ADVISORY COMMITTEE OF CERN USERS

Summary of the twenty-eighth meeting held on 13 March 1987
(as published in the Weekly Bulletin)

 Stores

ACCU noted the state of implementation of changes in the stores discussed previously. ACCU nominated H. ZACCONÉ as user representative on the Stores Committee.

 Restaurants

ACCU was informed of the decisions taken following the retendering of the restaurants; ACCU noted with satisfaction that its request for late opening hours would shortly be honored.

 Office space

ACCU was invited to make its position on the lack of space for users known to the newly created Site Committee.

 EP electronics pool

ACCU reiterated its position in favour of supplying the pool by its users with spares rather than charging the pool users.

 CERN computing policy

ACCU heard a presentation on the CERN computing policy. It noted the satisfactory situation concerning off-line computer power, and would welcome an increased effort in the on-line area.

Next meeting will be held on 3 July 1987.
CERN/ACCU/28

ADVISORY COMMITTEE OF CERN USERS

Minutes of the twenty-eighth meeting, held on 13 March 1987


Invited: R.F. Heyn (item 4b), B. Hyams, H. Reitz (item 4a), C. Roche, P. Schmid, J. Thresher (item 5).


The Chairman welcomed Bordalo, the new member from Portugal. He noted the absence of a member from Sweden, as no new member had yet been nominated since the appointment of Hallgren had come to an end. The Chairman also welcomed Binon and Lillestol who were replacing Mouthuy and Lillethun respectively, for this meeting only.

1. Adoption of agenda

Binon requested that the procedure for medical examinations and Boggild asked that the item "mail efficiency" would be discussed under "Any other business". It was so agreed. Klapisch said that he had invited the EP Division Leader, Hyams, in particular to discuss the latest development concerning the EP electronics pool. It was agreed to add this also under "Any other business".

With these additions, the agenda was adopted.

2. Apologies for absence

These were as given above. The Chairman remarked that it was for the moment unclear whether Mouthuy would remain the Belgian representative and asked Binon to clarify the situation.

3. Minutes of previous meeting (CERN/ACCU/27)

Fabjan proposed to change the first sentence of the second paragraph under item 5 a) (Stores plan) to: "Fabjan stated that well-functioning of the stores was critical to the CERN user community and he added that he felt uncomfortable concerning the "streamlining" of the standardization of stores items, as stores management would have to rely for its information on a very restricted number of people". In this context, Klapisch repeated that there would probably be a link with the CERN-wide Technical Boards and he proposed that the Technical Director, Brianti, would be invited to a future meeting to inform ACCU on these boards.

With the above modification, the minutes of the previous meeting, held on 21 November 1986, were approved.
4) Follow-up of items discussed at the previous meeting

a) Stores plan

The Chairman reminded members that at the last meeting the established ACCU procedure had not been followed, whereby an item is presented at one meeting and then discussed at the following meeting in the presence of the speaker. He was happy that Reitz had been able to come to the present meeting and enquired whether any complaints had been received since the implementation of the new policy had started. Reitz said that the range of items had been reduced by 3000, by suppressing items with either very low turnover or too high consumption compared to the needs of the laboratory. Since his presentation to ACCU the stock value had decreased by 3 MSF to 12.5 MSF. There had been some complaints and in a few cases corrective action had been taken.

As to the advisors on whom stores management would have to rely for the standardization of stores items, all 9 CERN Divisions had been asked to nominate a person in each of the five main fields in which stores items were divided. As soon as all nominations would have been made, the names would be published.

The Chairman asked whether the proposal to use local distributors as stock keeper had been implemented. Reitz answered that this had been tried with one firm for some electronics items, but it had turned out that such a scheme would make the items significantly more expensive and the discussions with the firm had been stopped. A few other contacts would be made soon.

Reitz raised the question of stores services to the LEP experiments and wondered whether there would be interest in having small self-service stores on each of the island sites.

