TF-TEN meeting, June 21 1996, Trondheim, Norway

Attendees

Victor Reijs	Netherlands	SurfNET
Celestino Tomas	Spain	RedIris
Vegard	Norway	Uninett
Gunnar Lindberg	Sweden	
Olav Kvittem	Norway	Uninett
Kevin Meynell	UK	UKERNA
Ramin	Belgium	ULB
Christoph Graf	Switzerland	Switch
Peter Feil	Germany	DFN
Gunther Schmittner	Austria	ACOnet/U of Linz
Ariel Sobelman	Netherlands	TERENA
Mauro Campanella	Italy	INFN
Tiziana Ferrari	Italy	INFN
Michael Behringer	UK	DANTE

Apologies

Magnus Danielson, Olivier Martin, Jean-Marc, Zlatica

Review of Actions

Action 1.1 Status Closed - (PF): Talk to his colleague and send report to
TF-TEN list
on NICE and some related stuff. (one week)

Action 2.1 Status Closed - (MB): Send pointer for copy of slide on TEN-34
currently planned topology.

Action 3.1 Everyone who didn't send their contact points yet, please do so.

Action 3.2 MB made progress on JAMES stuff, but Action still open

Action 3.3 (ramin) Closed - (RNK): Re-send his experiment proposal to the list

Action 3.4 (Ariel) Closed - (AS): send experiment template to the list.

Action 3.5 (Ariel) Closed - (Everyone): Send it the completed form based on the
template (two weeks).

Action 3.6 (Ariel) Closed - (AS): Send Peter Wintlev-Jensen's letter to
TF-TEN list

Action 3.7 Status Open - (AS): Send information on ATRE to the list

Action 3.8 VR will take care of it - (Everyone): Send the URL's to MB.

Approval of Agenda and last meeting's Minutes

MB reporting on JAMES status. We are starting to get the VP procedures up
and running. Looks like the same procedures from last year. VR states he
is not allowed to ask for a VP as a national research network. Only
projects approved by the European Commission projects are allowed to. It
is work checking this out. MB indicates that there is an explicit category
for experiments for national hosts; this might be implying that national
research networks would be allowed to apply for VP's. JAMES, it appears,
it reluctant to supply a document of operational procedures on how to apply
for VP's. At this stage, they can reject an request without giving any
reason or delay a reply for weeks.   Again, the Commission's insistence on
co-operation between JAMES and TEN-34 has led to the concept of joint
experiments.

There will be a meeting with JAMES in Paris on the 26th and we hope to
discuss the cooperation and bring out thoughts on the issues. We have a
good delegation of TF-TEN people, about 5, and there will be 4 people from
JAMES.

It is agreed that Prime Contractor for the experiments will be entered at
DANTE. MB indicated a discomfort with work conducted by tohers be
credited to DANTE, but TF-TEN members feel it should be DANTE entered
nonetheless and don't feel it's a problem.

Access funding by country

Italy: The situation is not yet fully clear. MC reports they will pay for
international JAMES infrastructure connections. It might be a symbolic
sum, but simply not known at this point if Italy will have to pay or not
(probably not, MC thinks).

Austria: Situation not yet confirmed with Telecom Austria, but there is a
pretty good relationship and probably won't be charged. The only ATM user
so far is Linz, so GS doesn't anticipate problems.

Germany: Situation unclear yet. German Telecom has a large ATM network
with 'real' customers. Bandwidth is not available at certain times so we
need to know in advance and ask for the bandwidth as soon as possible.

Switzerland: Theoretically you can get access from anywhere to anywhere.
In the next few days, Switch will connect to SwissWAN and in principal, we
should be able, by mid July, to connect to JAMES and participate. CG
doesn't think there will be costs. The funding is being taken care of with
Switch

Belgium: No official ATM service available. The PTT switch doesn't work.
It's there, but can't get VP\s from it. It should be possible to get VP's
fairly soon but we will have to pay for it. The problem at this stage is
they don't know how to charge for it.

ACTION 3.15 (Ramin): Try to find more information about status in blegium
and future possible costs.

UKERNA: From a funding point, there shouldn't be any problems becaise it's their own network... and will probably not get charged for JAMES connectitiy.

Sweden: GL's educated guess. Swedish Telecom sells ATM connections. The connection point for JAMES is Goteborg. He would assume, based on a complicated set of assumptions, that they will not be charged.

