

ALICE CONSTITUTION

TABLE OF CONTENTS

PREAMBLE	3
ARTICLE I – Membership in the Collaboration	3
Section 1. General Provisions	3
Section 2. ALICE Juniors	5
ARTICLE II – Collaboration Spokesperson	5
Section 1. General Provisions	5
ARTICLE III – Management	7
Section 1. General Provisions	7
Section 2. Collaboration Board Membership	7
Section 3. Collaboration Board Meetings	9
Section 4. Spokesperson and Collaboration Board Chairperson Elections	11
Section 5. Management Board General Provisions	13
Section 6. Management Board Elections	14
Section 7. Operational Boards General Provisions	14
Section 7.1. Technical Board	15
Section 7.2. Resource Board	15
Section 7.3. Physics Board	15
Section 7.4. Computing Resource Board	16
Section 7.5. Editorial Board	17
Section 7.6. Conference Committee	17
Section 7.7. Service Work Board	18
Section 8. Coordination Areas except those under Operational Boards Scope and General Structure	18
Section 8.1. Run Coordination	19
Section 8.2. Trigger Coordination	19
Section 8.3. Upgrade Coordination	19
Section 8.4. Electronics Coordination	20
Section 8.5. Software, Physics Data Processing and Computing Coordination	20
Section 9. ALICE Projects	20
Section 10. Diversity Office	21

ANNEX A – Incorporated External Documents	22
ANNEX B – Team Leader Duties and Responsibilities	24
ANNEX C – General Team Member Duties, Responsibilities and Restrictions	25
ANNEX D – Explicit Team Member Required Service Duties	26
ANNEX E – Collaboration Board Meeting Procedural Rules of Order	27
ANNEX F - ALICE Policy for Publications and Presentations (Adopted November 29, 2019)	28

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PREAMBLE

The **ALICE** (A Large Ion Collider Experiment) Collaboration (referred to in this document as **the Collaboration**) is an entity formed by a group of institutes that constructed, maintains, operates and carries out upgrades to the ALICE detector at the Large Hadron Collider (LHC) facility at CERN, as well as analyses the collected data and collectively publishes the results. The Collaboration adopts this Constitution as the authority governing the membership in and management of the Collaboration. This Constitution replaces all such previous documents. This Constitution is subject to and incorporates by reference the external documents specifying the relations between current and any new Member Institutes, Funding Agencies and CERN, including the responsibilities of these parties that are included in **Annex A** at the adoption of this Constitution, and all additional documents that are incorporated by the process provided for within this Constitution or otherwise mandated by CERN. Should any provision of this document be interpreted to violate any valid and applicable law, CERN regulation or requirements within the CERN Charter that provision shall be considered severable, null and void, and to the extent possible the remainder of the Constitution shall remain in force.

The ALICE Collaboration is committed to providing a respectful, tolerant, and welcoming environment, and a culture that promotes the development of excellence in scientific research, human collaboration and the nurturing of scientific careers. All ALICE Team Members as specified below shall fully respect CERN's Code of Conduct. In order to facilitate and promote the respect and adherence of such principles, an ALICE Diversity Office has been established and serves to overlook and administer diversity matters.

ARTICLE I – Membership in the Collaboration

Section 1. General Provisions

1. Membership in the Collaboration is by Institute. **Membership** can either be obtained by single institutes (hereinafter: **Member Institute**) or by several institutes that work together and join the collaboration as a **Cluster** (hereinafter: **Clustered Institutes**, or **Cluster**). Institutes in a pre-stage of full membership or that are interested in a cooperation with the Collaboration on technical projects can join the Collaboration as **Associate Institutes**.

2. Those Institutes that are Member Institutes, or Clustered Institutes or Associate Institutes at the time of the adoption of this revision of the Constitution shall maintain their membership status at that time. Applications to admit Institutes as new Member Institutes, Clustered Institutes or Associate Institutes, or to suspend their membership, shall be considered within the Management provisions of this Constitution. Each Member Institute, Clustered Institute and Associate Institute shall participate through the activities of its respective designated members. **Team Members** shall be defined as those individual participants from Member Institutes and Clustered Institutes. **Associate Team Members** shall be defined as individual participants from Associate Institutes.

3. Member Institutes have the following obligations:

- a. To enter the Collaboration as a Member Institute, an entry fee of a minimum amount of 50 000 CHF (fifty thousand Swiss Francs) must be paid. Transfer of a

full group to a different setup does not require an additional payment of the entry fee.

b. Member Institutes contribute to the experiment computing resources and to a yearly share of the Maintenance and Operation (M&O) costs based on the number of their Team Members holding a PhD or equivalent.

c. Member Institutes take on a share of the service work and operational shifts based on the number of their Team Members holding a PhD or equivalent.

4. Clusters are typically intended for institutes that are not large enough to stand on their own in the Collaboration. Such institutes either link up or join an existing Member Institute or an already existing Cluster. It is generally intended that Clustered Institutes represent de facto a single entity in terms of research infrastructure and resources. As such it is nominally expected that the institutes within a Cluster work closely together and build up a coherent effort in the Collaboration. Clusters have the following obligations:

a. To join the Collaboration as a Cluster of only new institutes, an entry fee of a minimum amount of 50 000 CHF (fifty thousand Swiss Francs) must be paid. The payment of the entry fee is not obligatory for: new institutes joining an existing Cluster; new institutes joining one or more Member Institutes to form a Cluster.

b. Clusters contribute to the experiment computing resources and to a yearly share of the Maintenance and Operation (M&O) costs based on the number of their Team Members holding a PhD or equivalent.

c. Clusters take on a share of the service work and operational shifts based on the number of their Team Members holding a PhD or equivalent.

d. Clusters appear, and are marked as such, in the list of ALICE institutes.

5. Associate Institutes do not pay the entry fee, do not contribute to the M&O costs, and they are not required to participate in any service work or operational shifts. They do appear under a separate heading on the list of ALICE Institutes.