Eggert pointed out that this had not been the case for UA1 and expressed the opinion that it was far more important to have quick access to the main stores through a well-designed urgent store request procedure than to have small self-service stores on the island sites. Hyams remarked that the fact that most of the LEP experiments were on French territory and hence implied opening of the tunnel whenever items were taken out the main stores, made the situation more complicated. Siebert suggested that expanding the self-service store at the Prevessin site could be a satisfactory solution.

The Chairman reminded members that a new ACCU representative on the Stores Committee had to be nominated. H. ZACOONE accepted to take on this task.

b) Restaurants

Heyn said that, as part of the periodic review of the contracts with concessionnaires who provide services to CERN, a call for proposals was sent out in October 1986 for the concessions to operate the three CERN restaurants. A thorough review had been made and the CERN Directorate had now decided that contracts would be negotiated with COOP for restaurant No. 1, with Migros for restaurant No. 2 and with Générale de restauration for restaurant No. 3. He assured members that the implementation of a personal night service until 1 a.m. would be included in the negotiations. Details would be decided upon using the experience of the new concessionnaires and he asked for a close collaboration with ACCU and its representative on the Restaurants Committee, Werlen, in fixing these. In particular, the question could be asked whether any type of rotation of
the night service over the three restaurants would have advantages. He regretted that the opening hours of restaurant No. 1 had not been extended until 1 a.m. under the old contract, in view of the retendering action.

The Chairman asked when the new contracts were foreseen to become effective. Heyn replied that one was aiming at 1 June, 1 July and 1 May for restaurants No. 1, 2 and 3 respectively.

Boggild remarked that the present concessionnaires of restaurants No. 1 and 2 had offered services which had had very different styles and wondered whether there was any risk that such differences would disappear with the concessionnaires chosen by CERN management. Heyn said that there was no intention to suppress different styles, and that, on the contrary, these should be maintained.

Reacting to the question concerning any type of rotation of the night service, Siebert and Boggild said that, as a first reaction, they would prefer to have the night service always in the same restaurant. The Chairman supported this view. He added that the possibility of reverting to a closing time of 2.30 a.m. should also be investigated. Jenni requested that early opening hours be included in the discussions as well.

Werlen insisted that there would be personal service during night service, not just vending machines. Heyn confirmed that one was talking about a personal service until 1 a.m. However, the possibility of having vending machines available after that time should not be ruled out.

Binon remarked that the experience with such machines in the North Area had been negative because lack of appropriate maintenance. Heyn expected that there would be no repetition of such bad experience with the new concessionnaires. Binon added that it could be useful to have vending machines at the LEP island sites. Heyn expressed the feeling that local commercial circles were well aware of existing possibilities which could lead to developments off-site.

Werlen said that there had been frequent complaints about the lack of choice outside normal working hours, and particularly during the weekend. Heyn felt confident that improvements were now possible.

ACCU took note of the decisions taken following the retendering of the restaurants. It expressed its satisfaction that its request for a personal night service until 1 a.m. would shortly be honoured.

c) Office space

Klapisch reminded the meeting that the space situation had been at the centre of debate for a long time and he announced that a Site Committee had now been established under the Chairmanship of F. Ferger. One of the tasks of the Committee would be to look into the problem of the number of square meters of office space available and needed per person; moreover, the Committee would also consider hall and laboratory space. Klapisch considered that the question of boundaries between the research divisions and the accelerator divisions could usefully be discussed in the framework of this Committee.

Fabjan remarked that the description of the tasks of the Committee (i.e. to evaluate, in the light of the existing facilities, any request for the new occupation of land) seemed to exclude the use of present office space from the Committee's mandate. Klapisch said that this included having a look at existing space before deciding on the creation of new space.
Klapisch proposed to put the issue of office space for users in front of the Site Committee, and to invite its Chairman to a subsequent meeting to report on the findings.

Heyn wished to make the position of the Committee very clear: it is advisory to the Directorate and Management Board.

ACCU was invited to make its position on the lack of space for users known to the newly created Site Committee.

