

ADVISORY COMMITTEE OF CERN USERSMinutes of the twenty-first meeting, held on 19 October 1984

Present : M. Albrow, M. Boratav, G.J. Bossen (Secretary), F. Bradamante, G. Damgaard, J. Feltesse, V. Gracco, A. Hallgren, E. Higon-Rodriguez, R. Klapisch, K. Kleinknecht (Chairman), A. Klovning, C. Kourkoumelis, G. Leder, F. Niebergall, H. Siebert, P. Sonderegger, H. Taureg, D. Websdale, M. Werlen.

Invited : I. Butterworth (item 4a)), S. Larsen (item 4d)), R.N. Milligan (item 4c)), J. Tuyn (item 5).

Apologies for absence : W. Blair, K. Bos, C. Fabjan.

The Chairman opened the meeting with the remark that, in order to enable the Committee members to participate in the festivities for the Nobel Prize winners Rubbia and Van der Meer, the meeting would have a shorter duration than usual. He welcomed Niebergall, who with effect from this meeting represented the CERN Staff Association, replacing Sonderegger. The Chairman noted the absence of a member from Belgium, as no new member had yet been nominated since the resignation for professional reasons of Favart.

1. Adoption of agenda

With the deletion of one item (Matters arising - Reorganisation of workshops - where there had been no developments), the draft agenda was approved.

2. Apologies for absence

These were as given above.

3. Minutes of previous meeting (CERN/ACCU/20)

The following corrections were noted:

- in the third paragraph of the discussion on EDF contract (pages 6 and 7 of the minutes) on three occasions "pp running" is mentioned; this should in all cases read "p-pbar running".
- second paragraph of the discussion on Health insurance arrangements for users, beginning of second sentence to read: Bradamante said that it seemed that the approval procedure in Italy was progressing ...

With these corrections, the minutes of the previous meeting, held on 2 July 1984, were approved.

4. Matters arising from the minutes

a) CERN computing policy

Butterworth reported that the 6x6 plan which he had presented at the previous ACCU meeting (see CERN/ACCU/20), had been discussed in the Computing Coordination Committee which had expressed the hope that CERN would increase the money to be made available. To that request, CERN's Director-General had answered that an increase to 8 MSF per year (rather than 6 MSF) was perhaps possible, appealing at the same time strongly to the Computing Coordination Committee to do its utmost to ensure that other laboratories made also an effort to meet the need for computing power in the Member States.

The upgrading of CERN's central computing power was the subject of a proposal to CERN's Finance Committee at its meeting to be held at the end of October. The proposal requested an improvement of the IBM and IBM-compatible part of the computer centre comparable to the replacement of the CDC-7600 by the CDC CYBER 875. If Finance Committee approval were obtained, the existing SIEMENS 7880 machine would be replaced by a 7890, the top model of the SIEMENS computer series, at the end of this calendar year. The replacement of the IBM 3081 would become the object of serious discussions with IBM. There was already an offer from IBM for a 3084 QX, but further negotiations were likely, as there was wide spread speculation that IBM was likely to announce a new series of computers in early 1985.

Butterworth reminded ACCU members that the present capacity of the computing centre was equivalent to 13.2 IBM-168's, the CDC part accounting for 6.0 units, the SIEMENS 7880 for 2.4 units and the IBM 3081 for the remaining 4.8 units. The above mentioned change in SIEMENS model would increase the capacity by 7.5 units, and the new IBM computer would add at least another 5.2 units. Butterworth said that thinking about the time-scale of this latter increase had evolved since the last ACCU meeting, and CERN was now aiming for the end of 1985, whereas another upgrade or replacement of the CDC computers in 1986/7 could be discussed as the present contract with CDC came to an end in 1986.

Butterworth repeated that the upgrading of the IBM(-compatible) computers would be accompanied by switching over to VM/CMS as the interactive operating system, which would lead to phasing out WYLBUR in a distant future. He stressed that CERN would try to make its VM system looking the same to the user as VM systems existing at other laboratories, which for historical reasons was a non-trivial matter.

As to test systems Butterworth said that he would have to be less definite about future plans which implied that the existing Super-Caviar system would have to be maintained for some time. It was recognized that a new test system was needed and this had been discussed at a recent meeting of an on-line working group in which the four LEP experiments and the two bigger UA experiments were represented. Opinions had been converging to a consensus choice, the Apple McIntosh PC with VME interfaces (among which a commercially available FASTBUS interface). It had, however, been realised that this choice had two major disadvantages: Apple was not a Member State company, and a large amount of software development would be needed. Butterworth stressed that he had only given a status report on test systems, and that decisions were not yet taken.