Norway: PTT expect to be connected to the pilot by end of June.   OK doesn't anticipate any connectivity costs. A commercial ATM network is expected to pop up in the autumm. Some people are hoping the experimental stuff will be swallowed by the commercial network. Possibly in 97. If this happens, we might start seeing funding problems.

Spain: They are going to give ATM service, possibly within a month. In principle, there will be a cost for connectivity. The PTT has not put a price tag on, but they are planning to dicuss this shortly. CT is hoping to find a way to avoid charging, and thinks something can be arranged to get the connections for free.

Holland: VR reports basically no costs anticipated and no problems expected.

ACTION 3.16 (Michael) Inquire with JAMES on the possibility of having their form on the web

TEN-34

A general disclaimer from MB that the shown TEN-34 topology diagram is a working draft and will still change. The topology itself is pretty close to fina, but the link speeds are changing rapidly.

MB thinks this is a good network and the backbone capacity is enough for every country. GL inquires about plain Internet connectivity to the States. MB says it's not clear yet at this stage. Regarding the first connections becoming operational, MB reports this will not be before the ned of the year.

Guest presentation on ATM work in Sweden

Gunnar Lindberg
Calmers
Lindberg

Robert olsson
SLU

  chalmers.se
        ~ftp/sunet-atm/fas1.rapport.ps
        ~ftp/sunet-atm/fas1b.rapport.ps
        <lindberg@cdg.chalmers.se>

Review Of Experiments

Three experiments are still not specified:
1. Advanced application testing
2. Native ATM applications and running them directly on the network
3. Addressing.

Regarding advanced application testing, MB proposed we leave this off the
list the year. It's agreed. In this context, VR mentioned that the
universities originally planning to conduct the advanced application tests
have withdrawn, and therefore he cannot be responsible for the test. MB
inquired if anybody else wanted to take over this experiment, there was no
reply. The consensus was that this experiment is not crucial to the project
at this stage, and MB proposed to leave this off the list the year. This
was agreed. In this context, VR inquires if MERCI is doing some video
conferenceing directly over ATM.

Action 3.17 (VR, CG) Find out what's going on in the Netherlands and
Switzerlnad on this front.

Regarding addressing. MB isn't sure this can be categorized as a full
experiment, but more in the direction of surveying who is doing what and
how do we use this information. This is one of the joint activities with
JAMES and possibly one of the most useful ones.

Action 3.17.1 (Kevin) Talk to George Howard about address and find out
about the scheme he devised. If possible - compile a list of the various
addressing schemes.

We need an outline of addressing in terms of what we are trying to acheive.
MB asks if we should we deffine out own addressign for the tests? It is
agreed that we need a document on this at some point in the next 4 or 5
months when we start the SVC experiments.

We should get to a state that we understand how our addressing scheme will
go for our experiments.

Action 3.18 (Kevin) Collect the info and write up this document...

Action 3.19 (Olav) Write up details and thoughts on RSVP project. Deadline
June 28th

Action 3.20 (Ariel) Find a speaker on RSVP for next TF-TEN meeting

Action 3.21 (Gunther) Send the URLs for RSVP information collected from Cisco

5. TCP over ATM experiments

TF proposes to start July 8th and go on for 5 days till Friday. Is this
enough time? An alternative date could be the 15th for the same duration.

Action 3.22 (everyone in the experiment) Doanload the software needed for
the experiment

Action 3.23 (Tiziana) Supply new address where to doanload final version of the software

Olav suggests adding another part to the experiment. A work station up in Trxmso, which is 2000km from Oslo. this will increase the distance.

Action 3.24 (Italy, Spain, Sweden and Norway) Pick up the form, give it to the contacts in their countries with a cover letter. It should be a copy of the original form which was submitted in Italy.

Action 3.25 (MB) come up with a unique experiment identifyer acronym.

6. Deliverable D.11

No discussion on the matter. It is already written and will be sent out.

Project Planning

The purpose of this item is to discuss and decide on the sequence ofexperiments and decision-making in the task force.

7. Scheduling of tests relating to the overlay network

TCP over CBR
SVC
ARP
NHRP
Addressing
Native ATM
IP over VBR (Not before September)
CDVT
RSVP

Native ATM, Ip over VBR and RSVP don't have a strict order of exectution, so it's agreed to leave it open for the time being and decide further down the road as work progresses.

