



# Constitution of the SND@LHC Collaboration

14 November 2024

## I - Preamble

\* The aim of the SND@LHC Collaboration is to perform the experiment described in CERN-LHCC-2021-003/LHCC-P-016.

\* The Constitution of the SND@LHC Collaboration describes the management of the Collaboration.

## II - Decision Procedures

\* All decisions taken by the Collaboration's Boards and Working Groups are by consensus whenever possible or otherwise by vote.

\* Each member represented in the Board or Group has one vote, except for the ex-officio (non-voting) members. All votes are open except for elections and re-elections.

\* Decisions require a 50% majority of the valid votes.

\* A change of the Constitution needs a 2/3 majority from all members of the Institute Board (IB).

\* Except for changes to the Constitution, abstentions, invalid and null votes are not taken into account for the definition of a majority. Thus in case of a yes/no vote only the sum of the positive and negative votes will be the 100% value. In case of an election the sum of valid votes for anyone of the candidates will be the 100% value.

\* Elections are performed by a succession of voting rounds whereby the candidate who has received more than 50% of the valid votes is elected. If no candidate receives this majority, the candidate(s) with the smallest number of votes is (are) removed in a further election round. The process is repeated until a majority is reached. In case no majority is reached, or when all candidates would be removed from the next election round by the rule of least votes, the Chairperson of the IB decides which candidate is removed from the next iteration. In the final round, the candidate with the highest number of votes wins, even if this is not a majority. In the case of a tie, the Chairperson of the IB decides who is the winner.

\* For the election of the 4 members of the Editorial Board, a vote is held selecting 4 candidates. The 4 candidates with the highest number of majority votes are elected. If there are less than 4 candidates with a majority vote, a new voting round is held among the candidates who were not elected. If no candidate obtains a majority, the IB will select preferably by consensus. In case there is no agreement, the Chairperson of the IB will decide.

33 \* All persons fulfilling managerial positions may resign at any moment.

### 34 **III - Institute Board (IB)**

35 The Institute Board has the ultimate authority in the SND@LHC organisation. It is the  
36 body through which all major decisions of the SND@LHC Collaboration shall be approved.  
37 In the IB, the interests of all collaborating Institutes are represented. The IB considers  
38 and prepares the adoption of new members of the Collaboration following the rules defined  
39 in this document. In addition, the IB decides managerial appointments.

#### 40 *IB membership*

- 41 \* Each Institute has one representative.
- 42 \* The IB Chairperson, elected by the IB for a (renewable) 3 year period.
- 43 \* Ex-officio (non-voting) members: the Spokesperson, the Technical, Physics and Re-  
44 sources Coordinators.

#### 45 *Agenda and Minutes*

- 46 \* The agenda for the IB meetings are prepared by its Chairperson, and is circulated 14  
47 days in advance. Any member of the IB may ask for additional topics to be included.
- 48 \* The proceedings of the IB are recorded in minutes. Draft minutes are circulated to  
49 members of the IB for approval at the next meeting. Approved minutes are made  
50 available to all members of the Collaboration.
- 51 \* All IB members will be informed at least one week in advance about all subjects on  
52 which a decision must be taken.

#### 53 *Membership and Associated Members of the Collaboration*

- 54 \* Membership rules  
55 Membership rules distinguish between personal members (“Individual Members”)  
56 and Institute Members.  
57
- 58 \* Membership of the Collaboration  
59 Members of the Collaboration are those who have signed the Technical Proposal  
60 (CERN-LHCC-2021-003/LHCC-P-016). Additional members are accepted according  
61 to the rules laid out for “New Members”.  
62
- 63 \* Institute Membership of the Collaboration  
64 Member Institutes of the Collaboration are all those institutes to which the original  
65 members are affiliated. New institutes can be accepted as Member Institutes follow-  
66 ing the rules laid down in this document. Member Institutes appoint a person who  
67 acts as the contact with the IB and the Spokesperson.  
68

69 \* New Members and new Member Institutes of the Collaboration

70 The candidature of new Member Institutes and new Members is first considered by  
71 the Chairman of the IB and the Spokesperson. Once they decide that sufficient in-  
72 formation is available on the intended participation, the candidature is presented to  
73 the IB for a vote.  
74

75 \* Rules for New Institute Members

76 In the case of a positive vote for admission, the relevant Financial Review Commit-  
77 tee will be informed by the Spokesperson at its next meeting and the institute will  
78 be included in the Maintenance and Operation (M&O) sharing for the forthcoming  
79 fiscal year. All Institutes are expected to contribute to M&O for the detector and  
80 software/computing projects in which they participate. For this Financial Review  
81 Committee meeting, the following documents should be prepared:

- 82 1. The Memorandum of Understanding for the Maintenance and Operation of the  
83 SND@LHC Detector, signed by the corresponding National Funding Agency or  
84 University and the Research Director of CERN.
- 85 2. An addendum to this Memorandum of Understanding for each new collaborating  
86 institute, describing the basis of the cooperation, the initial personnel involved  
87 and the foreseen scientific contribution to the SND@LHC experiment, signed by  
88 the responsible head of the corresponding institute and the Research Director of  
89 CERN.