The Chairman asked which alternatives to the McIntosh existed. Butterworth answered that there was a number of them, but none seemed very satisfactory. He quoted two German systems (FORCE and ELTEC), the HP200 and the MOTOROLA VME10. He added that it was CERN's intention to go commercial and not to develop a completely in-house system.

The Chairman remarked that for the Caviar systems it had for the users been a big advantage that the software was available from CERN. Butterworth confirmed that if the McIntosh route were to be followed, CERN would need to develop a substantial amount of software.

Feltesse said that it might well be too late to decide on the hardware of a new test system which would be common, as various solutions were already being adopted by the laboratories. However, he agreed that on the software side there was a need for development at CERN and he requested that this CERN software would be compatible with software already available elsewhere. Butterworth remarked that it seemed difficult to develop all purpose software.

He added that he was planning to report on the subject of test systems to the Computing Coordination Committee at its next meeting to be held in the last week of October.

In answer to a question by the Chairman who enquired on the activities on networking, Butterworth said that he could only repeat what he had said at the previous ACCU meeting, i.e.

- CERNET needed to be replaced, but CERN had decided to postpone a decision until the market became clearer,
- CERN was committed to ETHERNET and the future IBM token ring system, as Local Area Networks.

He added that CERN wanted to limit its commitments for the moment, which implied that it did not want to take an additional commitment for a cheap low grade local area network. Hence, he appealed to the users not to take yet any decisions from their side.

Concerning wide area networks Butterworth said that the GIFT project was well under way. Feltesse stressed that solving the problems connecting networks needed to have high priority for CERN. He was aware of a particular problem on the link between CERN and Saclay which was not yet solved due to lack of manpower, in particular on the CERN side. Butterworth confirmed that CERN recognised the importance of network connections and promised to check on the particular problem.

The Chairman queried whether any progress had been made to diminish the cost for network links through PTT lines. Butterworth answered that this item was on the agenda of the sub-committee on high energy physics which had been created after the Williamsburg summit-meeting.

Boratav asked if it was CERN's intention to propose standard hardware and software for graphics. Butterworth replied that whereas on the hardware side no decision was yet made, CERN was supporting the GKS system for software.

ACCU welcomed the plans to double CERN's central computing power by the end of 1985, and decided to continue the discussion on CERN's computing policy at its next meeting.

b) Restaurants

Referring to the minutes of the previous meeting (CERN/ACCU/20), Milligan said that although the name of Dalpiaz had been passed on to the Staff Association for nomination on the Restaurant Supervisory Committee, Dalpiaz had by oversight not been appointed. Milligan ensured that Dalpiaz would now be invited as a guest to the meetings of the Committee. (The Staff Association has subsequently added Dalpiaz to their nominees.) As to the footnote on page 7 of the minutes, Milligan informed the meeting that the opening hours of Restaurant No 1 on Saturdays and Sundays had been agreed to be from 07.00 to 22.00 hours (rather than 06.30 - 24.00 as mentioned in the minutes) for a trial period which would last until the end of the year. Moreover the contractor for Restaurant No 1 had been asked to investigate the possibility of installing a coin operated automat which would provide drinks and sandwiches 24 hours per day. That proposal had become more urgent after the incident in the night from 9 to 10 October when the barman had been murdered. As a result, Restaurant No 1 was now closing at 11 p.m. rather than 2.30 a.m., as a provisional arrangement, pending a survey of the security risks for the concessionaires on the site. Milligan added that a quick investigation had shown that at laboratories as Saclay, RAL, DESY and FNAL, restaurant services were only available during a very restricted number of hours.

Klapisch commented that CERN management was very concerned by the incident, but also wanted to avoid any overreaction. If users would feel that it was important for the life of the laboratory that restaurant services were available during long hours, they had now to express their opinions. These could then be used in a coming re-assessment of the situation.

The Chairman, supported by Taureg, stated that he thought it incorrect to compare CERN's restaurant facilities with those of other laboratories. Albrow remarked that closing at 11 p.m. was undesirable, as many if not all experiments changed shift at midnight and hence there was a need until at least that time. Bradamante commented that CERN should aim to re-establish the previous schedule and not to turn to alternative solutions like automats. The Chairman wondered whether the presence of guards at the time of closing the restaurant would diminish the security risk.

Kourkoumelis queried the absence of fast food on weekends after 19.30 hours. Milligan agreed to ask whether the grill could be operated after that time.

