

Agreement on the transfer of the CERN Inner Barrel Staves to the NA61/SHINE Collaboration

(hereinafter referred to as the “Agreement”)

between

THE EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH (hereinafter referred to as “CERN”), an Intergovernmental Organization with its seat at Geneva, Switzerland, Host laboratory of the ALICE and NA61/SHINE experiments, represented by its Director for Research and Computing, Eckhard Elsen

and

THE INSTITUTIONS OF THE NA61 COLLABORATION (hereinafter referred to as “NA61/SHINE”), represented by the Spokesperson, Marek Gazdzicki,

hereinafter each a “Party” and collectively the “Parties”.

THE PARTIES HAVE AGREED AS FOLLOWS

Article 1 – Scope of the Agreement

CERN hereby agrees to make available and transfer to NA61/SHINE 20 ALICE ITS Upgrade “partially functional” Inner Barrel (IB) Staves (hereinafter referred to as the “Equipment”) for use by NA61/SHINE for the exclusive purpose of the NA61/SHINE Experiment. An IB Stave consists of a row of nine silicon pixel sensors. **The number of functional sensors needed to accomplish the NA61/SHINE setup ranges from 1 to 5. The detailed information on the number and the location of the functional sensors is provided in the Appendix A attached to this document.**

Article 2 – Equipment construction, testing and transfer

2.1 The construction of the equipment shall take place in the context of IB Staves production for the collaboration with SPhenix. Subject to the signature of the related agreement, such a production should start in May 2019 and last about 10 months. Assuming a construction yield of 80% it is expected that the Equipment could be completed within this period. If necessary, a dedicated production of missing IB Staves partially **equipped staves according to the NA61/SHINE needs** shall be planned at the end of the construction for SPhenix.

2.2 CERN’s engagement is on a best efforts basis, without representations and warranties as to its

contribution and any of the items contributed, and subject to available resources and priority on its scientific programme.

- 2.3 NA61/SHINE shall provide necessary manpower to test and characterize the Equipment in the DSF assembly laboratory, before it is transferred (*What does it exactly mean? To be discussed on the NA61/ALICE/CERN meeting and properly formulated*). CERN shall provide the necessary training and shall make available the testing setup.
- 2.4 Ownership of the Equipment shall transfer from CERN to NA61/SHINE upon completion of the testing and validation of the Equipment. NA61/SHINE shall take care about the transport of the Equipment from the DSF. From this moment on, NA61/SHINE will exclusively bear all obligations and responsibilities associated with ownership, operation and any other activity concerning the Equipment, including in particular under the General Conditions applicable to Experiments at CERN. *In addition, CERN will grant access of the NA61/SHINE to the stave related software and it's documentation.*
- 2.5 Transfer of the equipment is as-is, and CERN does not provide any warranty, whether express or implied, as to the condition, properties and suitability of the equipment.
- 2.6 ALICE shall not be obliged to commission the Equipment in NA61/SHINE.

Article 3 – Financial Compensation

NA61/SHINE shall transfer 80'000 CHF (the “Amount”) *to the CERN account No XXXX.*
In case a dedicated production of partially functional IB Staves results to be necessary at the end of the SPhenix construction, an additional cost of 6600 CHF per each Stave shall be transferred. A staged payment over two years could be accepted upon NA61/SHINE request.

Article 4 – Safety

Each Party shall be responsible for Safety of any activities performed under its responsibility under this Agreement and shall ensure compliance with the CERN Safety Rules and any instructions given by CERN concerning Safety. CERN Safety personnel shall be entitled to carry out Safety visits, checks and inspections as well as other Safety measures deemed necessary by CERN.

If so required by CERN for the purpose of elimination of the Equipment in case it has become irradiated whilst in use by NA61/SHINE, ownership in the Equipment shall transfer to CERN upon completion of such use.

Article 5 – Amendments

Any amendments to this Agreement shall be agreed in writing between the Parties.

Article 6 – Entry into Force

This Agreement shall enter into force upon recommendation and approval of the NA61/SHINE upgrade programme by the SPSC and Research Board, respectively, and shall remain in force for as long as necessary to give effect to its provisions.

On behalf of CERN

Eckhard Elsen

Director of Research and
Computing

Date:

On behalf of NA61/SHINE

Marek Gazdzicki

NA61/SHINE Spokesperson

Date: