

The DRD-on-Calorimetry Collaboration - Governance

History of the document:

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1 Preamble

The Detector R&D (DRD) collaboration on calorimetry, called *DRD-on-Calorimetry* hereafter, is hosted by CERN and is therefore formally a CERN Collaboration following an approval by the CERN Research Board to start on January 1st 2024. The present document lays the foundation of the governance of the DRD-on-Calorimetry. As a CERN Collaboration the DRD-on-Calorimetry is subject to [CERN general conditions applicable to the execution of experiments](#) (GC).

The rules defined in this document and its modifications are subject to full-CB decision by the Collaboration Board as defined below.

2 Mission

The mission of the DRD-on-Calorimetry and the scope of its activities are driven by the following goals and principles:

- The DRD-on-Calorimetry develops calorimeter concepts required for future high-energy physics experiments, focusing on those defined in the ECFA Detector Roadmap;
- The DRD-on-Calorimetry shares the development of tools and infrastructure of common interest among the different projects;
- Electromagnetic and hadronic calorimeters are developed in a unified approach. Cooperation with tail catcher and muon system efforts is sought for test beam experiments;
- The DRD-on-Calorimetry carries out test beam campaigns with prototypes of different sizes. The maturity of a concept will have to be demonstrated with full-scale prototypes (i.e. able to contain more than about 95% of a shower). The Collaboration organises the task sharing between the prototype projects, to benefit from synergies between them and maximise the use of common infrastructures, building blocks and frameworks, as well as simulation code and data samples. This is also aimed at enabling common test beams with electromagnetic and hadronic calorimeters;
- Analysis of common test beam data is organised in a shared and open manner.
- DRD-on-Calorimetry members agree upon publication guidelines;
- The DRD-on-Calorimetry carries out research to the benefit of the progress of pure science or societal applications where possible. The work will be based on mutual respect regardless of ethnicity, gender, religious convictions or sexual orientation. We consider diversity to be an asset for the collaboration. We fully adhere to the values defined in the ECFA, NUPECC and APPEC [Diversity Charter](#);

3 Organisation of the DRD-on-Calorimetry

Figure 1 shows the organigramme of the DRD-on-Calorimetry.

