> April 2009, hosted in Paris by RENATER. Alberto remarked that the number of attendees at the meeting had been somewhat lower than usual due to a vacation period in several countries. The theme of the meeting came from work undertaken by Koen Schelkens of BELNET who drafted a survey questionnaire to explore the issues of: "who decides NREN connection policy"; "typical service portfolios for typical NREN users" and "a-typical NREN users". It was agreed that the issue of pricing of differential portfolios for different groups would be discussed during a separate meeting dedicated to that topic.

In several European countries there have been growing numbers and diversity of requests for connection to NREN networks. In order to avoid the possibility of giving any cross-subsidies, NRENs have well defined: Connection Policies (CPs); Acceptable Use Policies (AUPs) and in some cases additional terms and conditions. With the expansion of community and services, the issue of: "why shouldn't NRENs provide wider services for the public?" is being raised in several quarters. NREN procurements for goods and services are undertaken using the official open public processes. Since these procurements are often (but not exclusively) using public money there could be a justification for using the NRENs facilities for the greater public good.

Since most European NRENs have invested in dark-fibre to some extent there should be some capacity available to serve additional user groups. One might even consider NRENs could form the basis of a state funded public backbone serving the public in general.

Alberto then reviewed the presentations delivered to the April 2009 TF-MSP meeting. These can be found along with the minutes of the meeting at:

<http://www.terena.org/activities/tf-msp/meetings/20090415/>

## **3. The JANET Connection Policy – Shirley Wood, JANET(UK)**

Shirley Wood of JANET(UK) gave a presentation on the JANET Connection Policy (CP) and explained how it is applied in several a-typical user cases. In summary, JANET is a UK-wide private network funded for education and research through the Joint Information Systems Committee (JISC), Higher Education (HE), Further Education (FE) and the Research Councils.

All publicly funded HE institutions are connected to the JANET network as a matter of policy at: "the speed required to do their work" with research institutes being connected under a similar agreement. FE institutions are connected under slightly different rules and are normally

connected at 100Mbps. The conditions under which institutions can be connected to JANET are defined in the JANET Connection Policy. The costs associated with connection consist of: the JANET tariff plus the telco recurrent charges.

JANET connects public libraries if they wish but this is achieved through their Local Authority. Not-for-profit Galleries, Museums and Archives may also be connected to JANET as can not-for-profit professional associations such as the Institute of Physics. Shirley explained that JANET(UK) prefers to deal with sectors as a group, rather than individual institutions. UK schools and the UK health sector (NHS) are good examples of the implementation of that policy. Schools are connected through their Local Education Authorities (LEA) and NHS hospitals through the N3 gateway.

There are also examples of private peerings between JANET and content providers such as the British Broadcasting Corporation (BBC) and other third-party service providers. Before such organisations can be connected a demonstrable benefit for the community must be shown. A major benefit for the connected third-party is that if approved for peering they can use the "Connected to JANET" brand.

There were some comments from the floor enquiring how the benefit of connecting third-parties is actually demonstrated and also a reinforcement on the need for impartiality in connecting third-party organisations.

<http://www.ja.net/documents/publications/policy/service-terms.pdf>  
<http://www.nhs-he.org.uk/n3-janet-gateway.html>

#### 4. GÉANT Customer Segmentation Study - Anna Everitt, DANTE

The GÉANT customer segmentation study, undertaken in 2008 is designed to provide an understanding of the users of the network and their needs and expectations. The intention is to use the results of the survey to target end users with publicity and support material through their NRENS. The survey questionnaire was answered by 964 respondents based in 34 countries. Analysis of the data revealed six major "needs driven segments":

1. High Bandwidth/High Network Performance
2. Video/Data Conferencing
3. Remote Sources Access
4. Data Security
5. eduroam/Remote Network Access
6. Generic Service/Solution Opportunity Segments – End-users who appeared 'strong' in three or more of the needs areas

These six segments were then mapped onto the Cees de Laat traffic/bandwidth population profile to identify four categories of network users:

Category	Description	Remarks
A	Mass user base	Web, email . . . .
B	Latent high-end users	} user groups of most interest to PSP
C	High-end pan-European users with support needs	
D	High Profile well know project – very specific needs	Very specific needs

The user categories B & C contain segments of users that are likely to demand more services than can currently be offered by the network.

Anna provided several examples of how the survey data could be used to study the users. She encouraged members of TF-MSP and TF-PR to make use of the database. The documentation accompanying the survey is a GÉANT public document and can be downloaded from:

[http://www.geant2.net/upload/doc/GN2-09-003\\_DN3.0.3.5\\_Specific\\_support\\_actions\\_-\\_user\\_base\\_segments\\_v09\\_read\\_only.doc](http://www.geant2.net/upload/doc/GN2-09-003_DN3.0.3.5_Specific_support_actions_-_user_base_segments_v09_read_only.doc)

## 5. GigaPort: the business-case - Walter van Dijk, SURFnet

Walter van Dijk explained that SURFnet is a not-for-profit organisation employing around 70 staff. It is owned by the research and education community and serves approximately 1 million users in 160 institutions connected to the network.