There are a few aspects relating to the SCV tunneling. Coordination will be given to CG

Action 3.26 (Christoph) Coordinate finding the details for the tunneling experiments and chase the people. One month for this Action.

ARP: The work for the ARP experiment should be pretty straight forward, Ramin is in charge.

NHRP: OK is away till mid-August, so it's on rocks till then. To the point, however, there are doubts regarding where NHRP is going. It will be discussed at the coming IETF (Montreal), but most likely no decisions will be made before the December IETF.

Action 3.27 (Olav) Report back to the list after the IETF on NHRP status

Project planning

There are several ways we can setup an overlay network and we're not yet
sure about the best way. MB would like to see VC's that travel one hop and
others that travel more. He thinks we should have long distrances. The
countires that join first should be able to set a small subset.

Network structure: What should the network look like? Are we going to have
a tree structure?

The Mbone issue, it's decided, will stay open for the time being.

Action 3.28 (Victor) Draw up a network topology and send it to the list.

Cooperation with JAMES

The collaboration between TEN-34 and JAMES is a contractual nessassity by
the Comission. There will be a meeting in Paris on Wednesday with JAMES
people. We have to discuss the strategy of how we approach JAMES and how
do we, as TF-TEN, see the cooperation with JAMES.

Addressing issues

We are going to leave this more or less for UKERNA. In defining who
carries out the work, it is agreed that UKERNA will be the primary TEN-34
contact for addressing issues.

Future Services

MB thinks we should re-write this whole work package. On this issue, MB
also feels that JAMES have the biggest interest in collaborating with us.
The knowledge is with us - not in their environment.

Ipv6

This is out, we can refer them to ATRE or phase 2

UBR - phase 2

MB will re-write this section and sent it out to the list by Tuesday at the
latest

Network Management

Our primary contact is Zlatica. We don't have strong views on this subject
and it's subjectnegotiations with them.

```
Security
-----------

Action 3.29 (AS): Find information on what's going on with security issues
in ATM



VBR - pushed off till next meeting

Actions
-----------
Action 1.1 Status Closed - (PF): Talk to his colleague and send report to
TF-TEN list
on NICE and some related stuff.  (one week)

Action 2.1 Status Closed - (MB): Send pointer for  copy of slide on TEN-34
currently planned topology.

Action 3.1 Everyone who didn't send their contact points yet, please do so.

Action 3.2 MB made progress on JAMES stuff, but Action still open

Action 3.3 (ramin) Closed - (RNK): Re-send his experiment proposal to the list

Action 3.4 (Ariel) Closed - (AS): send experiment template to the list.

Action 3.5 (Ariel) Closed - (Everyone): Send it the completed form based on the
template (two weeks).

Action 3.6 (Ariel) Closed - (AS): Send Peter Wintlev-Jensen's letter to
TF-TEN list

Action 3.7 Status Open - (AS): Send information on ATRE to the list

Action 3.8 VR will take care of it - (Everyone): Send the URL's to MB.

Action 3.15 (Ramin): Try to find more information about status in blegium
and future possible costs.

Action 3.16 (Michael) Inquire with JAMES on the possibility of having their
form on the web

Action 3.17 (VR, CG) Find out what's going on in the Netherlands and
Switzerlnad on this front.

Action3.17.1 (Kevin) Talk to George Howard about address and find out about
the scheme he devised.  If possible - compile a list of the various
addressing schemes.

Action3.18 (Kevin) Collect the info and write up this document...

Action3.19 (Olav) Write up details and thoughts on RSVP project.  Deadline
```

June 28th

Action 3.20 (Ariel) Find a speaker on RSVP for next TF-TEN meeting

Action 3.21 Gunther) Send the URLs for RSVP information collected from Cisco

Action 3.22 (everyone in the experiment) Doanload the software needed for the experiment

Action 3.23 (Tiziana) Supply new address where to doanload final version of the software

Action 3.24 (Italy, Spain, Sweden and Norway) Pick up the form, give it to the contacts in their countries with a cover letter. It should be a copy of the original form which was submitted in Italy.

Action 3.25 (MB) come up with a unique experiment identifyer acronym.

Action 3.26 (Christoph) Coordinate finding the details for the tunneling experiments and chase the people. One month for this Action.

Action 3.27 (Olav) Report back to the list after the IETF on NHRP status

Action 3.28 (Victor) Draw up a network topology and send it to the list

Action 3.29 (AS): Find information on what's going on with security issues in ATM