5. CERN computing policy

Thresher started by reminding the meeting that when computing became established at CERN one was dealing almost exclusively with off-line computing for experiments. Since then computing had penetrated into every aspect of work at the laboratory. Thresher stated that, if CERN were to remain an efficient laboratory, the computing service would have to extend not only to experiments, but also to engineering, control, design, finance, personnel, communication, etc. Within this framework priority had still to be given to providing a front-line service to experiments. He then went on to discuss a number of topics including "Computing capacity", "Emulators" and "Interaction with users", as given in Annex A.

Albrow remarked that training of users was very important due to rapid evolution of available hard- and software at CERN. Thresher suggested to contact Metcalf of the DD User Support Group on the specific training needs to use the CRAY computer.

Fabjan said that one of the most dramatic changes over the last years had been the strong decrease in on-line support for experiments from DD which had now dropped to zero for some large experiments. Thresher acknowledged the problem which was not the result of a deliberate policy, but rather of the tight manpower constraints. Fabjan insisted that a certain continuity in this domain was crucial and that high level technical expertise which was difficult to obtain from outside the laboratory, was needed.

Eggert remarked that emulator farms would be a means to increase the computing power in the institutes. As it was difficult to get started on their own, it would greatly help the universities, if CERN expert help would be available during the setting-up phase.

Thresher answered that such help was in principle available, but that the present manpower situation might inhibit its realization. Lillestol questioned the necessity of emulators and expressed the view that only if commercial firms became interested in building and selling them, would there be a future for such systems. Thresher believed that industry would be interested only if at least some 100 emulators could be sold.

Lillestol expressed satisfaction with the present export of general software to the institutes and requested this service to continue. Sciacca wondered whether CERN could increase its help in the area of general structures of programmes. Thresher pointed out that there were experts in this field in DD Division available.

Werlen asked whether CERN was aiming for standardization for small computers. Thresher remarked that CERN made considerable efforts to standardize, but clearly had little control over what outside users were buying.
Jenni said that it was difficult to encourage use of outside computing power in view of large mass of data to be stored. Thresher answered that recording at higher densities (cartridges and/or optical disks?) could improve the situation.

Binon asked whether restricted access to the CRAY computer was envisaged. Thresher said that it seemed likely that some restrictions would be necessary, for example limiting submission of jobs to one responsible person per experiment.

The Chairman closed the discussion noting the satisfactory situation concerning off-line computer power; ACCU would welcome an increased effort in the on-line area.

6. Other business

a) Medical examinations

Binon said that he had been surprised to receive from the EP Division Leader a note indicating that with effect from 1 April 1987 users who did not have already a CERN film badge would have to bring a valid radiation pass from their home institute. Hyams explained that this was following the announcement by the CERN Medical Service that they could not continue to do the necessary medical examinations. In fact, his memorandum was asking users to be helpful by bringing an existing valid radiation pass if they had one already.

Binon asked whether the new procedure implied that the regular blood test had also to be done in the home country. Klapisch answered that this was a delicate problem: there seemed to be no need for duplicate examinations at CERN for occasional users followed at their home institute, but for users full-time at CERN during a year or so, the situation was different.

ACCU asked for clarification of the procedure, to be reported at the next meeting.

b) EP electronics pool

Hyams showed the list of services which were now charged to the end-user by the Divisions, placed the charges made by EP Division in the context of a decreasing divisional budget and increasing number of users, discussed the situation of the electronics pool and presented a proposal for an electronics pool on a rental basis (see Annex B).

Eggert repeated his opposition to the introduction of rental fees, as he had already expressed it at the previous meeting. He confirmed that he preferred that users bought spares for pool use. In this way he expected a healthy pool to exist again after a few years. Lillestol remarked that indeed paying for services met with difficulties in several Member States. Hyams said that he could accept Eggert's suggestion.

Binon wondered whether it would be possible to create a data base which would have information on EP pool material on loan. This would enable to locate rapidly items needed but not on the shelves. Hyams answered that it was intended that such a system would be available in a few months' time.

As to charging for printing which appeared on his list for 1988, Hyams remarked that this was not an EP affair. Heyn explained that it was foreseen that the budget now allocated to the printing service would be
split over the users of the printing service with a view of improving efficiency through bringing the money to the deciders.

