Hans H. Gutbrod

Referee - Report on the project

COMPASS-II STUDIES OF THE NUCLEON AND HADRON STRUCTURE AT CERN

(theme 02-0-1085-2009/2019, prolongation for 2017-2019)

In the 46th PAC meeting in January 2017, the project HADRON PHYSICS WITH THE COMPASS EXPERIMENT (JINR participation) and the Project COMPASS-II (JINR participation) had been proposed. The PAC recommended that One single group should be formed with a new leadership, focusing on physics and guaranteeing the technical support promised in the Compass II MoU. Furthermore, I stated that any continuation of the JINR participation in COMPASS III should be carefully evaluated and compared with the discovery potential at NICA or at the LHC experiments.

Those requests have been met within this proposal. A.P. Nagaytsev is project leader and A.V. Guskov serves as Deputy leader and plans for COMPASS III are taken out.

The number of persons from Dubna involved in COMPASS II is 47, most are with 50% or even 100% of their time. This is by a factor of two the largest team at COMPASS II. There is no compelling reason to justify such a large team. In view of impact this collaboration should be considerably reduced down by at least a factor of two.

One issue was raised in the January PAC meeting concerning the large travel budget request and suggestions were made to lower that budget substantially. This request has not been achieved.

a) There is clearly the obligation for shifts during data taking and run preparation, however, as in LHC experiments and in space experiments, remote monitoring is nowadays state of the art, and, e.g. at ALICE, some shifts are done from the institute site. Calorimeters should be working without interference. After construction of calorimeters, there is only need for a small group from those who have built them. Also shifts are mostly reserved for old experts, one should replace them with young members of the group so that they are making their own new network with other young scientists.

b) Furthermore, the travel request for collaboration meetings and group meetings *could* include double counting, since most collaborations plan those meetings either during the beam time or adjacent to conferences. Again I am arguing that only invited speakers should go to conferences and the group leader should work on getting invited talks for his people. Also only persons who have something to report should go to the collaboration meetings.

In summary, I recommend the proposal for approval but recommend also that the group size and the travel budget be both reduced by at least 50% .