6. Each Member Institute and Clustered Institute shall designate a **Team Leader** and one or two **Deputy Team Leaders** from among its Team Members. The responsibilities of the Team Leader are described in **Annex B**. The individual Team Members from each institute are expected to spend a significant fraction of their research effort on ALICE-related activities within the duties, responsibilities and restrictions specified in **Annex C**. The ALICE Spokesperson and Collaboration Board Chairperson have the same rights as any Team Members without direct affiliation to any ALICE Member Institute, Clustered Institute or Project. The Team Members constitute the **Collaborators** of ALICE. The Required Duties of the Member Institutes and Clustered Institutes and their related Team Members are specified in **Annex D**.

7. Each Associate Institute shall designate an **Associate Team Leader** and one or two **Deputy Associate Team Leaders** from among its Team Members. The rights, duties, obligations and limitations of each Associate Institute and of that Institute's Associate Team Members, Associate Team Leaders and Deputy Associate Team Leaders, as well as the scope of the contribution and its duration, shall be specified in an individual Memorandum of Understanding to be signed by the Spokesperson and the Associate Team Leader of the Institute applying for Associate Membership.

8. Application for admission to the Collaboration as an Associate Institute shall be considered for approval by the Management Board (Hereinafter also "MB" as defined in

ARTICLE III, Section 6). Upon approval of such an application by the MB, the application will be considered by the Collaboration Board (Hereinafter also “CB” as defined in ARTICLE III, Section 3) for final Endorsement. The term “Member Institute” in this Constitution shall not include “Associate Institutes,” however, the Memorandum of Understanding admitting an Associate Institute may expressly grant that institute any of the rights of Member Institutes as provided for in this Constitution.

9. All Member Institutes and Clustered Institutes, and their Team Members, shall have equivalent rights and obligations as set forth within the provisions of this Constitution, and shall have access to any and all data taken in the course of operation of the ALICE experiment. Any and all operational resources, as well as all software relevant to ALICE shall be available for every Team Member to review and to use, as well as to the general public to the extent required by the applicable laws and regulations.

10. All physics-related issues, including all new scientific results before they are shown to the public, as well as technical issues about the detector and its upgrade are to be presented in plenary meetings open to the Collaboration, chaired by the Physics Coordinator (Physics Forum) or by the Technical Coordinator (open session of the Technical Board, hereinafter referred to as “TB” as defined in ARTICLE III, Section 7.1), respectively, prior to approval.

11. All plenary meetings shall be open to all Team Members.

Section 2. ALICE Juniors

1. Within the current structure of ALICE Team Members, we recognize a special classification of Team Members to be referred to as ***Junior Team Members***.

2. Junior Team Members shall be defined as all ALICE Team Members who are: currently enrolled in a Bachelor’s, Master’s, PhD (or equivalent) degree program; or less than 5 years after the official date of receipt of their PhD or equivalent degree, or less than 8 years after the date of receipt of a Bachelor’s, Master’s, or equivalent University Degree.

3. The Junior Team Members shall self-organize an election process with the approval of the Collaboration Board Chairperson, to elect three individuals from among their members. These ***Junior CB Representatives*** (hereinafter Junior Representatives) shall include at least one student. Junior Representatives shall be elected for a term of not more than 2 years; they must have been Junior Team Members for at least six months at the time of their election, and may serve their entire term as long as they satisfy the conditions of Junior Team Members at the time of their election.

ARTICLE II – Collaboration Spokesperson

Section 1. General Provisions

1. The Collaboration Board shall elect a ***Spokesperson*** to serve a nominal term of three years beginning on January 1 of the year after the election (as described in ARTICLE III, Section 4) occurs. No individual may be elected to serve more than one nominal three-year term as Spokesperson unless otherwise specified in this Constitution.

2. The Spokesperson is responsible for the execution of all aspects of ALICE activities, and reports to the Collaboration Board. The Spokesperson has the discretion to determine which decisions to refer to the Collaboration Board. The Spokesperson is the primary representative of the Collaboration to CERN management, to other Institutes, to funding agencies, and to Governmental and non-Governmental organizations. The Spokesperson is an *ex-officio* member of all ALICE Management committees.

3. The Spokesperson serves as the Chair of the Management Board (ARTICLE III, Section 5, Clause 3).

4. The Spokesperson must be resident at CERN during the full term of office.

5. Upon election by the ALICE Collaboration the Spokesperson shall serve only after being endorsed by the CERN Management.

6. The Spokesperson shall nominate an individual from among all Team Members in the Collaboration to serve as the **First Deputy Spokesperson**, and may nominate a **Second Deputy Spokesperson**. Endorsement by the Collaboration Board as well as by CERN Management is required for the appointment of the First and Second Deputy Spokespersons to take effect. The Deputy Spokespersons have the power to act in place of the Spokesperson when designated by the Spokesperson to do so.

7. The Deputy Spokespersons serve in that capacity only during the term of office of the Spokesperson that nominated them.

8. The Spokesperson may designate another individual Team Member of the Collaboration to represent the Collaboration for a specific activity after receiving approval from the Collaboration Board Chairperson.

9. Should the office of Spokesperson become vacant during the nominal term, an **Interim Election** of a new spokesperson shall take place at the next timely meeting of the Collaboration Board. Given the time needed for a Search Committee to be formed (as specified in ARTICLE III, Section 4, Clause 2) and to arrange for the nominal election process to properly occur as mandated by this Constitution, the First Deputy Spokesperson shall serve as the **Acting Spokesperson**, if available to assume the duties, until a new Spokesperson is elected and is available to take office. If available, the Second Deputy Spokesperson shall assume the role of First Deputy Spokesperson. Should the First Deputy Spokesperson be unavailable to assume the duties of the Spokesperson, the Second Deputy Spokesperson shall serve as Acting Spokesperson, in which case the Collaboration Board Chairperson shall appoint an Acting First Deputy Spokesperson from among the Team Members, with the endorsement of both the Management Board and CERN Management. Should neither Deputy Spokesperson be available to assume the duties of Acting Spokesperson, the Collaboration Board Chairperson shall appoint an Acting Spokesperson from among the Team Members, with the endorsement of both the Management Board and CERN Management. The Acting Spokesperson shall serve until the newly elected Spokesperson assumes the office.