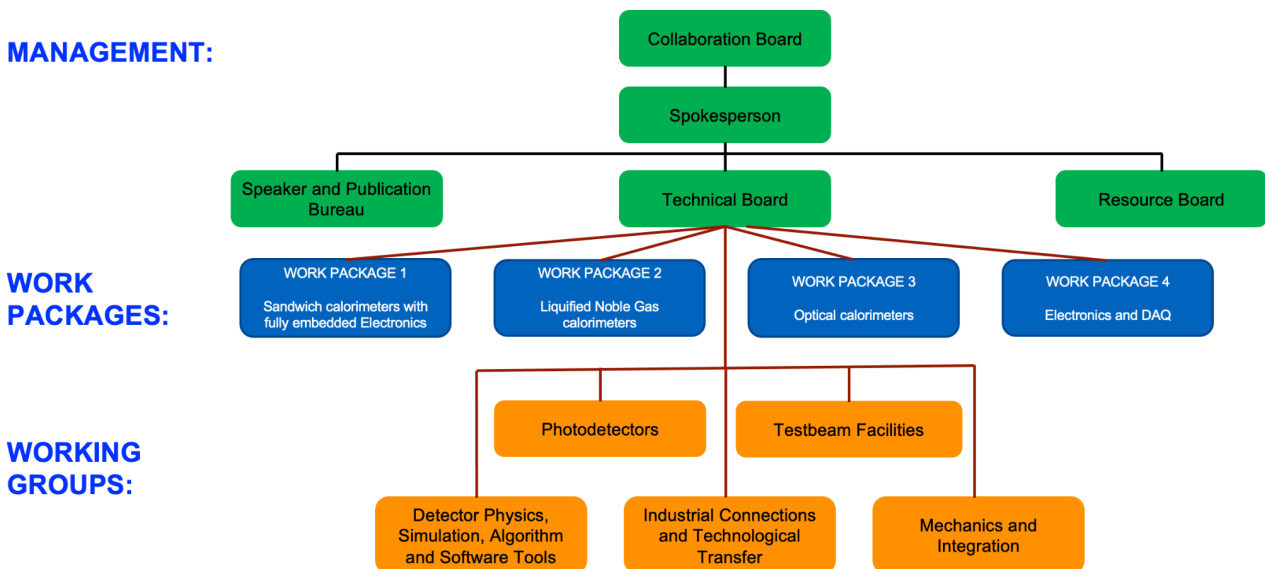


Figure 1: Organigramme of the DRD-on-Calorimetry.

The different management bodies and their roles as well as how decisions are taken within

the Collaboration are introduced in the following. Section 4 gives more details on the Work Packages and Working Groups.

3.1 Management Bodies

The governance structure consists of the following legislative and executive bodies:

- The Collaboration Board (CB)
- The Spokesperson and deputies (SP)
- The Technical Board (TB)
- The Speaker and Publication Bureau (SPB)
- The Resource Board (RB)

The organisation includes a Resource Board upon request by CERN as the host laboratory. Its detailed role is still to be defined and subject to a further update of the Governance Rules.

3.1.1 Collaboration Board

The **Collaboration Board (CB)** is the legislative body of the Collaboration with the following roles:

- takes major decisions within the Collaboration;
- defines the Governance Rules;
- decides changes in collaboration structure and policy;
- decides on group/institute membership;
- organises and carries out the election of the Chair of the CB and of the Spokesperson;
- endorses the Chairs of the executive bodies and the Spokesperson's deputies;
- endorses the Coordinators of the Work Packages;
- endorses the Working Group Coordinators.

The CB consists of:

- representatives of all voting collaborating institutes. Each institute is represented by one CB member.
- a chairperson, who is non-voting since he/she must remain neutral on all issues.
- ex officio (non-voting): Spokesperson, Chairs of the Technical Board (TB), Speaker and Publications Bureau (SPB) and Resource Board (RB).

Procedures in the Collaboration Board

Representation: At meetings of the CB, each institute is represented by the corresponding representative, either by in-person attendance at the meeting or by remote participation. Replacement by another member of the same institute is allowed after notifying the CB chairperson. Vote delegation to another institute is also permitted. Institutes are polled annually to confirm their willingness to continue participation. Non-responding institutes are placed in a hold status, with membership in the CB suspended until participation is re-confirmed.

CB Meetings: The Chair of the CB is responsible for preparing and organising the CB Meetings. The date of the Collaboration Board Meetings should be announced four weeks ahead of the next meeting. An agenda of the CB Meeting with a list of decisions is to be presented by the CB Chair at least one week before a scheduled CB Meeting. The CB Chair shall provide supplementary material in support of the decisions to be taken. Meetings can take place fully in person, fully online or in hybrid mode.

Decisions: It is expected that most decisions in the CB can be taken directly at the meeting by consensus, without explicit voting. A consensus is stated by the Chair of the Collaboration Board with an explicit oral question to the assembly at a meeting. Should there be no clear consensus, a vote takes place, with a decision by absolute majority of all voting members present in person or by remote attendance. Major decisions (“full-CB decisions”) can only be taken directly at the meeting if more than half of the voting members of the CB are present. Examples of full-CB decisions are the election of the Spokesperson, the election of the CB Chair and changes to the DRD-on-Calorimetry Governance Rules. Further cases for full-CB decisions are defined further down in the text. All other decisions (“regular decisions”) are taken with a majority of the voting members present in person or by remote attendance. Regular decisions can be promoted to full-CB decisions if requested by three or more voting members. If the quorum of more than 50% of all voting members is not reached in a meeting, full-CB decisions are taken electronically. In this case, an absolute majority of the voting members of the CB is required for acceptance. If the absolute majority is not reached, a second round of votes is organised and the decision is adopted if the 50% quorum is reached and there is a simple majority of all votes cast.

