



**TERENA Task Force on the Management of Service Portfolios (TF-MSP)
Wednesday 15th & Thursday 16th April 2009
RENATER Offices, Paris, France**

Minutes by John DYER
TERENA

1. Introductions

The meeting started with the usual formalities in which attendees introduced themselves. Sabine Jaume hosting the meeting on behalf of RENATER offered a brief overview of the RENATER network and services that could be provided by Franck Simon, the RENATER Chief Technical Officer. This was gratefully accepted.

2. Tour de Table

The theme of the April 2009 TF-MSP meeting was segmentation of customers. Consequently during the tour de table, NRENs were encouraged to mention ways in which new and different groups of users could be connected to the NRENs network. All the presentation material from this agenda item can be found on the TF-MSP private wiki (username & password required).

a) RedIRIS - Alberto Pérez Gómez

Alberto explained that RedIRIS has a number of categories of affiliation for institutions that may connect to the network. These are well documented and are detailed in the affiliation requirements at URL: <http://www.rediris.es/rediris/instituciones/afiliacion.html.en>. He went on to explain that RedIRIS currently has more than 350 institutions connected of which approximately 80 are universities and a population of 1.5 million students. RedIRIS are able to add new user groups for a variety of reasons including economies of scale. RedIRIS are currently working on a business case for the connection of schools. In terms of other groups of users, RedIRIS currently connects the research departments of hospitals. Some government ministries are connected but not broadcasters. Funding for universities and research connectivity comes from the Ministry of Science and Innovation (<http://web.micinn.es/>) whilst other users connectivity can be funded by regional government. It is important that RedIRIS is not using their funding for cross subsidy as a consequence there is a need for a clear cost sharing model.

b) Customer Segmentation at FUNET - Harri Kuusisto

FUNET connects about 80 research organizations and 350,000 users. FUNET normally connects: Higher Education institutions; Research Institutes; student campuses and residences. In 2000 FUNET became a registered public network, so could connect non-academic customers, but only companies engaged in research are considered for connection and then on a case-by-case basis. These are usually only accepted if undertaking cooperative research with a university or polytechnic. This is because FUNET receives public money for their network and does not want to engage in any cross subsidy.

CSC the Finnish information technology centre for science, (which is owned by the Finnish Ministry of Education) and runs FUNET is a partner of the Finnish ICT SHOK project which aims to the future internet in Finland <http://www.futureinternet.fi/index.html>.

Harri concluded his presentation on FUNET by explaining that the user policy was not thrust upon them from above, but developed in conjunction with the user community by listening to them carefully.

c) Categories of Users at BELNET - Koen Schelkens

Koen Schelkens of BELNET explained that they use a Customer Relations System (CRM) to help them support their customers. Currently BELNET have around twenty different types of customer falling into three main categories:

- Education and Academic Research
- Administration and Public Services
- Research (includes private & private/public partnerships)

d) UNINETT – Magnus Strømdal

UNINETT has developed a collaborative relationship with the telecommunication operator whereby UNINETT obtained IRUs in 2003 for a period of 15 years. During the period for which UNINETT have these IRUs they have to pay management costs and for some equipment upgrades.

UNINETT connects the usual academic user base of: universities; polytechnic and research institutions but do not connect government departments or private companies. UNINETT FAS (part of the UNINETT group) supports administrative systems for universities providing services such as accounting; student management; employee management and procurement.

UNINETT services include: FIEDE (single sign on); anti-spam services; eduroam; CERT; SCS and central procurement.

e) SURFnet – Walter van Dijk

Walter van Dijk from SURFnet intervened to say that NRENs have to be very clear about their purpose and objectives. He thought that the fundamental mission of an NREN was to be innovative. If NRENs did not pursue this objective they would become service centres for their community which is an entirely different mission.

He went on to explain the way in which SURFnet has been innovating and reported that they have 160 regular user institutions based in 220 locations. There are 15 customers of the advanced GigaPort.

f) JANET(UK) Community – Steve Hogger

The funding scheme for the JANET network in the UK is complex with most money being channelled through the Joint Information Systems Committee (JISC). Sectors connected by JANET include: Higher Education; Further Education; Schools and adult learning centres. Recently the health sector has been added through the N3 gateway. It is estimated that the JANET network now serves around 18 million users (almost one third of the UK population). Video conferencing seems a hot-topic for the health community in the UK and JANET(UK) are thinking of how to roll-out these services to all the thousands of hospitals in the UK.