10. A Spokesperson elected in an Interim Election may set the date of assumption of the office for up to 6 months following the date of the Interim Election.

11. The term of service of a Spokesperson chosen in an Interim Election will begin on the date of assumption of the office, and shall end on December 31 of the third full calendar

year following the date of the Interim Election. The total time served shall count as one term.

12. The Spokesperson and the Deputy Spokespersons shall not represent any country, Member Institute, Clustered Institute or interest group within ALICE during their term in office.

ARTICLE III – Management

Section 1. General Provisions

The management of ALICE is carried out by a number of Boards and Committees, which are structured in different levels with differing scope, decision-making authority, and responsibilities, as specified in this Constitution. Each of these management bodies may take specific actions or make decisions to discharge their responsibilities as indicated in this Constitution. These bodies and their corresponding levels are:

- Collaboration Board
- Management Board
- Operational Boards:
 - Technical Board
 - Resource Board
 - Physics Board
 - Computing Resource Board
 - Editorial Board
 - Conference Committee
 - Service Work Board
- First-Level Coordinators
 - Run Coordinator
 - Trigger Coordinator
 - Upgrade Coordinator
 - Electronics Coordinator
 - Software, Physics Data Processing and Computing Coordinator
- ALICE Projects
- Diversity Office

All decisions and actions of the individual Operational and Project Management Boards are directly reviewable by the Management Board and ultimately by the Collaboration Board.

All ALICE Board and Committee members shall be required to maintain their status as ALICE Team Members.

Section 2. Collaboration Board Membership

1. The Collaboration Board has the complete plenary power to consider all issues, policies, decisions and recommendations that are relevant to the construction, maintenance, operation and upgrading of the ALICE Experiment, as well as any issues related to the analysis and publication of any information or data taken during the course of the ALICE Experiment. Decisions rendered by the Collaboration Board under the

auspices of this Constitution shall be final, with the sole appeal within the Collaboration being to the Collaboration Board itself.

2. The Collaboration Board shall elect (as described in Section 4) a ***Collaboration Board Chairperson*** to serve a nominal term of 3 years beginning on July 1, following the Collaboration Board meeting during which the election was held. No single individual may be elected to more than one term as Collaboration Board Chairperson.

3. The Collaboration Board Chairperson shall schedule, set the agenda for, and preside at all meetings of the Collaboration Board.

4. The Collaboration Board Chairperson shall nominate a ***First Collaboration Board Deputy Chairperson*** and a ***Collaboration Board Secretary*** for the endorsement by the Collaboration Board. The Collaboration Board Chairperson may nominate a ***Second Collaboration Board Deputy*** for the endorsement by the Collaboration Board.

5. The Deputy Chairpersons serve in that capacity only during the term of office of the Collaboration Board Chairperson that nominated them.

6. The Collaboration Board Chairperson and the Collaboration Board Deputy Chairpersons shall not represent any country, Member Institute, Clustered Institute or interest group within ALICE during their term in office.

7. Should the office of Collaboration Board Chairperson become vacant during the nominal term, an Interim Election of a new Collaboration Board Chairperson shall take place at the next timely meeting of the Collaboration Board. Until a new Collaboration Board Chairperson is elected, the First Collaboration Board Deputy Chairperson shall serve as the ***Acting Collaboration Board Chairperson***, and if available, the Second Collaboration Board Deputy Chairperson shall assume the role of First Collaboration Board Deputy Chairperson. In the absence of any available Deputy Chairpersons, the Spokesperson with the endorsement of the Management Board shall appoint an Acting Collaboration Board Chairperson from among the Team Members at large. The term of a Collaboration Board Chairperson chosen in an interim election shall end on June 30 of the calendar year in which, on January 1, at least 2 years but not more than 2.5 years of the term have elapsed; and the total time served shall count as one term.

8. Clustered Institutes shall nominate their unique representative to the ALICE Collaboration Board.

9. The ***Nominal Members*** of the Collaboration Board shall be composed of the Team Leader from each Member Institute that has three or more Team Members holding a PhD or equivalent, and of the representatives of the Clustered Institutes that have three or more Team Members holding a PhD or equivalent, as defined in the Memorandum of Understanding for Maintenance and Operations (CERN-RRB-2002-034) in Annex A. Member Institutes and Clustered Institutes with fewer than three such PhD qualifying Team Members may agree to combine to attain or surpass the required minimum number of three for the purpose of having representation on the Collaboration Board. The Team Leaders of all such combination agreements (Voting Groups) shall notify the Collaboration Board Chairperson and the Collaboration Board Secretary of the ***Common Member*** selected to represent their combined Member Institutes or Clustered Institutes at meetings of the Collaboration Board.

10. The Collaboration Board shall also include three *ALICE Junior Team Members* as Junior Representatives.

11. All ALICE Junior Representatives shall be required to maintain their status as ALICE Team Members.

12. The Nominal, Common and ALICE Junior Representatives shall constitute the *Eligible Voting Members* of the Collaboration Board, and shall each have one vote in all matters considered by the Collaboration Board.

13. The *ex-officio (non-voting) Members of the Collaboration Board* shall include: the Spokesperson and their Deputies, the Collaboration Board Chairperson and their Deputies, the members of the Management Board, the Collaboration Board Secretary, the Associate Team Leaders, and at the discretion of the Collaboration Board Chairperson, any other individual Team Members or additional ALICE Staff Members. *Ex-officio* membership itself shall not preclude such members from also simultaneously holding an otherwise voting membership in the Collaboration Board.

Section 3. Collaboration Board Meetings

1. The Collaboration Board shall convene a nominal meeting at least once during each ALICE Week (ARTICLE III, Section 5, Clause 13) with an Agenda (ARTICLE III, Section 3, Clause 2) to be circulated to the Collaboration Board Members a minimum of three weeks prior to that scheduled meeting.

