DSNet UK Steering Committee Meeting

2nd November 2004, Xyratex, Havant

Meeting Minutes

Present:

C. David Wright (CDW), Eddie Townsend (ET), Andrew Pauza (AP), Barry Middleton (BKM), Rob Hardeman (RH), Des Mapps (DM) and Paul Nutter (PWN).

Apologies:

Eric Mayes, David Jenkins and Simon Gittens.

Minutes

04.01 Review of Objectives of Network

CDW was asked to restate the objective of the network - which is
'To promote and grow an inclusive industrial-university network to determine appropriate goals, aspirations and development strategies for the UK's data storage research, technology and manufacturing base'

There are a number of targets required for the DTI:

- To arrange a number of meetings per year (typically 1 general and 1 topical)
- Develop a roadmap for data storage in the UK
- Foster and develop a working relationship between academia and industry.

The network has been provided with £50,000 over 3 years to support these activities and pay for academic members to attend meetings, and visit other partners. Industrial members are expected to fund their own costs.

Money may also be used to support invited speakers at network meetings.

CDW pointed out that the network has an administrator employed by Exeter University, Sarah Adam, email: S.E.Adam@exeter.ac.uk, who helps to run the network. Sarah is currently part-time and works one day per week.

04.02 The UK Data Storage Strategy Document and Roadmap

CDW pointed out that one of the first objectives of the network is to develop a UK-based data storage roadmap. This might draw from the IMST EU roadmap under current development, for which DSNet members will also be invited to contribute. In essence we need to answer the question 'What can and should the UK concentrate on in the data storage area?'.

CDW handed out copies of the IMST white book and pointed out that this may be a useful basis for our own (network) roadmap. The IMST white book is broken down into sections where each area of technology is discussed indicating the strength of research in that area in the EU. The question was posed, can we do something similar for the UK; we have do to satisfy one of the objectives of the network.

CDW suggested that for our own roadmap we could take elements from the IMST white book and modify them to create our own version, including other areas not covered in the IMST white book, such as channels and systems. We could add the elements that are missing from the UK perspective. An example is holography, where there is plenty of ongoing work in the UK in both academia and industry.

CDW asked that members of the network should take a section each and modify them in view of our own perspective. Take the IMST roadmap as a starting point, update the sections identifying technological areas and UK strengths.

All present agreed to use the White Book as a structure around which to base the UK Data Storage Strategy Document.

It was agreed that individuals should be responsible for collating each section, taking input from the membership via the web-site (a form already exists on web for this), direct e-mail, and via feedback at forthcoming General Meeting.

Preliminary deadline for submission of written sections to CDW is December 31st 2004.

[Action: CDW - Emerging Technologies; ET - Storage Systems; AP - Optical Storage; RH - Magnetic Storage]

CDW asked whether we should extend out further and for our roadmap include a section on networks. BKM pointed out that there was already a network in the area of network storage/systems.

[Action: BKM to find details of this network and feedback to CDW.]

A discussion followed on whether we should include a section in the roadmap document on solid-state devices. The committee identified that there are one or two small companies working in CMOS storage in the UK, but none were members of the network.
All present agreed that we should look at the possibility of including solid-state devices within the remit of the network; it is just a question of identifying who is the best person to approach. I
It was agreed to contact Philips Southampton and perhaps XFAB in Plymouth to gauge interest

[Action: CDW to Philips Semiconductors and XFAB]

04.03 Network Membership

ET reported on the recent mailshot to all groups/companies listed in the DTI Information Storage Guide. This resulted in over 15 positive responses.

CDW also reported a number of requests to join the network had been received directly via the web-site.
The list of industrial members (or those who had requested membership), as at 2nd November 2004:

Philips (Southampton)
Zen Data (Cambridge)
Infinite Data Storage (Fife)
Nordiko
HP
Seagate
Photosonics
Southampton University spin-off company (phase change media)
M5 Data
Nanomagnetics
Imec
Decision Craft
BBC (archival project funded by the EU).

04.04 Organisation of 1st General Meeting

The discussion then switched to the next general meeting, for which all members will be invited to attend, and what format it should follow.

RH asked how do we actually get people to attend the general meeting.
RH suggested that we contact indsutrial members directly and ask what they would like to see at the general meeting, and what they would hope to get out of it.

