

DRAFT

Memorandum of Understanding for the DRD4 Collaboration  
Between the Collaborating Institutions/Funding Agencies

WHEREAS

Following the ECFA Detector R&D Roadmap a group of institutes from CERN Member and non-Member States, including CERN (“the Collaborating Institutions”), listed in Annex 1, have proposed to the CERN DRDC Committee to carry out a research and development programme for the development of Photodetectors and Particle Identification Technologies for the next generation of particle physics experiments and their upgrades.

For this purpose, it has been agreed to form the DRD4 Collaboration (“the Collaboration”). The Collaboration is structured as a set of Working groups (WG) and a set of Joint Projects (JP). The WGs have different themes, such as photodetectors, particle identification techniques, etc. while the JPs address primarily the technological challenges identified in the ECFA Roadmap process.

There are two distinct ways of collaborating inside DRD4:

- 1) The Collaborating Institutes join one or several WGs. A WG acts as a forum on which the institutes exchange information, samples, ideas, training and organise common activities like test beams, characterisation measurements, etc. The cost of forum-mode collaboration is minimal.
- 2) The Collaborating Institutes create or join one or several Joint Projects (JP). The JPs are aligned with the technological main goals of DRD4 as defined in the ECFA Roadmap document. The institutes agree on the objectives, work plan, milestones and resource sharing and secure the support of their Funding Agencies to enable them to participate in a DRD4 Joint Project. The formation and joining of Joint Projects is subject to a Memorandum of Agreement (MoA) approved by the DRDC.

On the basis of the DRD Proposal submitted in July 2023, (CERN-XXX-2023-xxx), and a detailed review of the technological feasibility and estimates of the resources needed, the DRDC has recommended approval of the Proposal to the CERN Research Board;

Based on the recommendation by the LHCC, the Research Board recommended to the Director General of CERN to approve the R&D Programme under the reference number DRD4;

The Director General accepted the Research Board recommendation and approved the R&D Programme (CERN/DG/Research Board 2023-xxx);

As far as the Collaboration performs activities at CERN, the execution of the R&D Programme is subject to the General Conditions applicable to Experiments at CERN (“the General Conditions”). The General Conditions define the representation of the parties involved in the Experiment and the basic documents that govern its execution, and set out in general terms the organisation of the Collaboration, CERN’s obligations as Host Laboratory and the obligations of the Collaborating Institutions. They also address the questions of liability and dispute resolution, as well as matters

related to intellectual property. The General Conditions are an integral part of the MoU and the current version, dated xx YYYY 2023, is attached as Annex x;

Is this paragraph needed?

As provided for in the General Conditions, agreement on the responsibilities for the execution of the DRD4 research programme is effected through identical Memoranda of Understanding (“MoU”) between CERN as the Host Laboratory and each Collaborating Institution (including CERN), represented for the purpose of signature, as the case may be, by their Funding Agencies;

IT IS HEREWITH UNDERSTOOD AS FOLLOWS:

Article 1. Parties to the MoU

Article 2. Purpose of the MoU

Article 3. CERN’s Obligations as collaboration member

Article 4. Responsibilities of the Collaborating Institutions

As base member participating to one or several WGs

As full member participating to one or several JPs

Article 5. Structure of the RD50 Collaboration

Article 6. Common Collaboration Fund (CCF)

Base fund for running DRD4

Funds for Joint Projects

Article 7. Intellectual Property

Base members

Full members

Article 8. Theses, Publications and Conference Contributions

Article 9. Observance of the MoU and the General Conditions

Article 10. Duration of the MoU and its Extension

Article 11. Withdrawal of Funding Agencies or Collaborating Institutions

Article 12. Participation of additional institutions

Article 13. Industrial Partners

Article 14. Relation to other Experiments

Article 15. Amendments

Annex: MoA for JP1

Annex: MoA for JP2

Annex: MoA for JP3

Annex: MoA for JP4

Annex: MoA for JP5