2. Additional Collaboration Board meetings may be called at the discretion of the Collaboration Board Chairperson. For an additional Collaboration Board meeting to be held outside an ALICE Week, minimum notice of two weeks is required, accompanied by a proposed Agenda. For an additional Collaboration Board meeting during an ALICE Week, notice shall be given by email and, when possible, orally during a prior Collaboration Board meeting. Note that when such Additional Collaboration Board meetings during ALICE Weeks are called, any subjects during any Additional meeting requiring substantive votes must be within the scope of the Agenda items from the nominal meeting.

3. Collaboration Board meetings shall be open to all Team Members and may be broadcast by electronic means at the sole discretion and under the control of the Collaboration Board Chairperson. The Collaboration Board Chairperson shall have the discretion to close the meeting at any time, in which case only the Voting and *ex-officio* Members of the Collaboration Board may remain present with no electronic broadcasts allowed. The Formal Voting process of Elections shall be conducted in closed meetings as required by ARTICLE III, Section 4, Clause 3. Under exceptional circumstances, at the discretion of the Collaboration Board Chairperson, the Collaboration Board meeting can be held as a virtual meeting, with remote, electronic participation by all or part of the attendees. In such cases, attendance during the Formal Voting process will be restricted to the Voting and *ex-officio* Members of the Collaboration Board by electronic means.

4. The Collaboration Board Chairperson, in consultation with the Spokesperson and the supporting staff, shall prepare the **Agenda** for each Collaboration Board meeting. Any Voting Member or *ex-officio* member of the Collaboration Board may request additional items to be included. All items, for which a formal binding vote by the Collaboration Board can be anticipated, shall be included. The Agenda may allow for the addition of discussion items from the attending members during the meeting.

5. The proceedings of the meetings of the Collaboration Board shall be recorded in minutes by the Collaboration Board Secretary. Draft minutes shall be prepared and circulated to the members of the Collaboration Board a maximum of six weeks after the prior regular meeting of the Collaboration Board, at which the minutes of the prior meeting shall be submitted for formal approval, and shall serve as the official record.

6. Any Nominal or Common Voting Member of the Collaboration Board may name the Deputy Team Leader or any other member of their Team or Teams represented for the duration of a particular meeting or portion thereof by advising the Collaboration Board Chairperson, or the Chair's designee of the assignment of a **Replacement Voting Member**. That Replacement Voting Member shall have all rights and privileges of the original Voting Member for the duration of that meeting while representing the original Voting Member. A Replacement Voting Member for a Junior Representative must be a Junior Team Member, and if that Junior Representative is the only student Junior Representative, their Replacement Voting Member must also be a student Junior Team Member.

7. Any Nominal or Common Voting Members who are neither present nor represented by a Replacement Voting Member at a Collaboration Board meeting may assign their **Voting Proxy** to any other Voting Member who is present, with the limitation that no single Voting Member shall be in possession of more than two Voting Proxies in addition to that Voting Member's nominal vote. The Junior Representatives may only give their proxy to another Junior Representative. A Voting Proxy shall be established with the notification and acceptance by both the Collaboration Board Chairperson or the Chair's designee, and by the Voting Member who is being assigned the Voting Proxy.

8. Meetings shall be conducted based upon the principles stated in Robert's Rules of Order, as specified in **Annex E**, unless suspended or revised by simple majority vote of those present, including proxies.

9. A **Quorum** shall be required in order to convene a meeting initially, or to reconvene a meeting after a short recess to conduct the official business of the Collaboration Board, or to continue with the agenda during a meeting. The presence of at least 1/2 of current Eligible Voting Members in addition to the presence of at least 2/3 of Eligible Voting Members including assigned Voting Proxies, constitutes a Quorum. In the case of virtual meetings, the presence of participants attending in person or electronically will be registered and counted.

10. The determination of a positive or successful vote on any matter shall be with reference either to the number of actual **Votes Cast** or to the total number of currently **Eligible Voting Members**, depending upon the subject of the vote as specified in this Constitution. In any vote, Voting Members may cast a vote of Abstention, which counts as a Vote Cast.

11. All non-election votes are open unless otherwise specified, and may be conducted by a show of hands unless a secret ballot is specifically requested by any Voting Member present with a second. All Elections shall be tabulated by secret ballot.

12. Non-Election decisions, additions, deletions and modifications of items in the Annexes of this Constitution, and endorsement votes of the Collaboration Board require a minimum of a 2/3 majority of the Votes Cast in order to be approved.

13. Amendments and additions to this Constitution, exclusive of the Annexes, require a 2/3 majority of the Eligible Voting Members.

14. A motion to admit new Member Institutes or Associate Institutes, or to suspend existing or reinstate suspended Member Institutes or Associate Institutes, requires a 2/3 majority of the Eligible Voting Members.

15. A motion for removal of the current office-holder of any ALICE management position including elected positions or any of their Deputies requires a 2/3 majority of the Eligible Voting Members.

16. At the discretion of the Collaboration Board Chairperson, voting on all matters, except elections, may be resolved at any time by email and/or other electronic means on issues previously discussed as agenda items at a Collaboration Board meeting. For cases in which no prior discussion has occurred, the Collaboration Board Chairperson may authorize such votes by e-mail or other electronic means with the concurrence of the Spokesperson and members of the Management Board. For all votes by e-mail or other electronic means, one week shall be the minimum time allowed for a response, and a positive vote requires a 2/3 majority of the Eligible Voting Members. The results of any such vote shall be communicated to the Collaboration Board via similar email or other electronic means in a timely manner after the deadline for voting has passed.

17. Voting on any motion on a subject not specifically identified in this Section requires a 2/3 majority of the Eligible Voting Members to pass.

Section 4. Spokesperson and Collaboration Board Chairperson Elections

1. Elections to determine the Spokesperson, the Collaboration Board Chairperson and the Members of the Management Board, shall be held during ALICE Week meetings of the Collaboration Board prior to the beginning of the term of office of the position to be filled, unless the election is to fill a vacant position, in which case the election may be set for the next timely ALICE Week.