UK schools have been connected since 2004/5 and are generally connected through their Local Education Authority (LEA). The connections are primarily used for collaboration with around 1/3rd making use of the video conferencing and MCU facilities. JANET(UK) is always searching for collaborative opportunities and partners and is currently talking with Internet2 staff. Steve reported that UK schools are increasingly signing up to the UK Access Federation <http://www.ukfederation.org.uk/>. The extent of membership now means that critical content may now be hosted with Access Federation control. This provides a unique service unavailable from the commercial ISPs.

Steve Hogger provided some vivid examples of the use to which JANET is being used to give children in the UK access to culturally rich resources. He demonstrated virtual visits to coal mines, museums and other educational sites. JANET would like to expand access to these facilities on a pan-European basis.

It is planned to bring all JANET services under a single portal early in 2010.

The JANET connection policy is well documented and can be found on the JANET website at URL: <http://www.ja.net/documents/publications/policy/connection-policy.pdf>.

g) Who can connect to GARR – Claudio Allocchio

Claudio reported that GARR is not a government organisation nor a public operator, but has a well defined list of who can connect which has been built up over time. All schools (both public and private) may connect, but the issue is who will pay for the connectivity. It is permitted to connect industrial sites but only if they are engaged in research activities and their use is within the terms of the GARR Acceptable Use Policy (AUP). Claudio gave the example of the Telecom Italia site in Turin which was connected to participate in some fibre research projects.

The GARR cost sharing model is based on the guaranteed bandwidth provided to sites and includes all the GARR services. GARR does not differentiate its users and provides the same level of service to each. Segmentation of the customers is somewhat pragmatic.

Some of the GARR staff are dedicated to following the users closely (in much the way an account manager might) with the objective of getting to better understand their requirements.

GARR provides a large range of services to its users including: Security; Domain Name; Certification Authority; AAI; eduroam; mirrors; news and videoconferencing.

3. RENATER Network and Services – Franck Simon

The RENATER network consists of approximately 7500 km of dark fibre and offers point-to-point lambdas to projects. The networked is meshed to provide resilience and availability of better than 99.95%. The network is operated using Cisco Tera-Routers in Paris & Lyon with giga-switches/routers at the other POPs.

Franck went on to describe the IPv4 and IPv6 services offered to users along with video-conferencing and other services including CERT support. Details of these can be found from the RENATER website at: <http://www.renater.fr/spip.php?rubrique156&lang=en>.

4. Highlights of the EARNEST Study on supporting 'Other users' – Sabine Jaume

The EARNEST Study on "Requirements of Users in Schools, the Healthcare Sector and the Arts, Humanities and Social Sciences" was written between March 2006 and November 2007. It investigated what the network is currently being used for by users in these disciplines and how they might use the networks in future. In some cases even where networks were accessible, users made little use of the facilities and capabilities. In some cases PCs were not connected to the network. A major obstacle in smaller institutes (particularly schools) is the lack of technical expertise. The EARNEST study can be accessed from the TERENA website at the URL: <http://www.terena.org/activities/earnest/docs/20080421-ither-v3.pdf>.

In summary, it was concluded that users in these categories can best be served by NRENS rather than ISPs. The reason being that frequently commercial ISPs cannot deliver the levels of service (such as federated access, filtering and security) needed by the users.

5. The Strategic Content Alliance, Emma Beer, JISC, UK

The Strategic Content Alliance (SCA) is a 3 year initiative funded as part of JISC's capital programme. It began in March 2006 and will conclude its current phase of work in March 2009. The aim of the SCA is to build a common information environment where users of publicly funded e-content can gain best value from the investment. The SCA website can be found at <http://www.jisc.ac.uk/contentalliance>.

Whilst the SCA drives the UK e-content from sources including: The BBC; Becta; The British Library; JISC and MLA, it also provides guidance for institutions on matters such as IPR, licensing, sustainability, revenue models and audience research.

Emma explained that the SCA has commissioned *Digipedia* which will become the portal for help anyone involved in the digital content life cycle. The Digipedia site is expected to be launched in April 2009 and can be found at: <http://beta.digipedia.org.uk/>. The presentation material is available from Emma Beer is available at: <http://www.terena.org/activities/tf-msp/meetings/20090415/docs/20090416-strategic-content-alliance.ppt>

6. Music, Dance and Others – Claudio Allocchio

GARR has been paying special attention to the support of new users in the areas of: music; theatre; architecture; cultural heritage; museums and health. This has enabled schools to become involved with performance and composition; tele-immersion and interaction with museum exhibits. In the health sector it supports remote diagnostics. As indicated in the earlier presentation on GARR services; GARR does not differentiate amongst its users and all have the same rights of access and support.

