

SCIENCE AND ENGINEERING RESEARCH COUNCIL  
RUTHERFORD APPLETON LABORATORY

COMPUTING DIVISION

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G P Jones

PANEL MEETINGS

Notes on a Panel Meeting held on 15 July 1982  
at Cosener's House

8 October 1982

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DISTRIBUTION:

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DCS Meetings/Notes File

PRESENT: Prof R Needham (Chairman) R Newey  
Prof R L Grimsdale C Portman  
Dr I Wand M Wright (DoI)  
B Brinkman J Monniot (Secretary)  
K Dixon A Challis  
B Holloway Dr D A Duce (Academic Coordinator)  
R Milner F Chambers (Industrial Coordinator)  
Miss G P Jones (Technical Secretary)

The Secretary introduced Mr Challis who has replaced Mr Hinde as Minute Secretary.

The Secretary also thanked Professor Needham, the retiring Chairman, for his services to the programme, this was seconded by Dr Duce. The next Panel Chairman will be Mr Newey.

1. MINUTES

Page 1 minutes of the meeting held on 29 April 1982 should read 20 January 1982.

Page 3 minute 4a paragraph iii should read "provided the Chairman approved the proposal.

The minutes were then accepted as a correct record.

2. MATTERS ARISING

- (a) The Engineering Board has approved a subsidiary award of £254K to Dr J Darlington, subject to approval by Central Computing and availability of funds.
- (b) A letter of congratulations was sent to Professor Hoare, on the Panel's behalf, on his election as a Fellow of the Royal Society.

- (c) The IEC has proposed a National mailbox facility, DCS funds of 50K will be used. The DoI confirmed that funds from them should be available. As the IEC wanted the facility to be made available to industry a licence may be required from British Telecom but that would not be a problem.
- (d) All higher approvals needed for grant recommendations have been received. The Secretary reported that due to cuts of £1.2 million in the computing budget only the top three alpha plus grants awarded at the last meeting could be funded. These were:

Turner, University of Kent	-	£109,474	over 3 years
Abramsky, Queen Mary College	-	£ 42,840	over 2 years
Plotkin (VF), Univ of Edinburgh	-	£ 18,357	over 1 year
Total	-	£170,671	

Grants approved but no money for funding were:

Bennett, Keele University	£ 24,058	over 1 year
Evans, Loughborough University	£ 32,404	over 3 years
Higginson, UCL	£ 51,050	over 2 years
Smith, Strathclyde University	£ 7,990	over 1 year
Hughes, UMIST	£ 39,990	over 2 years
Paker (VF), PCL	£ 750	over 1 week
Sloman, Imperial College (Co-op grant with NCB)		
Cain, PCL	£137,750	over 2 years
Wally, UCL	£ 19,325	over 2 years
Hunter, Sussex University	£ 65,897	over 3 years
Darlington,	£254,000	

The Secretary pointed out the fact that within the Council there were underspends, we could try to use the money to fund these grants.

The Academic Co-ordinator suggested the possibility that out of the DCS grant related capital for networking 80K could be used for funding grants. It was pointed out to the Panel that several of the groups above would be in great danger of collapse if funds were not provided. It was suggested that any funds available be used to keep staff in post wherever possible. The Secretary stated that it may not be possible to fund staff with money from grant related capital. The Panel asked him to do his best over the financial situation and asked for priority in funding to be given to Bennett, Hunter and Evans.

The Chairman was asked to complain in the strongest possible terms about the situation to the Council.

### 3. ACADEMIC CO-ORDINATORS REPORT

#### (a) DCS Conference

The DCS Conference at the University of Strathclyde was held from 5-7 July. Approximately 125 people attended of whom roughly 30 were from industry. Dr Duce reported that the conference had been a success and several people indicated that they would welcome a similar event next summer. The Panel were invited to request the Office to write a letter of thanks to Mr Shephard for his efforts in organising the conference.

The Academic Coordinator stated that he would be writing letters of thanks to the speakers.

(b) Workshops

A Cambridge Ring SIG meeting was held on 25 June at Queen Mary's College. 30 people attended and 13 presentations were given. Dr Duce reported that the purpose of the meeting was to review progress.

(c) Newcastle SERCnet Connection

It was reported that progress has been hampered by a series of software problems, the majority of which were not due to the York software. Until the Newcastle connection is operational no further connections can be made to SERCnet.

(d) 1982/1983 Workshop Programme

Dr Duce reported that at the Closely Coupled Systems SIG in April '82 future meetings of the group were discussed. There was a general feeling that some of the topics being addressed by the group would benefit from contact with other groups. Based on these discussions the following meetings were suggested:

- Applications of Closely Multiprocessor Systems
- Reliability/Resilience
- Distributed Operating Systems
- Local Area Networks
- Programming Methodology
- Programming Languages
- Data Flow SIG

A 2 day workshop on the state of the art in Specification and Verification Techniques is being organised by the BCS Formal Aspects of Computer Science Specialist Group. The workshop will be held from 28-30 March '83 at the University of York. DCS and Software Technology investigators will be participating in the event and the Academic Coordinator stated that he had been invited to join the Organising Committee. The committee would like SERC to co-sponsor the event and provide financial support in the form of travelling expenses for some speakers. The Panel were invited by Dr Duce to consider the request. This was done and the request was endorsed.

#### 4. INDUSTRIAL COORDINATORS REPORT

Mr Chambers opened by saying that the financial situation was depressing, but was enthusiastic at the content of the DCS Programme. It was reported that industry thought the DCS Conference at Strathclyde successful and a good lead into the Industrial Conference being planned for next year.

