June 21, 2004

Memorandum to the SPCS: NA49 Status and Computing

The last data taking run of NA49 was completed in October 2002; part of the 20 and 30 A·GeV data from this energy scan of Pb+Pb collisions still needs to be reconstructed this year. A vigorous analysis activity is continuing for at least another 2 years with numerous publications either in the pipeline or planned. In parallel, preparation work for an intended future experimental program with the NA49 detector (SPSC-EOI-01) is proceeding.

This future experimental program is pursued by part of the institutions presently making up the NA49 collaboration. This group is in the process of setting up a new collaboration, which intends to use the NA49 detector, possibly in upgraded form, in a program of p+p, p+A and A+A physics at the SPS. The expression of interest SPSC-EOI-01 which you received from M.Gazdzicki and G.Vesztergombi represents the plans of this new, nascent collaboration. The NA49 council at its October 2003 meeting unanimously supported a possible future use of the detector by a new collaboration and agreed that the NA49 detector ownership and responsibility would be transferred as soon as it was formally set up.

For our analysis and planning work we rely in part on the computing infrastructure provided to NA49 by the CERN IT division. In particular, we use CASTOR to store our reconstructed data as well as a sample of raw data required for simulation of various corrections. In this way the results can be shared by the whole collaboration. A moderate amount of computing resources is used for coherent reconstruction and simulation work. This work presently requires the use of the SONY tape drive and robot presently installed at the computer centre for accessing the NA49 raw data tapes. We have worked out an arrangement with IT division to move the SONY tape system plus some tape racks to a location where they can stay until their eventual removal in late 2005. In the meantime we have started to copy those raw data to CASTOR, which we will continue to use for our analysis work.

We therefore kindly ask the SPSC to support the following requests:

• Leave the NA49 detector on the floor until its possible future use will have been further clarified. We understand

that the SPSC has made such a recommendation at its February 2004 meeting.

• Continuation of computing support through the IT division at its present level for the next 2 years. We consider the present level of support from CERN essential for the successful completion of the physics analysis of NA49 and for the planning of the proposed further use of the detector at the SPS.

With best regards,

Peter Seyboth (spokesman NA49)