Concerning photocopying, Hyams said that this amounted to some 600 kSF per year for EP Division, and that one was looking for a system where people were aware of the cost in order to reduce the total bill.

ACCU reiterated its position in favour of supplying the EP electronics pool by its users with spares rather than charging the pool users.

c) Mail efficiency

Boggild said that it took one week or more for letters sent from CERN to arrive in e.g. Sweden. He wondered whether there were means to improve on this situation. Klapisch remarked that official mail from CERN was normally sent through the French post office on the Prevessin site, but that the sender could request that the Swiss post office on the Meyrin site would be used.

7. Items for agenda of next meeting

The Chairman reminded the meeting that it had already been decided
- to invite Brianti to inform ACCU on the CERN-wide Technical Boards
- to continue the discussion on office space when the findings of the Site Committee were available
- to discuss the procedure for medical examinations.

Lillestol said that he wished that the situation of the small workshops on the Meyrin site would be discussed. He had the impression that the number of machines available was diminishing which he considered worrying in view of the arrival in the near future of equipment for the LEP experiments. Fabjan added that it would be appropriate to be informed as well on the availability of high performance machines for special tasks. It was so agreed.

8. Date of next meeting

The date and time of the next meeting was fixed on Friday 3 July at 2 p.m. sharp.

G.J. Bossen
CERN COMPUTING

- Computing Policy
- Computing Capacity
- Emulators
- Assorted Topics
- Interaction With Users

Cannot deal with all the issues but am happy to try to answer questions on topics you may wish to raise.
CERN Computing Policy

"To provide a balanced system of high quality computing facilities and services for the computer literate users and staff of CERN"

What can be achieved depends on the available resources. Currently in short supply, LEP construction have to avoid expanding at the expense of the support provided for the experimental research activity (also expanding).

Expenditure: ~4OMSF per annum

Currently: Central Comp 40% 1978 60%
          on-line  20%  20%
          acc. control 30%  20%
          admin, eng, etc 10%  -
Central Installed Capacity

- Siemens/IBM Upgrade
  - Siemens 7890's + IBM 3090-200
  - Gave >3 x IBM Compatible Capacity
  - \[ \rightarrow 25 \text{ CERN Units} \text{ (168 Equivalent)} \]

- Nothing More Foreseen (Addition of Vector Facility?)

- CDC Closed Down 20 Oct 1986
  - Loss of 8 Units of Production Capacity

- VAX Cluster
  - 8800 + Upgrades of 8600's (3 off) to
    - 32 MByte 8650's (x1.5)
  - \[ \rightarrow 4.5 \text{ Interactive Units} \text{ (7 Batch Overnight No Tapes)} \]

- CRAY X-MP/48 Delivery Oct 87
  - 4 CPU's, 128 MWords of SSD Back
  - 8 MWord of Main Memory
  - 10 GBytes Disk Storage
  - \[ \rightarrow 25 \text{ Units Scalar Power (Vector \( x \odot \odot \)) } \]
**Capacity in 1988**

- **Green Book Request 50 Units**
  (At the time CERN capacity was 12 Units)
  Initial response was to try to find 25 Units
  
  $[6 \times 3 \text{ Units for LEP + UA Expts}]$
  $[7 \text{ Units for all other Expts.}]$

  LEP Expts estimate average of 12 Units needed for each. Requested 6 units from CERN.

  **May now be possible**.

  **But**

- **Peak Demand? Interactive use?**
  Will have to work on optimising sharing of resources
  And
  Use of computing capacity outside CERN. Users must make a major effort. CERN is willing to help.
\[ \text{IBM 3081-K + Siemens 7880 + CDC 7600} = 11 \]
\[ + \text{CDC 875} = 19 \]
\[ - \text{CDC 7600} = 15.5 \]
\[ - \text{Siemens 7880 + Siemens 7890 S} = 25.5 \]
\[ \text{IBM 3081-K + IBM 3090-200} = 33 \]
\[ - \text{CDC 875} = 25 \]
\[ \text{IBM 8650 + VAX 8800} \]
Emulator Farms

Project started 2 years ago to study feasibility and performance.
4 x 370E with VAX host (AVII)
5 x 3081E with IBM host. (4361)

Farms have proved to be successful!

