CN/DPG/91/MIN/3

THE CN DIVISIONAL PLANNING GROUP

Minutes of the Meeting held on 13th. May 1991

PRESENT: R.Brun, J.J.Bunn(Secretary), F.Carminati, F.Gagliardi, J.N.Gamble, S.Jarp, J.–C.Juvet, M.Metcalf, A.Osborne, H.R.Renshall, J.Richards, A.G.Silverman, D.Wiegandt, D.O.Williams(Chairman).

- *MINUTES OF LAST MEETING (CN/DPG/91/MIN/2), AND MATTERS ARISING*

A.G.Silverman asserted that he was, in fact, present at the last meeting. The "ready rack" of cassettes would save a "lot of legwork". The striking and rather surprising similarity between the IBM and Cray tape mount usage patterns had not been mentioned. Recently, the number of cartridge robot mounts had been rising steadily, now reaching approximately 1200 per week.

- *EXABYTE JUKEBOX TESTS (J.–C.JUVET)*

JCJ described plans for installation of an Exabyte Jukebox, and the new EXB–8500.

The 8500 is a new product with 500 kBytes/sec transfer rate and 5 GByte capacity. A high speed search possibility is offered, which uses a separate magnetic track on the tape. CO group had ordered an 8500, and there was a six weeks delivery delay. Existing 2.5 GByte capacity Exabyte cassettes could not be read or written using the device with the current hardware, although eventually it would be possible to read and write at both densities.

The EXB–120 juke box contains up to 116 cassettes. If these were of the 8500 type, then the box had a capacity of 580 GBytes. Access time to a cassette was claimed to be 16.5 seconds. Racks of ten cassettes could be moved in and out of the device at a time easily. An extended SCSI interface meant that the juke box could sit in the tape vault, whilst attached to a machine in the machine room. JCJ referred to the note from Charles Curran (CN/DPG/91/3), which described the possibility of field–testing an EXB–120 from June until the end of 1991. Some questions were asked regarding how the PC control system could know when a user had dismounted a drive, and how "window staging" could be implemented with the device. It was felt that the *shift* system would be a good testbed, although OPAL was very much committed to 8200 type devices. It was decided that the field test set–up should have two 8200 drives and two 8500 drives, and to go ahead with the test.

- *CENTRAL UNIX MAINFRAME SERVICE (J.RICHARDS)*

JR presented her and Dietrich Wiegandt's paper on a "Central Unix Service" (CN/DPG/91/2). CPU time distribution graphs contained in this document showed that there were a large number of people using very little CPU power on CERNVM and VXCERN! It was wondered whether these distributions would be similar on a central Unix mainframe, if one existed. There were a lot of questions raised, amongst them:

— Do we want to move users to a central Unix service?
— Would workstation users hog process slots on a central machine?
— What impact would, for example, remote news reading have on network traffic?
— What was the exact composition of the existing user community on CERNVAX? Who was using the machine for what, and why?

In particular, the question of whether the users needed a large central Unix machine, or several special purpose servers, was critical to any strategic decision in this area. It was generally agreed that, in any case, the CERNVAX machine desperately required upgrading. This machine provided a solid service, at minimal manpower cost, to the only existing large body of Unix users at CERN. Comparisons of platforms other than VAX/Ultrix revealed that a promising contender for a future central service was IBM's AIX/ESA product. Nobody knew, however, whether any of the contenders could really support a projected one thousand simultaneous interactive users. But it seemed probable that the IBM 9000/900 machine might approach this goal. An AIX service could be given a fixed but arbitrarily large share of the the CPU power, by means of the PR/SM facili–ty. A bonus was the easy access this would immediately afford users from Unix to the existing IBM peripherals (3480 cartridge drives, etc.).

Thus it was agreed that at some time in the not–too–distant future, VM/CMS should be "frozen", and AIX work ramped–up. Sverre Jarp was asked to estimate the manpower resources required for AIX/ESA introduction.

There followed a heated exchange of views on the merits or otherwise of upgrading CERNVAX in the short term with another VAX–based machine. Since the meeting, the issues have been largely resolved.

- *ANY OTHER BUSINESS*

  DOW asked for ideas on future topics for the DPG. It was decided that the following subjects should be addressed:

  — Gigabit Standardisation (Brian Carpenter and Robert McLaren)
  — ISIS (Frederic Hemmer and Fons Rademakers)
  — Computer Security (David Lord)
  — SCSI Teach–in (Jorgen Petersen)
  — Tape Server (no name given)
  — Future plans for Graphics (Rene Brun)
  — Tape Mounts – further statistics (Harry Renshall)
  — Home Directory Server (Les Robertson and Alan Silverman)
  — Data Repository (Phil. Defert)

- *NEXT MEETINGS*

  The following meeting dates have been fixed for the DPG:

  1. September 2nd.
  2. October 14th.
  3. November 11th.
  4. December 9th.

  The June 10th. meeting is cancelled. The secretary will circulate details of the new pre–Summer DPG in due course.

Table 1: Action Items

Name	Entry Date	Target Date	Task
David Williams	April 1991	Summer 1991	Produce cover note for Costs paper
Sverre Jarp	May 1991	End 1991	Manpower estimate for AIX/ESA introduction
Harry Renshall	April 1991	July 1991	Review Tape Mounts Statistics
Les Robertson	April 1991	July 1991	Review SHIFT progress