Election procedure for CB Chair: A search committee is proposed by the Spokesperson and endorsed by the Collaboration Board by consensus. The search committee, consisting of three members unless deemed to be necessary otherwise, is established with the goal of identifying suitable candidates. Any institute or individual in the Collaboration, can send nomination(s) to the search committee. The search committee will then create a short list of the candidates willing to stand for election. In the election itself, the CB Chair is elected by an absolute majority of all voting CB members. If no candidate reaches an absolute majority, a second round of voting is carried out with the two highest-ranked candidates of the first round. In this second round, the CB chair is elected by simple majority (50% of all cast valid votes) if the 50% quorum is reached. If the quorum is not reached, the election is repeated electronically.

3.1.2 Spokesperson

The **Spokesperson** represents the Collaboration and is the official contact between the DRD-on-Calorimetry and the management of external organisations. The Spokesperson organises and chairs the Collaboration meetings, and coordinates the preparation of external reviews. The Spokesperson has overall authority for the production and dissemination of approved results. By default, the Spokesperson is also ultimately in charge of the implementation of agreed policies of the Collaboration. Depending on the nature, implementation is delegated to other bodies of the Collaboration.

The Spokesperson nominates up to two deputies, who are then endorsed by the CB as a regular decision. The deputies support the Spokesperson to ensure presence in relevant panels and at relevant events. The work in the DRD may entail addressing short-term questions or building task forces. By default, the deputies would lead those task forces, but it can be delegated.

The Spokesperson nominates the chairs of the executive bodies of the Collaboration. As for the Spokespersons' deputies, the nomination of the chairs of the executive bodies is subject to endorsement by the Collaboration Board.

The Spokesperson reports to the Collaboration Board. The default form is a presentation at the Collaboration meeting, but other forms might be appropriate.

Election procedure for Spokesperson: A search committee is proposed by the CB Chair and endorsed by the CB by consensus. The search committee, consisting of three members unless deemed to be necessary otherwise, is established with the goal of identifying suitable candidates. Any institute or individual in the Collaboration can send nomination(s) to the search committee. The search committee will then form a short list by identifying the candidates willing to stand for election. In the election itself, the Spokesperson is elected by an absolute majority of all voting CB members. If no candidate reaches an absolute majority, a second round of voting is carried out with the two highest-ranked candidates of the first round. In this second round, the CB Chair is elected by simple majority (50% of all cast valid votes) if the 50% quorum is reached. If the quorum is not reached, the election is repeated electronically.

3.1.3 Resource Board

The Collaboration Board will decide on the role of the Resource Board at a later time after consultation with the Funding Agencies.

3.1.4 Technical Board

The **Technical Board (TB)** is an executive body of the Collaboration with the following roles:

- monitors all R&D activities and therewith ensures the coherence of the R&D activities within the Collaboration;
 - therefore coordinates also the development of common infrastructure, frameworks and tools.
- follows the preparation of test beam campaigns and reviews their readiness;
- coordinates the beam time requests to test facilities;
- oversees run coordinators for common test beam campaigns;
- supports the Spokesperson in the preparation of reviews of the scientific results and plans, in particular technical realisations, of the Collaboration. Coordination with the Speakers and Publication Bureau might be necessary. In this sense, a review is also the justification of beam requests by the Collaboration, if applicable.

In the case of test beam campaigns related to experiment-specific-only activities, the responsibility is in general of the concerned experiment(s).

Members of the TB are:

- the TB Chair (nomination, endorsement and charge, see below);
- the Coordinators of the Work Packages;
- the Coordinators of the Working Groups (where present);
- ex-officio members: the Spokesperson and the SPB Chair. Spokespersons emeriti and TB Chairs emeriti at their discretion but limited to the previous mandate.