SURFnet's objective is to provide advanced services such as: high-performance networking; authentication & authorization and advanced online multimedia collaboration to the research and education community.

He went on to explain that SURFnet6 is one of the most advanced networks in the world. It is built on SURFnet's own photonic network consisting of more than 8000 km of dark fibre pairs. This enables SURFnet to deliver: hybrid networks services consisting of IP and lightpaths with the capability of providing dynamic lightpaths since December 2008.

The GigaPort next generation network is a collaboration between public and private organizations aiming at strengthening the national knowledge infrastructure in the Netherlands. It was selected as having the best business case in IT in the Netherlands in 2008 impressing the judges as a support platform for e-science. Walter reported that competition judges had complimented SURFnet for its stakeholder and project management skills. The examples of e-VLBI and DigiBOB were presented as innovative uses of the network. It is clear that GigaPort is providing strategic impact as a focal point for international cooperation in projects such as: e-VLBI, LOFAR and the LHC.

GigaPort provides an environment for the development of innovative uses of the network and creates user demand for advanced products and services. SURFnet builds on these advantages by ensuring the highest possible level of customer satisfaction scoring very highly in surveys of networking professional in the Netherlands.

<http://www.terena.org/activities/tf-msp/meetings/20090608/20090608-surfnet-prize.pdf>

## 6. The Service Portfolio in GN3, Maturity and Innovation – John Chevers, DANTE

John Chevers explained that any service which is delivered to NREN customers by GÉANT is intrinsically multi-domain. It is vitally important for DANTE to have a good understating of the NRENs it serves and hence they intend to develop a partnership relationship with them. Whilst DANTE must maintain a high level of stability of production services, they must also engage in innovation of network and services.

Building on the lessons learned in GN2, it is important that a viable business case that matches user needs and expectation is made before effort is spent on new activities. The business case must include elements such as: strategic fit (benefits and how they will be measured); evaluation of the options; affordability and achievability. John explained that involving network technicians in the world of business cases is difficult but progress is being made. Another major task for DANTE is managing the relationship between the GÉANT network and the NRENs. DANTE is taking the issue of service delivery very seriously and aims to improve the level of service coordination. This is expected to be achieved by providing a single point of contact for the NRENs where all issues can be dealt with. Liaison and coordination across the project and NREN community is key.

John mentioned that they have been working on an integrated interface for NRENs to manage the services that they take. It is built using a web-based user interface and should provide a transparent view to NRENs. In addition to the basic services that they offer DANTE are proposing to offer consultancy services / advice directly to NRENs and their funding bodies.

In the discussions that followed the presentation Alberto asked if DANTE/ GÉANT would be offering a set of service descriptions similar to that developed in TF-MSP. John Chevers responded that would be best illustrated by real examples as they develop on GÉANT. Guy Van Den Bergh of BELNET asked if some examples of how the consultancy would work could be

provided. John Chevers replied that it would be a "catch-all" that would enable DANTE to call on whichever members of the team are needed to address issues. This might range from providing letters of support for projects to a wide range of technical and political advice.

Another delegate remarked that a major issue for workers in the field is the coordination between all the organisations responsible for providing end-to-end service involved in the hierarchical European networking model (Campus-Regional/Metropolitan Area Network-NREN and GÉANT). John responded that having a single user-interface to such information would be wonderful but would be very difficult to achieve. He offered some hope by saying there is a working group looking at the problem.

<http://www.terena.org/activities/tf-msp/meetings/20090608/20090608-portfolio-management-gn3.ppt>

## **7. Partner Service Promotion in GN3 – Laura Durnford, TERENA**

Partner Service Promotion (PSP) is a task in GN3, Networking Activity NA2 which itself will be undertaking Joint Dissemination and Outreach. PSP is being led by Laura Durnford of TERENA. PSP will assist NRENs with their dissemination plans and tools for promoting end users services monitoring the results and reporting these to the project.

Work has already started on making the appropriate contacts in the NRENs and documentation. There have also been various meeting and videoconference contacts. Laura explained some of the challenges for PSP including that of getting the right balance between the monitoring at the NREN and end-user levels. She asked for ideas from the community on how PSP could best coordinate between the GN3 project and the NRENs.

John Dyer mentioned that TERENA has been involved in collection of data from the NREN community for many users in the context of the TERENA Compendium of European NRENs. He invited GN3 activity leaders to suggest areas in which they would find data useful so they can be considered for inclusion in future compendia questionnaires. The 2009 questionnaire is currently out for completion by the NRENs so the next opportunity for including new questions will be early in 2010.