[Action: ET to contact those who have raised an interest in the network to seek their views on meeting format]

CDW suggested that we present the draft roadmap to the members, as well as discussing routes for funding.
RH asked whether it would be wise to get someone from the DTI to attend and discuss funding via DTI. *All agreed this a good idea.*
[Action: RH to approach DTI for suitable speakers]

CDW posed the question, what would the academic community like to get from the meeting? What will entice academics to attend? BKM suggested *funding* to which DM agreed. Academics are keen to determine where they can obtain money and who to talk too, for example, DTI, EU etc.
It was therefore agreed that a section on EU funding and DTI funding should be included if possible.
ET agreed to prepare something on EU funding.
[Action: ET to prepare presentation on EU funding etc]

CDW suggested we get a number of prestigious speakers to attend (paid for by the network) which may entice members to attend. It was also suggested that it might be possible, depending upon numbers, to ask members to present a brief overview of their area of expertise.
It was agreed that a poster session be held at the meeting, to give members a chance to show some of their current interests
[Action: CDW to organise poster session and request contributions]

CDW reiterated that we must have a mix of interesting presentations, plus the roadmap and funding. DM suggested that industry may be interested in seeing what technologies may be on the horizon to gauge what may be available for future products. *All agreed.*
A number of possible subjects and speakers were suggested, including …
Simon Gittens (possibly tape or customer orientated views), **Action: ET to invite.**
Someone from Seagate and/or Plasmon? **Action: AP to invite Bob Longman**
Emerging technologies, phase change (Bernard Bechevet, LETI/Grenoble), magnetic probe storage (Leon Abelmann, Twente), someone from ST Microelectronics who are working on MEMs for probe storage. **Action CDW to invite**

It was suggested that it may be best to arrange for the general meeting around mid-December and have draft network roadmap inputs produced a week before this, maybe Friday 3rd or Monday 6th December.
A date for the General Meeting was decided … **Wednesday 15th December.**

The venue was discussed. Manchester (Uni), Bristol (NanoMag) and Birmingham (IEE Centre) were suggested as alternatives.
CDW agreed to check availability and costings for each.
[Action: CDW]

The discussion then concentrated on the structure/agenda of the general meeting.

The following agenda was generally agreed upon:

Morning session

10:30 start

Invited speakers, approximately 3 half hour presentations.

Lunch

About 1.5 hours, maybe with a poster session where members can advertise their strengths and current activities.

Afternoon session

UK DSN roadmap presentation and discussion
Funding discussion
Feedback session
Other acitivies?

Finish around 4pm

A few other activities were discussed including,

Whether we should have an open forum to involve the delegates or maybe split into discussion groups which concentrate on particular areas of data storage.
Whether we should discuss topics for future meetings and maybe theme these around particulars areas of data storage.

RH suggested to use of 'post-it walls' were delegates can post a number of ideas (typically 5) suggesting future areas of discussion, network activities etc. All agreed this would be a good idea.
[Action RH/CDW to co-ordinate post-it session]

04.05 General role of network

The rest of the meeting comprised a wide-ranging discussion of possible roles for the network.

ET stated that one question prospective members may ask is 'how can I contribute?'.

CDW replied that a primary role of the network might be to identify key technical problems that are affecting members, which can be shared with the rest of the members who may be able to offer possible solutions.

BKM pointed out that in the United States where there are similar, and successful, networks, NIST for example, they suffered from similar problems, which were easily discussed; the same may not be the same for the UK community.

ET asked the question 'What could the UK offer in terms of advancing storage technologies? What are the niche areas where we could place real value?'

CDW discussed the success of INSIC in the United States, we don't want to necessarily model ourselves on them, but we could follow a similar path. Developing larger and more visionary projects, but in the UK and EU.

ET pointed out that a highly commercial project would be more successful.

CDW pointed out that funding for projects could be sought from EPSRC and DTI in the UK, as well as the EU (Framework programme), providing a common theme for research can be identified through the network, for which the network could offer real value.

AP suggested that members be asked what their interests are and to possibly present their work in the general field of storage at a future meeting.

ET pointed out that maybe some common themes may come out of this that the network as a group can pursue.

RH asked as a network, what areas of data storage are we interested in? Since storage in general covers many areas from materials, through the physics of the head-media interface through to the user-interface in a virtual network … everything in between is storage. Do we want to take it all on? An example is the case of error-correction, this area is largely comms, so it is a prime example of other areas which knit into our own.

CDW stated that if the UK strengths aren't really invested in the strengths of the founding members of the network, the ethos of the network should be to seek and invite new members from any key areas that are identified in our roadmapping exercise.

CDW handed out a copy of the DTI's MNT roadmap and suggested that we use it as a model for our own network roadmap, identifying the strengths of the members and the missing expertise that we may have to find elsewhere.

RH pointed out that we have existing strengths in many areas, materials, device layer, mechanical tribology, coding and ECC, channels, systems etc and suggested that we concentrate on uniting these areas of expertise.

ET asked what happens to the network once the funding runs out. CDW pointed out that it would be good if the network became self-funded (trade) organisation, much like INSIC, or may become an advisory group within DTI. This needs some thought about and is worth considering.

RH asked how often we need to schedule steering committee meetings? CDW suggested twice a year.

RH also asked how we set our targets? CDW replied that we measure our success against achieving our aims. In particular, to double the membership in the first six months, which has already been achieved, to encourage collaborative research activities and to organise a number of topical meetings. In addition, we must produce the UK DSN roadmap by the end of the year.

Paul W Nutter
2nd November 2004.