The TB Chair is nominated by the Spokesperson and endorsed by the CB by regular decision. He or she is in charge of the implementation of the different tasks of the TB as defined above. The TB Chair reports to the CB. A report might be presented at the Collaboration meeting, but alternative reporting might be implemented.

3.1.5 Speaker and Publication Bureau

The **Speaker and Publication Bureau (SPB)** is an executive body of the Collaboration with the following roles:

- oversees the implementation of the publication policy that will be defined in a separate document that will be approved by a vote of the CB. The publication policy will ensure common standards on publications like review procedures and include dedicated rules for publications in common with other DRDs and experiments;
- implements the policy of access to data that have been produced by the Collaboration. The rules for data access have to be defined in a separate document to be voted by the CB;
- provides a single contact point for conference organisers for DRD-on-Calorimetry talks;
- maintains a record of the talks given and ensures that the material presented remains accessible to the DRD-on-Calorimetry;

- Monitoring of given talks should ensure the equal distribution of talks given on behalf of the whole collaboration among the collaboration members.
- solicits new opportunities for conference talks by members of the DRD-on-Calorimetry;
- supports the Spokesperson in the preparation of reviews of the scientific results. Coordination with the TB might be necessary.

The SPB has seven members:

- the SPB Chair (nomination, endorsement and charge, see below);
- four additional members proposed by the Work Packages and endorsed by the CB by consensus.
- the Spokesperson, the CB Chair (ex-officio),

If an individual or a group intends to present results obtained within the Collaboration the SPB is to be informed through the corresponding Work Package Coordinator or the representative of the Work Package in the SPB as the case may be. In case of work carried out within a Working Group, the Working Group Coordinator or the TB Chair as the case may be should be informed. One of these will inform the SPB Chair.

Personal invitations to talks or to submit abstracts to conferences, workshops or seminars should be coordinated with the SPB.

It is not needed to inform the SPB in case the presented material will be not publicly available.

The SPB, at the beginning of the mandate, will elaborate the general rules for publications, such as circulation rules, template, logos. The SPB will also define rules for authorship and it will maintain the author list for the general publications. Both documents will be presented to and approved by a vote of the CB.

The SPB Chair is nominated by the Spokesperson and endorsed by the Collaboration Board by regular decision. He or she is in charge of the implementation of the different tasks of the SPB as defined above. The SPB Chair reports to the Collaboration Board. A report might be presented at the Collaboration meeting, but alternative reporting might be implemented.

3.1.6 DRD-on-Calorimetry Management and Terms of Office

The DRD-on-Calorimetry Management consists of the following members:

- a) The Spokesperson and deputies;
- b) The CB Chair;
- c) The TB Chair;
- d) The SPB Chair.

The Management Team will be extended by the Resource Board Chair once the role of the Resource Board has been clarified.

Members of the Management Team serve two-year mandates and their re-election is normally limited to two consecutive terms. *Exceptionally, the first mandate of the CB Chair, started in January 2024, is extended to three years to avoid complete exchanges of the central governance of the Collaboration.*

The Management Team will ensure the governance of the Collaboration between the CB Meetings. This may imply decisions and expressions of opinion on behalf of the Collaboration. Those would be of preliminary nature until endorsed or approved by the CB. It is expected that there will be regular meetings of the Management Team. Work Package coordinators might be invited to these meetings if it's deemed to be adequate.

4 Scientific Bodies

The scientific work is mainly organised in Work Packages. The Work Packages contain the deliverables of the Collaboration. The work on these deliverables is executed within a set of tasks and subtasks. The Work Packages as of [October 30th 2024](#) are:

- Work Package 1: Sandwich calorimeters with fully embedded electronics
- Work Package 2: Liquified Noble Gas Calorimeters
- Work Package 3: Optical Calorimeters
- Work Package 4: Electronics and DAQ

Details are presented in the proposal document [CERN-DRDC-2024-004 ; DRDC-P-DRD6](#) and therein the Sections 2.1 and 3. For convenience the proposal is part of the annexes of these Governance Rules. These aforementioned sections serve as the reference for updates of the scientific action of the Collaboration. Updates may consist in the definition of new tasks and subtasks within existing Work Packages or the formation of completely new Work Packages. Creation or termination of Work Packages are full CB decisions. Creation of tasks and subtasks are regular decisions.

