CN/DPG/91/MIN/5

THE CN DIVISIONAL PLANNING GROUP

Minutes of the Meeting held on 30th, September 1991

PRESENT: R.Brun, J.J.Bunn(Secretary), B.Carpenter, F.Fluckiger, D.Jacobs, S.Jarp, G.Kellner, D.Lord, M.Metcalf, A.Osborne, J.Richards, L.M.Robertson, A.G.Silverman, D.Underhill, D.O.Williams(Chairman).

- *MINUTES OF LAST MEETING (CN/DPG/91/MIN/4), AND MATTERS ARISING*

There would be a large "Villars–style" meeting to discuss LHC in Evian. Edinburgh University had taken delivery of a Connection Machine.

- *FORTRAN FUTURE*

Mike Metcalf presented his views on possible CERN participation in the Fortran standardisation process in the future. Work on the standard to follow "Fortran 90" had already begun in X3J3. That standard would probably be too late to make an impact on LHC code. It was agreed that CERN should be involved in the standardisation of the key languages it used. As a minimum, CERN should be active and stay in WG5: Mike Metcalf was asked to decide whether it would be him who participated, or someone else.

Mike then described his tests of the NAG Fortran 90 translator that is currently on beta test. Results were very encouraging: both KERNNUM and JETSET had successfully been compiled and run (but with a 30% increase in execution time). NAG had offered the translator in terms of an attractive site license on multiple platforms. Mike and David Williams would discuss its possible purchase.

- *COMPUTER SECURITY*

David Lord presented the status of the management of computer security incidents at CERN. This area is reviewed by the Computer Security Panel, which is chaired by J.J.Thresher. The panel concerns itself with regulations, licenses, policies and rules. He announced that a security study would shortly get under way, and be completed by the end of 1991. This would involve a small team of hand–picked "volunteer" experts. The report would be discussed by the DPG when it was available.

David felt that the main solution to tomorrow's security problems would be network authentication by tokens, a scheme used in packages such as Kerberos. He said that, in fact, there were fewer reported security incidents at CERN these days than there were five years ago. However, he could not tell whether this meant less "hacking" was going on, or if it meant it was being less well detected!

- *CRAY FUTURE*

Sverre Jarp peered into the Cray Crystal Ball, and told the DPG what he saw when the clouds periodically parted. He described the current applications which were being run on the Cray. None of these programs *only* ran on the Cray, so they could each, in principle, be run elsewhere. MAD and SIXTRAK (LHC machine simulation) as well as ANSYS and TOSCA (magnet design etc.) are citical for LHC development.

Sverre presented four possible futures for the Cray. The first was to remove the existing machine and recuperate its funding. The second was to re–negotiate the maintenance contract for the exist–

ing machine. The third was to install a Cray Y–MP with four processors, and the fourth was to install a Cray Y–MP with eight processors. There was no clear concensus around the table on which option was the best, although a straw vote showed strong support for options two or three.

The DPG felt that Cray was no longer a strategic supercomputer manufacturer for CERN.

- *HOME DIRECTORY SERVER*

  Les Robertson presented the scope of the market study of which companies offer user file services software. The target users were Unix users; the services required from a product were that it should enable backup/restore, archival/retrieval and hierarchical storage management. The product had to be scalable to several hundred Unix workstations, with no hard limits. The market study had shown no clear winner. Les felt that, in this area, CERN had its own special requirements that would not necessarily be satisfied by a commercial product. He therefore favoured going out to tender in the new year. Some felt that a call for technology was more appropriate, or even a joint project with a manufacturer. It was suggested that Novell should be consulted on the requirements list, since they have such a dominant role in the PC world.

- *SNAKE FARM*

  Les Robertson described the status of the Snake Farm project. Initially, the farm would contain 16 HP Snake machines, five of which would be purchased by CERN, the remaining 11 provided by HP. The first machines would arrive imminently. It was expected that a first service could be provided by the beginning of November.

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
Mike Metcalf	September 1991	Xmas 1991	Identify WG5 member