Claudio explained the origins of the tools used to support distributed interactive video between participants. In summary the tools are based on Digital Video Transport System (DVTS) - software which enables DV (Digital Video) distribution on the Internet. Originally developed in the WIDE project, in 2001 GARR used the tool as a way of injecting large traffic flows into their network for performance testing purposes. During 2005 in partnership with Internet2, GARR provided a transatlantic DVTS demonstration at the GARR05 users' conference. This was a huge success and excited many teachers present in the audience. The system was subsequently put into production service and Claudio presented several examples of usage including: GARR-Internet2-New World Symphony MasterClasses; an interactive art exposition - Italian Spring in Japan; high-definition performance art – UbiquiLab and Distributed e-music composition. In 2007/2008 GARR demonstrated the capabilities of telesurgery at the IRCCS workshop.

More recently GARR has been involved in using the computing power of the Grid to reconstruct the acoustic properties of ancient instruments from our understanding of current day instruments.

He concluded by saying that whilst GARR did not engaged in formal customer segmentation, it is expected that there will be cross-pollination between user groups and solution developed in one sector will find novel uses in other sectors.

<http://www.terena.org/activities/tf-msp/meetings/20090415/docs/20090416-garr-music-dance.ppt>

7. Broadcasters and the NRENs – Walter van Dijk

In the Netherlands several broadcasters receive some public funding from government. They collectively generate a great deal of interesting content. Through co-innovation with SURFnet, these broadcasters can better serve the public who provide their funding. Walter provided several examples of the services provided both to the users and the broadcasters.

- Archiving and distribution – The broadcasters have amassed large quantities of material that is academically interesting from an historic perspective. This material is made available to universities through a licensing scheme.
- Infrastructure – SURFnet is able to offer broadcasters a very stable high capacity infrastructure (1-10 Gb/sec) with point-to-point light paths for storage and archiving and multicast.
- SURFmedia – provides a video distribution platform for uploading and viewing of material.

Walter explained that although there is a tension between commercial and public broadcasting, public broadcasting is growing in the Netherlands, particularly at the regional broadcaster level. Live events streamed by SURFnet have generated huge traffic flows with the 2008 Tour de

France being a prime example. The lesson learned from this is that centralised support for large events does not scale very well and use of a distributed Content Distribution Network (CDN) is the most promising way forward. The provision of CDNs will require network providers to invest in content service support and infrastructure. As a consequence there are political and financial issues to be addressed. The presentation material is available from: <http://www.terena.org/activities/tf-msp/meetings/20090415/docs/20090416-surfnet-broadcasters.ppt>

8. A National Digital Resource Bank for Teachers in Schools - Steve Hogger

The National Digital Resource Bank (NDRB) for Teachers in Schools is a UK/Spanish collaboration to assist teachers create, search for and re-use free digital resources that have been developed by their peers and other trusted sources. Steve reported that the UK has invested in and helped create a thriving commercial market for digital learning resources for schools (£500m over 4 years).

The motivation of NDRB is that content should be easy to create, find, and share, and accessible to all teachers as much of it has been funded publicly. This is particularly true in the current economic climate, but makes sense generally. It is expected that the widespread uptake of federated access in the UK schools community will make access to NDRB seamless.

NDRB is based on the Spanish AGREGA Project which provides a federated repository of digital learning material which is to be used by 19 educational authorities in Spain. The AGREGA project website can be found at: <http://www.proyectoagrega.es/>. The software has been developed as open source to minimize the costs for the educational community. It is planned that the content developed by schools, colleges, libraries, charitable organisations and companies will be held in the NDRB as digital assets under the terms of creative commons licenses. It is expected that the NDRB Database will go live in September 2009 with the repository accessible by other countries through federated search. <http://www.terena.org/activities/tf-msp/meetings/20090415/docs/20090416-janetuk-content-management-for-teachers.ppt>

9. Support for Administration & Public Services - Koen Schelkens

To be connected to the BELNET network government bodies have to conform to the BELNET Connection Policy, which FOR THESE USERS requires the organisation to receive at least 90% of its funding from the state. BELNET currently have around 55 customers that fit into this category. BELNET works with Fedict (the Belgian Federal public service for Information and Communication technology) to deliver the FedMAN computer network providing network access to around 90000 public servants. BELNET is seen as a source of networking specialism and innovation, particularly in the context of e-Government. They have recently been asked to be involved in the creation of a national CERT for Belgium. The material from the presentation is only available on the TF-MSP wiki.