If a new Work Package, task or subtask is introduced a continued numbering is to be applied.

The Work Packages are led by Work Package Coordinators. The nomination of the Work Package Coordinators are at the discretion of the Work Packages. The Work Package Coordinators are to be endorsed as a “regular decision” by the Collaboration Board after consultation with the Spokesperson.

The Work Packages are complemented by Working Groups that address common aspects. The organisation of the Working Groups is either ensured by dedicated coordinators, nominated by the TB Chair, or directly under the auspices of the TB Chair.

The Working Groups as of [October 31st 2024](#) are:

- Photodetectors;
- Testbeam Facilities;

- Detector Physics, Simulation, Algorithm and Software Tools (Software WG);
- Industrial Connections and Technological Transfer;
- Mechanics and Integration.

Creation or termination of Working Groups is a full-CB Decision.

5 Memorandum of Understanding

The Collaboration will be formalised by a Memorandum of Understanding (MOU) that governs the relation between the collaborating institutes and CERN as the host lab. This MOU is still being worked out by CERN (status October 31st 2024) in cooperation with the Managements of the DRDs. The MOU will have to be agreed by the Collaboration Board and will subsequently be circulated for signature by the institute or laboratory directors within the Collaboration.

Details are about to be worked out but the MOU will consist of two parts

- A main text with a set of general provisions;
- Several annexes, see Section 7 for details.

6 Membership

Membership is by institute. The term “institute” applies also to laboratories and university groups.

Institutes listed on October 31st as CB members are members of the DRD-on-Calorimetry since they have manifested an expression of interest. However, the membership will have to be formalised by signing the MOU as described above.

Institutes wishing to join the collaboration after October 31st 2024 are requested to send a short letter of intent to the Spokesperson, the Deputy Spokespersons and the CB Chair. The letter describes the competencies and resources of the group and their interests and plans concerning their contributions to DRD-on-Calorimetry. A second letter confirming approval of membership by the institute director will accompany the application letter. The letters will be annexed to the MOU.

Both letters will be put at the disposal of the CB that decides on the admission of (new) members. Discussion and decision on the candidate member will take place at a CB Meeting. The candidate group will then introduce the group at this CB Meeting and should be ready to answer questions by members of the CB. Each new member will be asked to ensure the signing of the MOU or to provide an equivalent document by its institute director in which it is stated that the institute adheres to the provisions of the MOU. This statement could be part of the accompanying letter mentioned before and would be considered equivalent to signing the MOU.

Preliminary measure: In case an institute wants to join the Collaboration before the MOU is effective, preliminary membership can be obtained by the short letter of intent to the

Spokesperson, introduced above. The corresponding institute director will be asked at a later stage to sign the MOU or to provide an equivalent document.

Unless explicitly stated in the MOU or its addenda, joining the Collaboration does not establish a legally binding relationship, but is based on a declaration of good will. However, all members commit themselves to follow the rules, in particular the principles of open access to test beam data, and the guidelines for the publication of scientific results.

7 Additional Documents

The following additional documents are part of the governance rules:

- DRD-on-Calorimeter Proposal as approved by the CERN Research Board on December 6th 2023;
- List of DRD-on-Calorimetry member institutes and representatives (will become annex of MOU);
- Updated list of subasks, its members and its resources (will become annex of MOU)
- List of persons occupying management positions, Work Package coordinators, Task Leaders as well as Working Group coordinators (will be part of annex of MOU);
- Publication, dissemination and data management policy of DRD-on-Calorimetry results (work in progress as of October 31st 2024);
- Guidelines for the DRD-on-Calorimetry author list (work in progress as of October 31st 2024);
- DRD-on-Calorimetry Diversity and Inclusion Policy (work in progress as of October 31st 2024).