ACCU took note of the information given by Milligan and recommended that the long opening hours of the restaurant facilities should be re-established as soon as security permits.

c) Housing

Klapisch reported on the development since the last meeting of the project to increase the accommodation for users by making a number of new apartments available to them. He said that the result of his letter asking for information on how many users were likely to want to benefit from these apartments had confirmed the need to extend the housing facilities, and that CERN management had taken the decision to go in principle ahead with a project which would make 60-80 flats available, rather than 40 as foreseen previously. Land for such a project was

available at the entrance of St. Genis near the Lion river. He reminded ACCU members that CERN would not be the owner of the apartments but would take a lease of some 9 years and that users or their institutes could then rent from CERN.

From the enquiry it had become clear that there was a strong need for small apartments (1 or 2 bedrooms), with a relatively small request for 3 or more bedroom apartments. Cost calculations had shown that if these big apartments were to be rented furnished and if also a cleaning service were to be provided, the price would become too high (of the order of 1800 Swiss francs per month). Hence one was thinking of furniture and cleaning service to be provided for the small apartments only. Anyway, the persons looking for large apartments were likely to be users coming with their families, bringing their own furniture.

To obtain additional information on the wishes of the users the Hostel reception and the Housing Service were giving out questionnaires which should allow to take a final decision on the distribution over 1, 2, 3 and 4 bedroom apartments of the apartment block. Klapisch said that if firm approval was given before the end of 1984, the apartments would be available mid-1986. This concerned the first part of the project which consisted of a 4 story building. The second part, smaller building(s) at 2 levels only, would be available later.

Albrow remarked that it would be desirable that the apartments would be ready before the summer of 1986 to help diminish the usual summer pressure on accommodation already in that year. Boratav observed that a large number of people would look for accommodation during the period of setting up the LEP experiments. Klapisch answered that CERN could only contribute to solving the accommodation problem by trying to restore the percentage of users which find housing in CERN flats at the level of 10 to 15 years ago. Websdale asked how many reservations had been foreseen following Klapisch' letter to the responsible people in the LEP and large UA experiments. Klapisch quoted provisional commitments for 60 apartments and added that he considered that the real need would be closer to 80. Boratav said that he had doubts as to the reliability of the information provided by the collaborations, as he was aware that at least in one LEP experiment the various requests of individuals had been summed up without an overall assessment at the level of the collaboration.

Damgaard and Kourkoumelis raised the question of the minimum length of lease of the new apartments. Klapisch said that the idea that CERN was favourable to leases of at least one year was due to a misunderstanding; the only point which he had made in this respect was that for shorter leases there would be an inefficiency factor to be taken into account in calculating the rental price. Kourkoumelis asked for priority for short term occupation (2-3 months) of the apartments. Klapisch recognised that there was hardly anything commercially available for durations below 6 months and said that he could imagine about half of the new apartments to become available for short-term occupation. Siebert wondered, if in this context, a further increase of the hostel capacity should be envisaged.

ACCU decided that its members should help to publicise the questionnaire to be completed by individual users, and that each ACCU member should also complete such a questionnaire. ACCU confirmed its satisfaction with the project.

d) Hostel

Klapisch reported that the hostel reception was open now from 1.30 p.m. onwards. Websdale expressed his appreciation of this gesture towards his request that the reception would remain open during lunch time.

Klapisch added that a simplified procedure was considered for regular users which could involve the creation of a credit card system. Kourkoumelis queried why CERN users who arrived outside the opening hours without having made a reservation, could no longer be given a room (if available) by the guards. Larsen said that abuses had made this necessary. He expressed the hope that in the context of the new CERN reception building a solution could be found.

e) Relations staff-users

Sonderegger said that there were misunderstandings between CERN staff and the users; in particular users had failed to understand why the computer and accelerators had been switched off during the concerted work stoppage in December 1983. He admitted that also the Staff Association might well not understand correctly the situation of the users. The Chairman agreed that although there was a representative of the Staff Association on ACCU and a user representative on the Staff Council, contacts so far had been minute.

Albrow observed that the problem seemed to be to create channels of understanding. So far there had been some information from the Staff Association to the users through leaflets (which however had CERN staff as target population), but no information flow in the opposite direction. He wondered whether the CERN Weekly Bulletin which contained information from the Staff Association could not be sent regularly to outside institutes. Sonderegger remarked that one could also think of a special issue of Proton, a Staff Association publication issued irregularly.

ACCU asked Niebergall to prepare for its next meeting a report assessing the problem raised by Sonderegger.