90 After that, the Institute becomes a full member of SND@LHC and has the right of  
91 vote in the IB. Institutes also have the obligation to participate in general service  
92 tasks.

93 \* Associated Members of the Collaboration

94 An Institute can be given the status of Associated Member if it wishes to bring in  
95 limited technical, financial or human resources to a particular project or working  
96 group.

97 An Associated Member must be "attached" to an Institute of the SND@LHC Collab-  
98 oration, called the "Host Institute". The Host Institute will propose the Associated  
99 Member candidature to the IB. Individual members of the Associate Member have the  
100 same rights and obligations as full members.

101 The Host Institute must take the long-term responsibility for the operation and main-  
102 tenance of any hardware, or software, which the Associated Member would produce  
103 and which would become part of the experiment.  
104

105 \* Individual Membership

106 The admission of an Individual as a new member of the collaboration (from an existing  
107 SND@LHC Institute) is under the responsibility of the Institute leader who should  
108 inform the SND@LHC secretariat. Likewise, it is the responsibility of the Institute  
109 leader to notify the SND@LHC secretariat when members leave their group.

110 Individual membership is described by a person's status (e.g. Academic, PostDoc,  
111 PhD student, Engineer, Emeritus) and by their individual access rights (Full member,  
112 Affiliate or Other). Access rights, in normal circumstances, are:

- Full member: Full Access. Primary or Secondary experiment affiliation.<sup>1</sup> Authorship.
- Affiliate (e.g. theory): Full Access, fixed-term (3 years, renewable, approved by the IB on the advice of the the Spokesperson). Authorship can be requested for individual papers.
- Other: Full Access. Intended for engineers, technicians and others. Authorship can be requested for technical (non-physics) publications.

Payment of M&O contributions is expected for all full members holding a PhD or equivalent degree. Institute leaders are requested to provide a list of full members (excluding PhD and MSc students) from their Institute (once a year, before the autumn Financial Review Committee). This list reflects the Institute's share of the M&O budget. Retired persons who work on SND@LHC may be classified as SND@LHC Emeritus, and may sign papers without incurring the M&O and service tasks mentioned above. Emeritus status must be confirmed to the IB annually by the Institute leader.

Individuals may become a member of the Collaboration even if their Institute is not. In this case the individual should contact the Spokesperson or the Chairperson of the IB. After a short presentation in the IB, the IB will vote whether the individual may be admitted to the Collaboration.

### *Managerial appointments*

The IB shall elect the following managerial positions:

- \* The Spokesperson (SP) shall be elected for a (renewable) 3 year period.
- \* The Physics Coordinator (PC) shall be elected for a (renewable) 3 year period.
- \* The Scanning Coordinator (SC) shall be elected for a (renewable) 3 year period.
- \* The 4 members of the Editorial Board shall be elected for a (renewable) 3 year period. The election will be held during the summer of the last year of this period. The mandate starts on January 1st following the election, but to ensure continuity, newly elected members will be asked to participate in the activities of the Board upon their election.

The IB shall endorse the appointments by the Technical Board (TB) and PC of Working Group Conveners.

## **IV - The SND@LHC Management**

### *Executive body*

The SND@LHC Management is the executive body of the Collaboration. It has overall responsibility for managing the detector operation and upgrades as well as the physics analysis. The SND@LHC Management represents the Collaboration towards outside bodies. It is composed of:

---

<sup>1</sup>There is no restriction on simultaneous membership of other experiments.

- 150 \* The Spokesperson and, if appropriate, the Deputy Spokesperson
- 151 \* The Technical Coordinator
- 152 \* The Physics Coordinator
- 153 \* The Scanning Coordinator
- 154 \* The Resources Coordinator
- 155 \* Upon invitation, other members of the Collaboration as required

156 The SND@LHC Management shall organise the resources (financial and manpower), pre-  
 157 pare the SND@LHC budget, present it to the IB and to the appropriate Review Boards.