2. Candidates for Spokesperson and for Collaboration Board Chairperson shall be solicited by a **Search Committee** that shall be appointed by the Collaboration Board Chairperson no later than the end of the ALICE Week prior to the ALICE Week during which the election is scheduled. All nominees must be ALICE Team Members. All nominations must be accompanied by a second from a Team Member not from the same Member Institute. The Search Committee shall determine the willingness of each nominee to serve in the position if elected. The list of nominees who have agreed to serve if elected shall be reported to the Collaboration Board Chairperson at least six weeks prior to the election. Only the Search Committee may organize and conduct uniform Collaboration-wide interviews of each individual candidate prior to the nominal date of the Collaboration Board meeting at which the election process will commence.

3. The election process for Spokesperson and Collaboration Board Chairperson shall commence with each candidate being given an opportunity to address the Quorum after which the **Formal Voting** shall commence. The candidates and all individuals not expressly members or *ex-officio* members of the Collaboration Board shall not be present during any discussion prior to and during the Formal Voting process, nor shall any such discussion or process be made available external to the meeting prior to the completion of the Formal Voting process. Should the current Collaboration Board Chairperson (or

Acting Collaboration Board Chairperson, if applicable) be a candidate in the election, or should there be any potential conflict of interest for the Collaboration Board Chairperson with respect to any of the candidates, a Deputy Collaboration Board Chairperson shall act as Collaboration Board Chairperson and preside over the election process until any potential conflict of interest has been removed.

4. The ballot shall consist of the list of names of the nominees and a place to indicate Abstention. Each Voting Member present shall be given one ballot plus one or two additional ballots equivalent to the number of Proxies for that specific election that the Voting Member may properly possess. In the case of virtual meetings, each Voting Member will receive an electronic ballot plus one or two additional ballots equivalent to the number of the Proxies for that specific election which the Voting Member may properly possess.

5. A candidate is elected by receiving 2/3 of the Votes Cast.

6. A non-binding **Straw Vote** may be taken at any time as a separate vote during the Formal Voting process, at the discretion of the Collaboration Board Chairperson.

7. The Formal Voting process for the election of Spokesperson and Collaboration Board Chairperson is as follows:

- **A.** If there is more than one candidate on the ballot in a round of voting and no candidate is elected, the candidate receiving the lowest number of votes is removed from the ballot for all-subsequent voting. If there are more than two candidates remaining and multiple candidates are tied with the lowest number of votes, all such candidates' names are removed from the ballot.
- **B.** If there are multiple candidates in a round of voting and all candidates receive the same number of votes, a further round of voting shall be taken with all candidates on the ballot. Should that additional round of voting also result in a similar tie, the election shall be declared failed and voting terminated.
- **C.** If there is only one candidate on the ballot in a round of voting and the minimum vote total to elect is not achieved as a result of that vote, then the voting may continue at the discretion of the Collaboration Board Chairperson until either the candidate is elected or the votes for the candidate are fewer than or equal to the total received in the most recent prior round of voting, in which case the voting shall be terminated.
- **D.** Should the Formal Voting be terminated, the election shall be considered to have failed, and the Collaboration Board Chairperson shall again appoint a Search Committee to seek candidates for election in the following ALICE Week.
- **E.** If the election has not terminated during a Formal Voting process, the meeting may be adjourned for a specified time at the discretion of the Collaboration Board Chairperson, after which the meeting shall resume, taking up the election process at the status it had reached at the time of the prior adjournment.
- **F.** In the event of a failed election for Spokesperson or Collaboration Board Chairperson, and the next election would occur after the end of the nominal term of the current office holder, that office holder shall remain in office beyond the end of their nominal term, and may continue to serve in that capacity until there is a successful subsequent election to fill their position.

Section 5. Management Board General Provisions

1. The Management Board is responsible for the management of the ALICE Experiment in all matters of a scientific, technical, organizational, operational and financial nature.
2. The Management Board has the authority to review all decisions and recommendations from any of the Operational Boards and Projects.
3. The Spokesperson is the chair of the Management Board (ARTICLE II, Section 1, Clause 3).
4. ALICE Projects shall be represented by the Project Leaders of major projects as defined by the Management Board. The definition of a major project shall be determined with the endorsement of the Collaboration Board.
5. The Spokesperson, Deputy Spokespersons, Collaboration Board Chairperson and Deputies; the Technical, Resource, Physics, Computing Resource and Service Work Coordinator(s) or Board Chairperson(s); the Editorial Board and Conference Committee Chairpersons; the Run, Trigger, Upgrade, Electronics and Software, Physics Data Processing and Computing Coordinators; one of the three Junior Representatives as chosen by the Juniors; and one of the Diversity Officers shall be members of the Management Board.
6. The Spokesperson shall nominate the Coordinators/Chairpersons and Deputy Coordinators/Chairpersons of each of the Operational Boards.
7. Four members of the **Management Board** shall be elected by the Collaboration Board for a term of three years, to begin at the end of the ALICE Week during which they were elected. The term shall end upon the timely election of a replacement. No individual shall be elected for more than one term on the Management Board.
8. The Spokesperson shall provide for the taking of minutes during all Management Board meetings, which shall be made available to all Team Members after approval by the Management Board.
9. The Management Board shall nominally meet monthly except when there are extraordinary circumstances precluding such a timely meeting. In that event, the Spokesperson will resume the monthly meeting at the earliest reasonable time.
10. The Spokesperson has the discretion to invite additional attendees to Management Board meetings, which are otherwise closed meetings.
11. The Spokesperson shall be the arbiter of all decisions of the Management Board after considering the input from other members.
12. The Management Board, in consultation with the Physics Board, shall arrange for a minimum of three **ALICE Weeks** per calendar year, during which appropriate plenary meetings shall be arranged.
13. The Management Board, in consultation with the Spokesperson, shall determine and maintain the **ALICE Calendar**, which shall include the dates for the **ALICE Weeks** and such **ALICE Mini-Weeks** as may be required. The dates for the ALICE Weeks and ALICE-Mini-Weeks should be determined at least six months in advance with the provision that in exceptional circumstances, ALICE Mini-Weeks may be scheduled as required.