5. Radiation protection

Tuyn explained that safety at CERN is the responsibility of the Technical Inspection and Safety (TIS) Commission, headed by F. Ferger. TIS is composed of 6 groups, i.e. electrical installations and general safety group, medical service, fire brigade and fire prevention, mechanical engineering group, flammable gases and chemistry group, and radiation protection group. Tuyn said that he wished to report on the activities of the latter group: personnel monitoring (headed by M. Höfert), radiation survey and control (G.R. Stevenson for SPS, A.H. Sullivan for PS, J. Tuyn for SC and site, H. Schönbacher for LEP), and technical support/ environmental monitoring (responsibility of G. Rau). Tuyn added that the CERN radiation safety rules are laid down in the Radiation Protection Manual (latest issue 1983), copies of which are available in English and French from the secretariat of the Radiation Protection Group. He reminded members that these rules had been approved by the CERN Host States.

Tuyn considered the following items to be of particular importance for the users:

- Layout, shielding etc. of all experiments have to be discussed with the Radiation Protection Group before the experiment comes on the floor. These aspects of an experiment may also be discussed in the Radiation Protection Committee.
- Personnel monitoring: the CERN reference level (which can only be exceeded if the Division Leader concerned declares that work cannot be done without exposures at a higher level) is 15 mSv (milli-Sievert, the new international unit replacing rem from 1.1.85 onwards; 1 rem = 10 mSv), whereas the annual dose limit which under no circumstances might be exceeded is 50 mSv. Monitoring is done through a personal dosimeter, i.e. a film badge containing one or two films (β/γ , nuclear emulsion). Until now this badge was distributed monthly, but from 1 January 1985 onwards this will be reduced for persons attached to EP Division to a two-monthly distribution. This is possible as these persons are expected to be exposed to low doses and because new nuclear emulsions with reduced fading of tracks are now available. Medical clearance remains required before a film badge can be issued; the annual blood test will be restricted to persons likely to receive over 5 mSv per year.
- Use of radioactive sources: at the moment there are some 1300 radioactive sources in use or in stock on the CERN sites. Users who need a source can obtain these from the site section of the Radiation Protection Group on loan. If the requested source is not available, the Radiation Protection Group will order it (on its own budget in case of small standard sources, on the user's budget in case of large numbers or special dedicated sources). All sources have to be registered in the source register of the Radiation Protection Group including those belonging to other laboratories.
- Uranium is increasingly used at CERN. No uranium can be received at CERN without following a number of administrative procedures, in particular concerning import, export and/or transit licences. Hence the Radiation Protection Group and the Distribution Section in FI Department (M. Doran) have to be contacted well in advance. No machining of uranium will be allowed on the CERN site. It is to be noted that uranium is subject to an annual inspection by the IAEA in the framework of the Non-Proliferation Treaty.
- Transport of radioactive items between the CERN sites requires "radioactive transfer" slips issued by the Radiation Protection Group. Transport of such items outside CERN requires a certain amount of paper work for which assistance can be obtained from the Radiation Protection Group.
- Disposal of radioactive waste is handled by the Radiation Protection Group. The group takes also care of storage of radioactive items if space is available.
- Non-ionizing radiation (lasers, microwave and RF radiation, magnetic fields, UV): the site section of the Radiation Protection Group is available for advice on safety precautions to be taken and has measurement instruments to assess the hazards involved. Written safety notes and instructions are available.
- Radiation resistance of materials: information can be obtained from H. Schönbacher and collaborators.
- Computer programs, like the hadron-meson cascade programme FLUKA 82, are

available.

- Spectrometry (α , β , γ , X): help and advice available.

The Chairman thanked Tuyn for the information, and welcomed the reduction in distribution of film badges (once every two months instead of once per month).

6. Any other business

a) CERN Kindergarten

An enquiry had shown that the reasons for raising the problem concerning the management of the CERN kindergarten at the previous meeting of ACCU, had disappeared in the meantime.

b) Scintillator workshop

The results of an investigation by Blair confirmed that the statement of Websdale at the previous meeting of ACCU was substantially correct. The manpower available had since 1979 diminished by 50%, which made small users suffer from occasional big jobs. The head of the Central Workshops in SB Division, K.S. Neil, had indicated that there was no objection to qualified persons (including technicians of visiting teams) using the available equipment. Moreover Neil was willing to discuss solutions in each case that users had a problem.

7. Items for the agenda of the next meeting

Due to lack of time this point of the agenda was not discussed. ACCU members are invited to contact the Secretary, if they have propositions.

8. Date of next meeting

The date and time of the next meeting were fixed on Friday, 15 February 1985 at 2 p.m. sharp.

G.J. Bossen