370E Farm → 3 CERN units
3081E Farm → 6 CERN units

Both working as well as in the proposal and are being used for M/C and analysis.

Different Philosophies

370E Farm → 4 different jobs: 1/Emulator
3081E Farm → 1 job shared between Emula

Well matched to CERN needs.
Other Matters

- **Communications**
  - Must try to provide a fully integrated communications network on the CERN sites.
  - Ensure easy access to and from CERN to user institutes.

- **Computer Security**
  - Becoming a very serious matter, have appointed D. Cord to be responsible.
  - Involves cooperation with other centres.

- **Graphics**
  - Implementing GKS/GKS-3D. Have purchased commercial package GTS-GRAL. By end of this year should be available on most graphics engines.

- **Fastbus Support**
  - 400 crates will be in use for LEP.
  - CERN is providing help with software.
  - Very short of effort owing to sickness and departures.
INTERACTION WITH USERS & FEEDBACK

- **USER CONSULTANCY OFFICE (UCO)**
  The primary point of interaction at the user level.

- **USER GROUPS** (e.g., for VAX Cluster, Cray)

- **MEDDLE**
  For LEP Experiments

- **GRAPHICS PLANNING**

- **HEPCCC**
  Interlab: Directorial Level
  (DESY, IN2P3, Saclay, RAL, INFN, ECPA, Nikhef, etc).

  **Try to improve standardization, achieve common policy.**

We always welcome ideas to improve user contact and feedback.
**SERVICES**                         **DIVISION**  **YEAR:**  
Transport of equipment (off-site)          SB              1978  
Crane/transport (after working hours)      SB              1980  
Film purchase                                EF              1980  
Film development                             EF              1985  
Jobs in Electronics Workshop                 EP              1978  
Gas for experiments                          PS/SPS           1983  
Gas racks                                    EP              1985  
Telephone calls and Telefax use (≥15")       PE              1982  
Stationary stores (Economat)                 EP              1985  
Radio receivers (bips)                       EP              1985  
Cars (rent-a-car system for visiting teams)) EP              1979  
Storage (outside CERN)                       EP              1985  
Photography Service                          DG              1986  
Printing                                     DD              1988  
Maintenance of on-line computers**          DD/EP            1984  
Manufacturers' computer user manuals         DD/EP            1984  
Installation and Maintenance of terminals    DD/EP            1984  
                                 details under disc.

Caviars: loan and maintenance               DD*            
Electronics pool (expenses for maintenance) EP            
Electronics pool (loan of equipment)        EP            Under Active Study  
Photocopying                                 EP            
White cars                                   EP

* The proposal is 3000 SF/year; property of the group after 5 years
** Except for material in "DD-Pool"!

**Miscellaneous**

Installation of electricity, cooling water in principle, covered by EP  
Divisional budget. Major  
installations of new equipment  
to be covered by project funds.

Office and labs furniture, keys, telephones,  
free to users if request is  
"reasonable"  
if more than once a week!

1987  12.1 M.Sfr.

Also many services previously free (to E.P.) now billed to us.
  e.g. SPS installation work
  Terminals
  Gas Supplies etc etc

Also visitors increase at ~250 per year (~10%) per year

Less support per user.

Electronics Pool

Outstanding "credits" ~ 2.3 M.Sfr.

On the shelves? but < 2.3 M.Sfr of most demanded equipment.

If groups used credits pool availability -> 0.

1. Will leave electronics with empties
   there for their duration.

2. Cancelled all credits

3. Remaining items in pool available
   on rental.
For: 1) spares in case of failures during a run
2) Short tests without buying equipment.
3) Loans while waiting for purchased units to arrive.

Charge 2% per month to enable scheme to be in equilibrium—buying new devices while old becomes obsolete.

Have applied for 500 US$. to get system launched with some more (Fast Bus) modules.