

CERN/SPSC 2002-006
SPSC 56
28 January 2002

SPS AND PS EXPERIMENTS COMMITTEE

Decisions taken at the 56th meeting
held on 15 January 2002

OPEN SESSION

1. Status Report on AD1, ATHENA: R. Landua
2. Status Report on AD2, ATRAP: G. Gabrielse
3. Status Report on AD3, ASACUSA: R. Hayano

CLOSED SESSION

Present: H. Bialkowska, F. Bobisut, I. Brock, S. Dalla Torre, M. De Jong,
A. De Roeck, C. Détraz, S. Forte, R. Forty, P. Grafström, M. Hauschild,
J. Knobloch, K. Königsmann (Chairman), W. Kühn, A. Magnon,
J-P. Riunaud, H. Taureg (Secretary), I. Videau.

Apologies: G. Altarelli, Y. Déclais, E. Fernandez, U. Heinz, A. Pich, D. Websdale.

1. INTRODUCTION

The Chairman transmitted his best wishes for the New Year to the members of the Committee.

2. MINUTES OF THE LAST MEETING

The minutes of the last meeting were **approved** without amendments.

3. MATTERS ARISING

The Committee took note of ongoing and forthcoming spin-physics experiments in comparison to the NA58 / COMPASS capabilities. Substantial competition exists in the area of flavour separation and $\Delta G/G$. Therefore the Committee **stresses** the importance to find soon an adequate replacement of the Oxford solenoid and to complete the tracking system.

4. REPORT FROM THE 155TH MEETING OF THE RESEARCH BOARD

The Chairman reported on the 155th meeting of the Research Board.

The Research Board **confirmed** the proton run for NA60 in 2002. The 25 ns running will take place in 2003. The Chairman expressed the worries of the SPSC about missing resources for maintenance in the PS. The LHCC will monitor more closely the use of test beam time by the LHC experiments.

The Research Board discussed the consequences of the financial situation for the research programme. For 2002 the accelerator time will be cut by about 25%. CAST running will be cut by a similar amount. Experiments will be declared terminated one year after the end of data taking. Therefore CHORUS is considered terminated at the end of 2001. The appropriate scientific committees are requested to review experiments approved to run in 2003. The costs to completion of CNGS and the participation of CERN in OPERA will be reviewed beginning 2002.

5. STATUS OF THE SPS

P. Grafström reported on the shutdown activities. A substantial part of the work concerns preparations for LHC. Additional magnets are being installed in the transfer lines TT2 and TT10. The SPS tunnel and the injection line TI2 will be joined in Spring. Civil engineering on TI8 and CNGS progresses. Equipment for beam studies is being prepared in LSS4 and LSS5.

6. STATUS OF THE PS

J.-P.Riunaud reviewed the shutdown work at the PS complex. One PS main magnet unit is being exchanged and checked in preparation of a control of all units. The exchange of the cooling circuit is continuing. At the AD the cathode of the electron cooling has been replaced. Most of the ring has to be baked out. In the East Hall a faulty bending magnet in the south branch will be replaced. In the T10 and T11 lines four magnets will also be replaced. There is still no replacement/spare available for the quadrupoles in the F61S and T9 beam lines. This is critical for HARP and DIRAC but will also affect test activities of LHC experiments.

7. STATUS OF THE PS AND SPS EXPERIMENTS

The status of the experiments will be reviewed at a later meeting.

8. STATUS OF AD1, ATHENA

The referee recalled the goals, which the experiments had set itself for 2001. Positrons and antiprotons have been trapped and cooled in numbers close to the target value. Positrons have been transferred to the recombination trap. The Collaboration commissioned fully the antihydrogen detector.

The Committee **congratulates** the Collaboration on the cautious and steady progress. The Collaboration is close to the goals for accumulating positrons and antiprotons and has a performant antihydrogen detector. The Committee **looks forward** to the detection of antihydrogen in 2002.

9. STATUS OF AD2, ATRAP

The referee reviewed the progress in 2001. The Collaboration has demonstrated for the first time positron cooling of antiprotons and has stored cold positrons and antiprotons in the same trap simultaneously. The Collaboration is close to the demonstration of antihydrogen formation. New traps are under investigation and preparations for ATRAP2 are under way.

The Committee **congratulates** the Collaboration on the positron cooling of antiprotons and trapping both species in the same space. The Committee **asks** for a written report of the 2001 progress and a detailed plan of the 2002 activities for the meeting on 26 March, especially concerning the method of antihydrogen detection.

10. STATUS OF AD3, ASACUSA

The status of AD3 will be discussed in the March meeting.

11. NA45 BEAM TIME REQUEST

The Committee took note of the physics goal of the requested NA45 run at low ion energies, its evaluation by the referee and discussed the implications for other, approved experiment.

Because of these implications the Committee **does not recommend** for approval a run of NA45 in 2002.

12. SCIENTIFIC ACTIVITIES AT CERN IN THE NEXT YEARS

The Chairman presented a brief overview of the non-LHC activities in the next years, the size of the non-LHC user community and the first measures as a consequence of the financial situation at CERN.

The Committee discussed the implications of economy measures on the operations of the accelerators. The Committee **strongly prefers** a shortening of the yearly running time over a stop for a full year. The reduction per year should not exceed 25%, like in 2002.

The Committee has been requested to review the 2003 programme. The run with Indium ions in 2003 constitutes the essential part of the NA60 programme. The SPSC **insists** on performing this run as planned. The NA48/2 programme will be revisited during the March meeting. The Committee **reiterated** its support for the NA58 programme and a speedy replacement of the failed Oxford magnet.

The SPSC **considers** a participation of CERN in the OPERA experiment important. The Collaboration needs strengthening, not weakening.

13. SPS AND PS SCHEDULES

M. Hauschild summarized the PS and SPS schedules after the cuts in running time by about 25%. The 25 ns run has been postponed to 2003. The users have been collaborative in adjusting to the reduction.

14. A.O.B.

The Committee agreed upon the approval procedure for a design change of OPERA.

The memorandum from NA49 will be treated in the next meeting.

15. DOCUMENTS RECEIVED

- AD-3/ASACUSA: Status Report CERN/SPSC 2002-002/M674
- AD-1/ATHENA: Progresss report CERN/SPSC 2002-003/M675
- NA49: Data Taking in 2002 (CERN/SPSC 2002-005/M677)
- CERES Participation in the 2002 Low Energy Pb Run (2001-033/M673).

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