## 158 **V - Mandates of managerial positions**

- 159 \* *Spokesperson (SP)* The SP represents the Collaboration to the LHCC, the CERN  
 160 Management, and the outside world. The SP is responsible to the IB for the execu-  
 161 tion of the project.

162 The election of the SP is organised by a small group of persons appointed by the IB.  
 163 Candidates should be presented by at least one Member of the IB and their names  
 164 should be announced at least two days before the election.

165 The IB may decide at any time with a 50% majority to start a new election procedure  
 166 of the Spokesperson.

167

- 168 \* *Deputy Spokesperson (DS)*

169 The Spokesperson may nominate a Deputy Spokesperson for ratification by the IB.  
 170 The DS represents the Spokesperson in his/her absence. The DS can take over well-  
 171 defined responsibilities from the Spokesperson by mutual agreement; however, the IB  
 172 shall be informed in the case of delegation of important responsibilities. The Deputy  
 173 Spokesperson is an ex-officio (non-voting) member of the IB and the Technical Board.  
 174 The appointment of the Deputy Spokespersons comes to an end when the term of  
 175 office of the Spokesperson comes to an end.

176

- 177 \* *Technical Coordinator (TC)*

178 The Technical Coordinator is responsible for coordinating all technical activities in-  
 179 cluding construction, installation, financial and schedule planning. The TC reports  
 180 to the Spokesperson and the IB. The TC chairs the Technical Board and is an ex-  
 181 officio (non-voting) member of the IB. The TC is nominated by the Spokesperson, in  
 182 agreement with the CERN Management. His/her nomination is ratified by the IB.  
 183 The Technical Coordinator shall be a member of the CERN staff for the duration of  
 184 their term of office.

185

- 186 \* *Resources Coordinator*

187 The TC nominates, in agreement with the Spokesperson, a Resources Coordinator;  
 188 their nomination will be ratified by the IB. The RC is responsible for coordinating  
 189 the financial planning of the collaboration. The RC is in charge of establishing the  
 190 annual budget and expenditure reports, which are presented to the IB for approval

191 and to the experiments' Financial Review Committee. The RC monitors the payment  
192 by the Institutes of the M&O share. The RC reports to the Technical Coordinator  
193 and the IB. The RC is an ex officio (non-voting) member of the TB and the IB.  
194

195 \* *Physics Coordinator (PC)*

196 The Physics Coordinator coordinates the analysis efforts in order to ensure the best  
197 possible physics data quality and physics output. The PC reports to the Spokesper-  
198 son and the IB. The PC is an ex officio (non-voting) member of the TB and the IB.  
199 They coordinate the physics analysis groups and propose to the Spokesperson the  
200 Conveners of these groups. The PC shall facilitate information exchange and ensure  
201 that all SND@LHC members can access the data and work on any physics analysis.  
202 The PC ensures the scrutinizing of the physics results and their collaboration-wide  
203 discussion. The PC oversees the review and approval procedure necessary for any  
204 physics analysis result to proceed toward publication. The PC shall be elected by  
205 the IB, following the Collaboration's procedure for elections. The appointment of  
206 Physics Coordinator is for a (renewable) 3 year period.  
207

208 \* *Scanning Coordinator (SC)* The Scanning Coordinator oversees all activities related  
209 to handling, processing and analyzing the emulsion. The SC reports to the Spokesper-  
210 son and the IB. The SC is an ex officio (non-voting) member of the TB and the IB.  
211 The Scanning Coordinator works in close collaboration with the Physics Coordinator,  
212 overseeing the physics results stemming from the analysis of the emulsion, including  
213 the creation of tools and the installation of the required hardware. The SC shall be  
214 elected by the IB, following the Collaboration's procedure for elections. The appoint-  
215 ment of Scanning Coordinator is for a (renewable) 3 year period.  
216

217 \* *Commissioning and Run Coordinator (CRC)*

218 The Commissioning and Run Coordinator's task is to gain experience in detector  
219 operation and control, to verify the hardware stability, to obtain initial alignment  
220 and calibration constants, to develop monitoring tools and to understand the detector  
221 performance. A major commissioning activity will be the collection of beam splash,  
222 beam halo and cosmic ray triggers. During data taking, the CRC is in charge of the  
223 overall SND@LHC detector operation. The CRC is nominated by the Management  
224 and ratified by a simple majority vote by the IB. The CRC reports to the TB and  
225 the Physics Coordinator. The CRC is an ex officio (non-voting) member of the TB.  
226 The appointment of CRC is for a (renewable) 3 year period.