14. All applications for Membership or Associate Membership shall be presented by the Spokesperson to the Management Board for consideration and the endorsement to the Collaboration Board. The Spokesperson has the discretion to keep the detailed contents of any individual Memorandum of Understanding confidential, entirely or in part.

Section 6. Management Board Elections

1. Nomination of candidates for the elected positions on the Management Board as specified in Section 5, Clause 7 of this ARTICLE, are solicited directly by the Collaboration Board Chairperson from the Voting Members of the Collaboration Board. Nominations may be submitted directly to the Collaboration Board Chairperson, at least two weeks prior to the meeting at which the election will occur. Nominations require a second from a Voting Member of the CB from another Member Institute. The election process for each such position proceeds in the same manner as for the election of the Spokesperson and Collaboration Board Chairperson. When multiple positions are to be filled, the voting for the subsequent positions begins with a ballot containing all the original candidates with the candidate or candidates that have been elected removed. Should the Formal Voting for a position be terminated with a single candidate not being elected, the election for that position will be considered to have failed. The ballots for any subsequent voting during that election's Formal Voting process will not include the final candidate in the failed election. The Collaboration Board Chairperson shall re-open the nominations for that position for election in the following ALICE Week.

2. Should an elected position become vacant during the term of that member of the Management Board, an election to replace that member shall take place at the next meeting of the Collaboration Board, and the replacement member's term shall be for a full 3-year term from that election.

Section 7. Operational Boards General Provisions

1. The Coordinators and Chairpersons of all ALICE Operational Boards, and their Deputies, are nominated by the Spokesperson (ARTICLE III, Section 5, Clause 6) and require the endorsement by the Management Board and Collaboration Board. They report to the Spokesperson.

2. All Operational Boards shall nominally meet during ALICE Weeks and ALICE Mini-Weeks, or more frequently as required.

3. The Coordinators or Chairpersons of the Operational Boards that meet only during ALICE Weeks shall circulate a Draft Agenda to the members of that Operational Board at least two weeks prior to any meeting of that Board to solicit any additions. A Final Agenda shall be circulated at least one-week prior to the meeting. In the absence of any Agenda items, that meeting may be cancelled. Operational Boards that meet more often than just ALICE Weeks may establish their own reasonable Agenda requirements.

4. Minutes documenting all decisions and recommendations shall be kept for all Operational Board meetings, and all approved minutes except for those from the Resource Board shall be made accessible to all Team Members in a timely manner.

5. Attendance at all Operational Board meetings shall nominally be limited to the members of that Board. The Board Coordinator or Chairperson shall have the discretion to admit other individuals to attend the meetings of that Board.

6. The Coordinators or Chairpersons of all Operational Boards shall be the final arbiter of all decisions after considering the opinions of all of the Board's Members, and shall report all decisions and unresolved issues to the Management Board.

7. The Spokesperson and Deputy Spokesperson(s), the Collaboration Board Chairperson and Deputy Collaboration Board Chairperson(s), shall be *ex-officio* members of all Operational Boards.

Section 7.1. Technical Board

1. The Technical Board (TB) is the principal steering group in all matters requiring technical coordination or decisions. All matters determined to have a significant impact on the performance or resources of ALICE shall be referred to the Management Board.

2. The Technical Board shall be chaired by the Technical Coordinator or, in the absence of the Technical Coordinator, by the Deputy Technical Coordinator. The Technical Coordinator has a 3-year renewable term.

3. The members of the Technical Board shall be established by the Management Board. The members of the Management Board and the Deputy Technical Coordinator shall be *ex-officio* members of the Technical Board. Additional Team Members may be invited to be members of the Technical Board at the discretion of the Technical Coordinator.

Section 7.2. Resource Board

1. The Resource Board (RB) is responsible for all matters related to the costs and resources of the Collaboration, evaluation of in-kind contributions, relations with Funding Agencies, contracting policy, and all administrative matters.

2. The Resource Board shall be chaired by the Resource Coordinator or, in the absence of the Resource Coordinator, by the Deputy Resource Coordinator (if one exists). The Resource Coordinator has a 3-year renewable term.

3. The Resource Board members shall include the designated ALICE representatives of the national Funding Agencies. The Deputy Resource Coordinator (if one exists), the Technical Coordinator and the Computing Resource Coordinator shall be *ex-officio* members of the Resource Board.

4. Decisions of the Resource Board with significant implications for the Collaboration must be presented to the Management Board and the Collaboration Board for their endorsement.

Section 7.3. Physics Board

1. The Physics Board (PB), in cooperation and consultation with the Editorial Board and Conference Committee, coordinates and oversees all ALICE physics-related activities, including the physics aspects in the development of publications, notes, and oral presentations, using the procedures for the preparation and review of scientific results described in the ALICE Publication Policy (Annex F).

2. The Physics Board shall coordinate with the Run Coordinator, the Trigger Coordinator, the Technical Board and the Management Board to optimize the experimental configuration and data-taking strategies in order to address the physics goals of the Collaboration.

3. The Physics Board shall be chaired by the Physics Coordinator or, in the absence of the Physics coordinator, by the Deputy Physics Coordinator. The Physics Coordinator shall propose the organization of the Physics Board for the endorsement by the Management Board. The maximum duration of a term in office of the Physics Coordinator is three years, and appointment of any individual is limited to one term.

4. The members of the Physics Board shall include the Physics Coordinator, the Deputy Physics Coordinator(s), the conveners of all of the Physics Working Groups, and several appointed members who are ALICE Team Members (see clause 5). The Editorial Board Chairperson(s), Conference Committee Chairperson(s), the Technical Coordinator, the Computing Resource Coordinator, the Service Work Coordinator, the Run Coordinator, the Trigger Coordinator, the Upgrade Coordinator(s) and the Software, Physics Data Processing and Computing Coordinator shall be *ex-officio* members of the Physics Board. Additional Coordinators and ALICE Team Members may be invited to be members of the Physics Board at the discretion of the Physics Coordinator.

