CN/DPG/92/MIN/8

THE CN DIVISIONAL PLANNING GROUP

Minutes of the Meeting held on 19th. October 1992

PRESENT: J.Altaber, J.J.Bunn(Secretary), B.Carpenter, F.Fluckiger, D.Jacobs, S.Jarp, J.–C.Juvet, A.Osborne, H.R.Renshall, A.G.Silverman, D.O.Williams(Chairman).

- *MINUTES OF LAST MEETING (CN/DPG/92/MIN/7), AND MATTERS ARISING*

  The Minutes were accepted. DOW welcomed J.Altaber, who would speak on the subject of the CHEOPS Project.

  The Minutes of the POW meeting were to arrive shortly.

- *CHAIRMAN'S REPORT*

  DOW presented several items:

  1. He had arranged a meeting with Aleph to discuss their computing requirements in the context of the removal of the Cray.
  2. He asked that the minutes of the Software Advisory Group be circulated to the DPG.
  3. The first meeting of the new LHC "MEDDLE" meeting would be held on the 2nd. November.
  4. He expressed concern that the COCOM regulations currently would class the next generation of high–end workstations as "supercomputers".

- *REPORT FROM THE ADVISORY BOARD ON COMPUTING*

  A.Osborne reported from the last meeting of the board. The manpower available for working on WWW had been discussed. J.Knobloch and F.Ranjard had been asked to investigate code management offerings for the future.

- *CHEOPS*

  J.Altaber presented the current status and plans for the CHEOPS project. The goal of the project was to distribute HEP data to remote HEP laboratories in batch mode overnight, taking advantage of low tariffs on satellite links or land lines. A system that made use of the Olympus satellite had become operational in May 1992.

  He described how the CHEOPS software had been designed using structured techniques, and how FATMEN had been chosen as the primary user interface. Data sets were transferred overnight, and the next day the user received a status report on the transfer. To do this, the data were buffered on disk during the day, in preparation for easy accessability when the time came to transfer them that night. For a night–time link availability of six hours, it was possible to transfer a maximum of 2.2 GBytes of data with the current system.

  Lisbon, Helsinki, Athens and CERN were the sites currently involved in CHEOPS.

  JA described the problem with using TCP/IP over a "long, fat network" like a satellite link: if the product of round trip time and bandwidth was greater than around 5 Mbytes, then TCP/IP became unusable. So the CHEOPS team had devised the CHEOPS Data Protocol (CDP) which managed to keep the "pipe" full, and achieved an efficiency of 96% on transfers.

He then moved on to describe the plans for the project. In July 1993, the CHEOPS service would be declared open, and would run using the Olympus satellite until the satellite stopped at the end of the year. CHEOPS would also be applied on terrestrial links. There was interest in transporting files of n–tuples to the remote laboratories, and these would thus need cataloguing in FATMEN. Prospective customers were the DELPHI, CPLEAR, ALEPH and NA38 experiments, so far.

Some commercial satellite owners had shown interest in renting time on their systems overnight (when most TV signal broadcasts stop), and this possibility would be investigated. Another interesting possibility was VSAT, a system of cheap commercial dish/receiver installations offering bi–directional communication with partners at 64 kbits per second, and costing around five thousand dollars per installation (for one hundred or more installations).

DOW thanked JA and asked that the good work be continued by a) analysing the n–tuple requirements, b) evaluating the costs of pilot VSAT services, c) ensuring that there was strong interaction between CHEOPS and the HEPnet requirements Committee.

In conclusion, JA said that he had spent six months on the roof of Building 513, and the weather wasn't getting any warmer. He wanted to find partner sites for terrestrial links using CHEOPS.

- *ANY OTHER BUSINESS*

  None.

- *NEXT MEETING*

  The next meeting will be on November 6th., at 10:30, after the C5 Meeting. Then there will be a POW follow–up meeting on 16th. November.

Table 1: Action Items

Name	Entry Date	Target Date	Task
F.Fluckiger	November 1991	1992	Give Computer Colloquium on Multimedia
R.Brun	January 1992	1992	Task Force on Computing Models