10. The Emergency Military Unit as User of RedIRIS - Alberto Pérez Gómez

The Emergency Military Unit was created by the Spanish Prime Minister in 2006 to provide support to other national and regional civil units in case of emergency (floods, earthquakes, fires, severe snowfalls, terrorist attacks, etc.). It consists of 3500 soldiers distributed in seven different locations nationwide so good communications is vital to its operations. Although this class of users is not normally considered standard for RedIRIS there was some precedence for including them. Many of the centres providing emergency warnings (National Meteorology Centre, Spanish Oceanographic Institute, National Geology Institute, etc.) were already affiliated to RedIRIS so all that was required was an extension of this concept. The result is regarded as a successful example of collaboration and widening of the RedIRIS user groups and as a consequence, Dr. Tomás de Miguel, Director of RedIRIS, was awarded by the Minister of Defence the Military Merit Cross.

<http://www.terena.org/activities/tf-msp/meetings/20090415/docs/20090416-rediris-ume.ppt>

11. Project Opera Oberta as users of RedIRIS - Alberto Pérez Gómez

Alberto introduced the “Gran Teatre Liceu de Barcelona” and their project Opera Oberta as users of RedIRIS. After a fire and rebuilding, the Gran Teatre Liceu de Barcelona was equipped with an extensive IT infrastructure and sound system. As a consequence it can be connected to around 50 Spanish Universities as part of the Opera Oberta project. The project reaches approximately 4.000 students with its broadcasts.

Operas from Liceu are broadcast live. Before the broadcast takes place, a lecturer provides background information. Information can be found at the Internet portal at the URL: <http://www.opera-oberta.org>. In 2007/2008 the project started to collaborate with universities and academic networks in other countries (CUDI/Mexico; REUNA/Chile; RENATER/France; SWITCH/Switzerland; FCCN/Portugal; University of Andorra).
<http://www.terena.org/activities/tf-msp/meetings/20090415/docs/20090416-rediris-liceu-opera-oberta.ppt>

12. CIRENSE Project Proposal - Harri Kuusisto

The CIRENSE Project Proposal was developed by four European NRENs to be submitted to the EC in response to their call for Coordination and Support Actions for ICT 2009.9.3 General Accompanying Measures. In summary, the proposal is to investigate the benefits of coordination of inter-NREN service provision in Europe.

The project would be small lasting 2 years with 4 FTE’s invested in total. The purpose would be to examine the current situation by undertaking a survey then bring together the interested parties to try and develop a “market-place” for all European NRENs

The work would be complementary to that of TF-MSP and the partners anticipate a lot of collaboration and interaction with the TF-MSP involving all interested European NRENs.
<http://www.terena.org/activities/tf-msp/meetings/20090415/docs/20090416-funet-cirense.pdf>

13. Any Other Business

Alberto thanked Sabine and RENATER for hosting what had been a lively and successful meeting. He asked delegates what might be the hot-topics for the future TF-MSP meetings. Suggestions included:

- UK libraries as a case study in new users groups
- Results of the DANTE segmentation study
- How to progress with the Customer Segmentation Study
- Interaction with 3G mobile operators – Stefan Winter, RESTENA
- Further Development of the TERENA compendium of NRENs

John Dyer agreed that TERENA will provide a private wiki space for TF-MSP to discuss issues which might be regarded as sensitive and therefore should not be public.

14. Date of Next Meetings

TF-MSP will meet jointly with TF-PR on the morning Monday 8 June, just before TNC 2009 in Malaga.

Action List

Reference	Who	Action	Status
20080929-03	AP	Work with JD on monthly topic	ONGOING Task
20090203-01	?	Small Survey of Issues surrounding Media Management & Distribution	
20090415-01	JD	Setup TF-MSP wiki	NEW

List of Participants & Apologies

Claudio	Allocchio	GARR
Emma	Beer	JISC
John	Dyer	TERENA
Steve	Hogger	JANET(UK)
Sabine	Jaume-Rajaonia	RENATER
Harri	Kuusisto	FUNNET/CSC
Yannis	Mitsos	GRNET
Alberto	Perez	RedIRIS
Koen	Schelkens	BELNET
Magnus	Strømdal	UNINETT
Walter	van Dijk	SURFnet

Apologies

Lajos	Balint	NIIF/Hungarnet
Brian	Boyle	HEAnet
Gerti	Foest	DFN
Maurice	van den Akker	SURFnet