5. The appointed members of the Physics Board shall serve for a term of three years. No individual may serve more than one term as an appointed member of the Physics Board. These appointed members shall be nominated by the Spokesperson in consultation with the Physics Coordinator. Such appointments require the endorsement by the Management Board and Collaboration Board.

6. The Physics Working Groups oversee and manage physics analysis activities in specific areas of physics. The Physics Board, upon approval by the Management Board, may modify the structure and focus of the Physics Working Groups.

7. Every Team Member of the Collaboration may participate in the activities of the Physics Working Groups.

8. Physics Working Groups shall each be directed by two Conveners. Physics Working Group Conveners shall serve for a non-renewable term of 2-years. Nominally, the terms of the two Conveners shall be offset from each other by one year.

9. For appointment of a new Physics Working Group Convener, the Physics Coordinator will consult with the members of the Physics Working Group to propose candidates. The Physics Coordinator shall nominate a candidate, in consultation with the Spokesperson and the Management Board, for the endorsement by the Collaboration Board.

10. The Physics Working Group Conveners, in consultation with the Physics Coordinator, may recommend creation of **Physics Analysis Groups** and the appointment of **Co-Coordinators** to direct the efforts of the Physics Analysis Group within their Physics Working Group. Creation of a Physics Analysis Group must be approved by the Physics Board and the Management Board. Individual Co-Coordinators for a specific Physics Analysis Group nominally serve for non-renewable terms of 2-years.

11. The Physics Board shall arrange for regular Physics Forums that shall be open to all Collaborators, at which physics analyses, physics results and paper proposals of the Physics Working Groups will be presented and discussed.

Section 7.4. Computing Resource Board

1. The Computing Resource Board (CRB) is responsible for the oversight of the computing resources of the experiment.

2. The Computing Resource Board is chaired by the Computing Resource Coordinator or, in the absence of the Computing Resource Coordinator, by the Deputy Computing Resource Coordinator (if one exists). The Computing Resource Coordinator has a 3-year renewable term.

3. The members of the Computing Resource Board shall include up to two representatives from each Funding Agency, one representative from the Physics Board, the Software, Physics Data Processing and Computing Coordinator, and a representative from each of the Analysis Facilities. Additional Coordinators and ALICE Team Members may be invited to be members of the Computing Resource Board at the discretion of the Computing Resource Coordinator.

4. A Deputy Computing Resource Coordinator may be nominated. The Deputy Computing Resource Coordinator is a member of the Computing Resource Board.

Section 7.5. Editorial Board

1. The Editorial Board (EB) is responsible for the oversight and management of the publication process for all ALICE publications, conference proceedings, and internal and public technical notes, with the purpose to guarantee an efficient procedure and an effective internal quality assurance for ALICE publications in a timely manner. Details of the Editorial Board's responsibilities and procedures are specified in the ALICE Publication Policy (**Annex F**).

2. The Editorial Board is chaired by one or two Team Members of the ALICE Collaboration. The maximum duration of each Editorial Board Chairperson's term in office is three years, and appointment of any individual to that office is limited to one term. The Editorial Board Chairperson(s), in consultation with the Spokesperson, may nominate one or more deputy Editorial Board Chairpersons(s) to the Management Board for their endorsement.

3. The Editorial Board Chairpersons, in consultation with the Spokesperson, nominate Editorial Board members for the endorsement by the Management Board and Collaboration Board. Editorial Board members shall be appointed for two years, renewable once. The Physics Coordinator or Deputy and one Conference Committee Chair shall be *ex-officio* members of the Editorial Board.

4. The Editorial Board, in coordination with the Physics Board and the Conference Committee, shall administer the policies and procedures as set forth in the ALICE Publication Policy (**Annex F**), and may recommend changes to those policies and procedures, which shall be subject to review by the Management Board and endorsement by the Collaboration Board.

5. The Editorial Board shall provide for the bookkeeping and the archiving of all publications, contributions to proceedings, internal notes, PhD theses, and all other relevant reports concerning ALICE.

Section 7.6. Conference Committee

1. The Conference Committee (CC) is responsible for the oversight and management of all oral and poster presentations given at scientific conferences on behalf of the Collaboration. This includes the selection of presenters, with the goal of equitable distribution of presentations across the Collaboration, as well as internal quality

assurance following effective and efficient procedures as detailed in the **ALICE Publication Policy (Annex F)**.

2. The Conference Committee is chaired by one or two Team Members. The maximum duration of a term in office for a Conference Committee Chairperson is three years, and appointment of any individual is limited to one term. The Conference Committee Chairperson(s), in consultation with the Spokesperson, may nominate one or more deputy Conference Committee Chair(s) for the endorsement by the Management Board.

3. The Conference Committee Chairperson(s), in consultation with the Spokesperson, nominate Conference Committee members, for the endorsement by the Management Board and Collaboration Board. Conference Committee members shall be appointed for two years, renewable once. The Physics Coordinator or one Deputy Physics Coordinator, and one Editorial Board Chairperson shall be *ex-officio* members of the Conference Committee.

4. The Conference Committee shall provide for the bookkeeping and the archiving of all oral and poster presentations given at scientific conferences on behalf of the Collaboration.

Section 7.7. Service Work Board

1. A system referred to as Service Work is established to distribute the service work in a fair manner within the Collaboration.

2. A list of activities identified as Service Work is established and maintained for each of the ALICE projects corresponding to instrumentation, detectors, data taking and preparation, and computing with the aim of ensuring the full success of ALICE data taking during Run 3 and beyond.

3. A Service Work Board (SWB), involving the Service Work Coordinator, Technical Coordination, Run Coordination, Resource Coordination, the Spokesperson's office, the Collaboration Board Chairperson, a representative from the CB, and a representative from the Junior Team Members, is defined with the task to regularly assess the status of activities proposed for the different projects and performed by ALICE Collaborators.