227 **VI - Editorial Board**

228 The Editorial Board ensures that the basic publication principles of the collaboration are  
229 followed. It is composed of 4 members who are elected by the IB. The members will elect  
230 the Chairperson of the Editorial Board, who will represent the Board to the SND@LHC  
231 management. The election of the Chairperson will be ratified by the IB.

232 The Editorial Board will organise the decision on the target journal of a publication and the  
233 collaboration-wide review process of an SND@LHC publication or conference presentation.

234 The Editorial Board organises the distribution of the draft to the collaboration and ensures  
235 that all comments from the collaboration have been appropriately addressed before final  
236 approval of the publication. The Editorial Board will ensure that the proper Author List is  
237 used. In case of a disagreement between authors and the internal referees or other members  
238 of the collaboration, the Chairperson of the Editorial Board, together with the Physics  
239 Coordinator and the Spokesperson, will make the final decision. The Editorial Board  
240 assists the Management in seeking optimal exposure of SND@LHC through a prominent  
241 presence in the programs of relevant conferences, workshops, and schools. The Editorial  
242 Board shall ensure that presentations are shared in a fair way among the SND@LHC  
243 collaborators and organises rehearsal talks to maintain a high level of quality.

## 244 **VII - Technical Board (TB)**

245 The Technical Board (TB) assists the Technical Coordinator with all technical activities  
246 of the experiment.

247 The TB sets up Working Groups lead by Conveners to facilitate the progress of the ex-  
248 periment. The Conveners report to the TB and are responsible for the operation of their  
249 Working Group. The TB may decide at any time to replace a Convener, or set up a new  
250 Working Group. The TB is composed of:

- 251 \* The TB is chaired by the TC. The Technical Coordinator is appointed by CERN.
- 252 \* The SP
- 253 \* The PC
- 254 \* The SC
- 255 \* The CRC
- 256 \* The Working Group Conveners
- 257 \* Any member the Technical Coordinator deems necessary to perform the TB's tasks

258 The TB has frequent meetings, typically once per 14 days, to ensure the progress of the  
259 work. The TC shall keep the Collaboration and IB informed of the decisions and activities  
260 of the TB.

## 261 **VIII - Physics Analysis and Publication policy**

### 262 \* *General Principles*

263 All physics results from SND@LHC are the property of the entire collaboration. The  
264 complete and detailed information about any analysis should be made available to  
265 the collaboration. Any analysis or results using data from the SND@LHC experiment  
266 must be reviewed, understood and approved by the collaboration before being dis-  
267 closed outside the collaboration. All physics results presented at conferences and to  
268 be prepared for publication, which involve use of SND@LHC raw data or SND@LHC  
269 software, must be submitted to a review process under the responsibility of the PC.  
270

### 271 \* *SND@LHC Authorship*

272 Every full member of the collaboration who has contributed to the experiment has  
273 the right to sign SND@LHC physics papers, subject to the following conditions.

274  
275  
276  
277  
278  
279  
280  
281  
282  
283  
284  
285  
286  
287  
288  
289  
290  
291  
292

- SND@LHC collaborators are expected to have participated in the detector construction, the online or computing activities, or to contribute to data taking, calibration or data processing.
- Inclusion on the author list will normally begin 6 months after membership starts. This rule will be applied on the date when an analysis is approved to go to paper. The presence on the author list will normally last, after membership terminates, for a period of 12 months.
- For technical, non-physics publications technicians and engineers may appear on the author list.
- Individual authors may choose not to sign any particular paper by informing the Editorial Board before the author list is finalised.
- The author list may include collaborators who left but have contributed significantly to the experiment, as well as others for a paper to which they have made a significant contribution.

Exceptions to the guidelines will be decided by the Editorial Board, in consultation with the IB Chairperson and the concerned Institute leader. Appeals may be addressed to the Spokesperson who, in consultation with the Chairperson of the Editorial Board and the IB Chairperson, should reach an agreement, to be ratified by the IB.

## 293 **IX - Code of Conduct**

294  
295  
296  
297  
298  
299  
300

Members of the SND@LHC Collaboration are expected to act in an ethical and collaborative manner at all times, and abide by the CERN Code of Conduct. SND@LHC members shall not engage in harassment or bullying, or discriminate against each other in particular on the basis of sex, age, religion, beliefs, nationality, culture, ethnicity, sexual orientation, gender identity, career status, disability, or family situation. SND@LHC members are expected to work with the utmost scientific integrity, and respect the confidentiality of internal information.