<http://www.terena.org/events/pdfs/20090608-tfprmsp-tnc-update-pp-durnford.pdf>

## **8. Life Cycle and Product Management for CLARA - Rafael Puleo, CLARA**

The presentation started with an overview of Cooperación Latinoamericana de Redes Avanzadas (CLARA), ALICE2 and the countries of Latin America. Thirteen partner countries are currently connected to RedCLARA with a further four more partners still to connect. The European partners include: DANTE; FNCC; GARR; RedIRIS and RENATER. Rafael went on to explain the eight main objectives of the Life Cycle and Product Management (LCPM) project for CLARA including: supporting NRENs in developing new services; to ensure sustainability of services; motivating innovation; matching users' needs, evaluating services and finally phasing services out at the end of the life.

Using the LCPM approach will allow CLARA to manage their services in a professional way: define and maintain standards for reliability; ensure responsiveness of helpdesks in dealing with problems and managing user expectations. This also means not raising user expectations beyond what can reasonably be delivered and establishing processes of monitoring and control of services performance. Rafael went on to explain that CLARA intends to develop an empathetic relationship with its customers, talking to them in clear language and adapting their service offerings to meet the user's needs. He went on to explain how they are working with the NRENs in a collaborative way identifying the different communities and services they need (segmentation). Finally Rafael used some graphical representations to demonstrate the way in which LCPM will be implemented to provide a balance between: user requirements; technology push; new service propositions and service phase out.

<http://www.terena.org/activities/tf-msp/meetings/20090608/20090608-lcpm-at-clara.ppt>

## 9. Collaboration with 3G providers - Stefan Winter, RESTENA

Stefan took eduroam as his starting point explaining that it is a successful international roaming consortium. However, it is not as ubiquitous in coverage as services offered by mobile phone operators. As a consequence, users have to find other ways of connecting when away from eduroam enabled institutions. This can be expensive and has led some NRENs including HEAnet and CARNet to seek deals with 3G operators on behalf of their users. The problem with this is that unlike eduroam which offers the same cost (free) wherever a user connects, 3G operators tend to structure their tariffs between lower cost national connectivity and roaming in other countries/regions which can be much more expensive.

The issue has been discussed in tf-mobility but there is not much progress to report. In many countries students can get good "student-deals" from the 3G operators by showing their student-id card, thus without any NREN involvement.

Since most operators are offering highly differential rates between national and international connectivity this really does not provide a pan-European solution to connecting to your home institution whilst travelling. Thus - striking a Europe-wide deal with 3G operators would be of great benefit for users particularly if it would give them access to the NRENs networks for a single low pan-European price.

Quite apart from the pricing issue, a major issue that needs to be addressed is that of authorisation and authentication. This is somewhat problematic as the operators usual approach is only to authorise only at the SIM card level. Since the NRENs are not involved at that low level, something additional to the SIM card handshake would be necessary.

The three most obvious possibilities are:

1. Use of PAP or CHAP, in which case the mobile operator would get to see the username password combination. This does not seem like a solution users would be happy with.
2. Use of EAP for APN access.
3. Exploring the use of combination of telephone number/SIM card by the NREN to grant authorisation but this requires the NREN to have knowledge of the students' phone number which raises privacy issues.

Stefan concluded his presentation by saying there are huge benefits to be gained from finding solutions to cheap ubiquitous pan-European roaming access to the NRENs backbones.

<http://www.terena.org/activities/tf-msp/meetings/20090608/20090608-3g-winter.pdf>

## 10. Next TF-MSP meeting

The next TF-MSP meeting is likely to be adjacent to the NORDUNET conference in Copenhagen mid-September 2009. Details will be put in the TF-MSP web pages when confirmed.

<http://www.terena.org/tf-msp/>

## List of Participants

Lajos	Balint	NIIF/Hungarnet
Domen	Božeglav	Arnes
Thomas	Brunner	SWITCH
John	Chevers	DANTE
Elke	Dierckens	BELNET
Tomi	Dolenc	Arnes
Laura	Durnford	TERENA
John	Dyer	TERENA
Anna	Everitt	DANTE
Ann	Harding	SWITCH
Robert	Haymon-Collins	JISC
Gabriela	Krcmarova	CESNET
Gitte Julin	Kudsk	UNI-C/Forskningsnett
Harri	Kuusisto	CSC/Funet
Tiina	Leiponen	CSC - IT Center for Science
Cristina	Lorenzo	RedIRIS
Yannis	Mitsos	GRNET
Russell	Nelson	JANET(UK)
Damian	Niemir	PIONIER/PSNC
Dorte	Olesen	UNI-C
Alberto	Perez	Red.es/RedIRIS
Rafael	Puleo	CLARA
Roel	Rexwinkel	SURFnet
Charlotte	Rosenbeck	UNI-C/Forskningsnett
Koen	Schelkens	BELNET
Goran	Skvarc	CARNet
Carrie	Solomon	TERENA
Maurice	van den Akker	SURFnet
Guy	Van Den Bergh	BELNET
Walter	van Dijk	SURFnet
Lonneke	Walk	SURFnet
Stefan	Winter	RESTENA
Shirley	Wood	JANET(UK)

## Apologies

Brian	Boyle	HEAnet
Roland	Eugster	SWITCH
Gerti	Foest	DFN
Lars	Fuglevaag	UNINETT AS