Referee Report on:

Studies of the Nucleon and Hadron Structure at CERN

NA-58 Collaboration , Project Compass-II

Theme 02-0-1085-2009/2022, Extension for 2021-2022

The participation of JINR groups in COMPASS is a longstanding one and when COMPASS comes to its end, it is more than reasonable that the active members of the JINR-COMPASS team participate with full energy in the final harvest of physics data and physics results. The responsibilities and obligations of the JINR group requires their full participation in the last data-taking runs. *(Please add JINR to the list of Participating Countries, Institutes and International organizations in the Form No. 24)*

According to the COMPASS-II Memorandum of understanding (MoU), JINR's responsibilities for 2021-2022 are technical support for the installation's detectors (HCAL1, ECAL0, MW1), participation in polarized target work, support for the engineering structure of the experimental hall, data collection systems, and processing and analysis of experimental data. The extension of this Memorandum until **the end of 2025** was approved by the FRC and SPS committees at CERN, without obligations for detectors beyond 2021.

I understand that the COMPASS-II JINR Collaboration ends in 2022 and the group will focus on new opportunities like e.g., MPD, SPS, and PANDA where its expertise is certainly very much needed.

However, the presented request for Extension for 2021 -2022 leaves open the involvement of the group into the data analysis beyond 2022.

In my opinion, there is great need for getting scientific recognition of the two-decade long work in COMPASS, which can only be obtained by a very active participation in the analysis of data and a strong collaboration on the physics exploitation of the data. This proposal is not taking issue, but the authors could have a tacit understanding that young scientists would work on the data analysis until 2025.

Therefore, I support fully the responsibilities as signed in the COMPASS-II MoU, and encourage the group to promote young scientists for giving talks at international conferences.

Heidelberg, May 31st, 2020

Hans. H. Gutbrod