The format of the conference was discussed. The Industrial Coordinator had planned a 2 day conference, to commence with a short tutorial on SERC and then review the main investigators within the DCS Programme including industrial and cooperative research. The Panel suggested that a small informal committee be set up to organise the conference. This it was decided should consist of Dr Duce, Mr Chambers, the DCS Chairman and if willing Mr Peter Hall.

Mr Wright was asked by the Panel to investigate the possibility of some funds coming from the DoI and report his findings to the secretary.

## 5. PROGRESS REPORTS

Progress reports were not received from Aspinall, Bornat, Cain & Morling and Coulouris. All investigations seemed to be progressing, questions were raised about the following:

### Dr Bennett - referee Dr Wand

Dr Wand reported that he was happy with the project, and suggested a Panel visit before the announcement. The Chairman although in favour thought it not an easy arrangement to make.

### Dr Roberts - referee Mr Milner

Mr Milner reported that the RA appointed to the project can only work for a quarter of the time which leaves the project under-staffed. The investigator hoped to find a suitable RA for the remaining period. The Academic Coordinator was asked to investigate further at the end of the summer, or sooner if required.

## 6. FELLOWSHIP OF ENGINEERING REPORT

It was stated that the Panel operates according to the needs of the programme as a whole, the report sowed the seeds of its own downfall.

## 7. STRATEGY PROPOSALS

The Academic Coordinator invited the Panel to offer to continue to meet before each CCSC meeting to formulate recommendations to CCSC on grant applicants in the area of distributed computing. The Panel's role with respect to the DCS Programme would be a monitoring role and no new grants would be incorporated into the DCS portfolio.

It was proposed that an active workshop programme should continue until the termination of the DCS Programme, with major workshops being held in the summer of 1983 and September 1984. The Panel considered the 1982 Strathclyde Conference a great success and wished to hold another conference along the same lines next year, and made it known that they were seeking an organiser for the event.

It was generally agreed that the Mailshot has been highly successful, it was proposed to continue the service until the termination of the DCS Programme. The Panel were invited to recommend to CCSC that they should investigate ways of continuing the DCS Mailshot after the termination of the DCS Programme whilst the research community feel it is valuable.

The DCS Programme has a large equipment pool from which items are loaned to investigators. The pool is maintained by SERC. When the programme terminates three courses of action are possible:

- (a) equipment pool becomes a CCSC equipment pool. Maintenance continues to be provided by SERC;
- (b) items of equipment in pool are offered to investigators. Maintenance will not be provided by SERC;
- (c) a combination of a and b.

Dr Duce reported that the equipment pool contains VDU's, magnetic tape decks, LSI-11 systems, Teraks, Cambridge Ring equipment, PERQ's, hardware for connections to SERCnet, RT11, Unix and UCSD Pascal licences. The first four types of equipment in the list will be nearing 5 years of age when the programme terminates and are unlikely to be of interest to other CCSC funded groups. Course b is appropriate for these items.

Cambridge Ring equipment is likely to be of general interest, but when the DCS Programme terminates the majority of CCSC funded groups may be expected to have acquired Cambridge Ring or other local area networks within their department and so course b is appropriate here also.

The PERQ systems pose a problem in that it is not at present clear how PERQs will be awarded by SERC in the future. At the present time PERQs seem to be made available to investigators on loan for the duration of a grant, but there is pressure from the CCSC that PERQs should be awarded as other equipment so that when the grant terminates ownership passes to the Institution. If SERC adopts a loan policy, then the DCS PERQs should become a part of the CCSC pool, otherwise they should be offered to investigators to whom they are on loan when the programme terminates.

Hardware for SERCnet connections consists of modems and LSI-11 front-end systems for PDP11 systems running on the Unix operating system. Connections to SERCnet are currently only permitted for machines owned by SERC. Agreement has been reached with the SERCnet management committee that DCS funded groups can connect to SERCnet if the hardware/software combination to be connected is approved by SERC. It was suggested that the SERCnet connections should continue to operate as a loan pool, but that the decision should be reviewed if the conditions for use of SERCnet change.

Software licences posed a problem. Both Unix and UCSD Pascal licences are only valid so long as the machines licenced are used for SERC funded research. These licences must therefore continue to be administered by SERC, though no maintenance charges result from them. The RT-11 licences for the LSI-11 systems are not subject to such restrictions and may therefore be offered to institutions along with the systems they licence.

The overall agreement of the Panel approved option b but reserved the right to use option a at their discession when necessary.

It was reported that the DCS support team have built up considerable expertise in the current hardware and software components of SERC's Common Base and have also developed good working relationships with the DCS community. The manpower is currently 8 man years per year, 5 of those supporting Unix, PERQ, Cambridge Rings, etc. The Panel was therefore invited to report to the CCSC that this kind of support should continue within the SERC.

It was decided that the DCS Annual Report should continue to be produced until the end of the programme, but should evolve towards a summary of the programme and the contribution made by each project to the state of the art. The Industrial Coordinator said that in his opinion the report was too large, the reviews by investigators too long which resulted in the report not being a good marketing tool. It was agreed that the next report be redesigned and perhaps allow only two pages of review per grant. This was accepted by the Panel and the two coordinators agreed to draft a letter to send to investigators giving a specification of requirements.

The DCS Panel have been asked by the CCSC to produce a scheme for the assessment of the DCS Programme. The Panel decided that the best solution would be to get the past Chairmen (this would involve 2 industrialists and 2 past grantholders) plus the Coordinators to draft a report, then get someone independent of the programme to vet it. It was suggested that it be sent to Peter Hall for independent assessment. The most important factor being that it must be truly objective.

## 8. FORWARD LOOK

This year's forward look remains unchanged from last year.