4. The Service Work Board is led and chaired by the Service Work Coordinator. The term of office of the Service Work Coordinator is 3 years renewable.

Section 8. Coordination Areas except those under Operational Boards Scope and General Structure

This section deals with ALICE-wide Coordination Areas except those under the responsibility of the Operational Boards. These are: "*Run*", "*Trigger*", "*Upgrade*", "*Electronics*" and "*Software, Physics Data Processing and Computing*". In the following the coordinators of these Coordination Areas will be referred to as First-Level Coordinators.

1. For each ALICE-wide Coordination Area one (or two) First-Level Coordinator(s) are nominated by the Spokesperson, endorsed by the Management Board and the Collaboration Board.
2. The First-Level Coordinators are *ex-officio* members of the Management Board.

3. The Spokesperson, in agreement with the First-Level Coordinators, may nominate one or more Deputies for the endorsement by the Management Board.
4. The ALICE-wide Coordination Areas in general may have Second-Level Coordinators, who coordinate the work of groups addressing specific tasks. Second-Level Coordinators are nominated by the First-Level Coordinators, in agreement with the Spokesperson, and must be endorsed by the Management Board.

Section 8.1. Run Coordination

1. The Run Coordinator(s) (RC) term of office is 1 year renewable.
2. The Run Coordinator(s) will coordinate the global commissioning of the ALICE detectors and systems and their operation during the physics runs.
3. The Run Coordinator(s) will coordinate with the Physics Board, the Trigger Coordinator, the Technical Board and the Management Board to optimize the experimental configuration and data-taking strategies in order to address and realise the physics goals of the Collaboration.

Section 8.2. Trigger Coordination

1. The Trigger Coordinator(s) (TRC) term of office is 3-year non-renewable.
2. The Trigger Coordinator(s) will coordinate the preparation and operation of the ALICE Trigger Systems (central trigger system and trigger detectors), as well as the development and operation of the software algorithms for the selection of events in the online/offline data processing system.
3. The Trigger Coordinator(s) will coordinate with the Run Coordinator, the Physics Board, the Technical Board and the Management Board to optimize the trigger configuration and data-taking strategies in order to address the physics goals of the Collaboration.

Section 8.3. Upgrade Coordination

1. The Upgrade Coordinator(s) (UC) term of office is 3-year non-renewable.
2. The Upgrade Coordinator(s) shall coordinate all ALICE upgrade activities through their interactions with all upgrade projects, the Physics Board and the Technical Board.
3. The Upgrade Coordinator(s) shall coordinate the preparation of the Expression of Interest (EOI) and Letter of Intent (LOI) for the upgrade projects. They shall organize the preparation of Technical Design Reports in close collaboration with the management of the upgrade projects and the Technical Coordination
4. The Upgrade Coordinator(s) may recommend the creation of Upgrade Working Groups (UWG) to carry out specific tasks related to the development and implementation of the upgrade programme. The UWGs are created and dissolved by the Upgrade Coordinator(s) as determined by the needs, in consultation with the Spokesperson and the endorsement by the Management Board.

5. The activity of each UWG shall be coordinated by one or two Conveners. The Conveners of the UWGs are nominated by the Upgrade Coordinator(s), in agreement with the Spokesperson and endorsed by the Management Board.

Section 8.4. Electronics Coordination

1. The Electronics Coordinator(s) (EC) term of office is 3-year renewable.
2. The activity of the Electronics Coordinator is organized following the guidelines of the ALICE Technical Coordination, with three main tasks:
 - define the ALICE wide readout architecture and its interfaces to the central systems, and follow up on their implementation;
 - review the (sub)projects on electronics specifications and monitor the progress of their development, through direct interaction with the projects and through technical reviews;
 - identify and promote common solutions, whenever possible and effective, evaluate the resources required to implement them, and supervise their execution.
3. In general, the (sub)projects have to provide their own required resources. The EC is fully informed of all the activities of such projects and continuously interacts with the project's management to avoid the build-up of technical, schedule and resource problems. Dedicated Task Forces are set up whenever appropriate.
4. The Electronics Coordinator(s) shall work in close collaboration with the Project Leaders.
5. Regular meetings are scheduled, in conjunction if possible, with other more general ALICE meetings.

Section 8.5. Software, Physics Data Processing and Computing Coordination

1. The Software, Physics Data Processing and Computing Coordinator(s) (SDC) term of office is 3-year renewable.
2. The Software, Physics Data Processing and Computing Coordinator(s) is responsible for the overall management of the activities related to software development, the processing of physics data, the analysis framework and distributed computing. This includes the strategy, the planning, the priorities and the usage of the resources in concertation with the other boards and projects.
3. The development of the detector specific software for calibration, simulation and reconstruction of physics events, is carried out within well-defined projects, which have their own internal management structure. The Software, Physics Data Processing and Computing Coordinator(s) is fully informed of all activities of such projects and continuously interacts with the project's management to avoid the build-up of technical, schedule, resource or other problems.
4. The Software, Physics Data Processing and Computing Coordinator(s) shall operate through its interactions with the O² (online/offline) Project and the Physics Board.

Section 9. ALICE Projects

1. An ALICE Project is a collaborative enterprise proposed and undertaken by a specified

number of Member Institutes and Clustered Institutes to pursue a well-defined goal for the benefit of the ALICE Collaboration.

2. New ALICE Projects shall be initially presented to the Management Board. The Management Board may seek input from any relevant ALICE Boards or Projects for initial consideration and recommendation. The Spokesperson shall present the recommendation from the Management Board to the Collaboration Board for their endorsement.

3. Each Project shall have a Project Leader who may be nominated by the Project Member Institutes for the endorsement by the Management Board. Deputy Project Leaders may be proposed by the Project Leader as appropriate for the endorsement by the Management Board. The Project Leader shall chair any Project Management Board that may be formed, if needed by the project, and shall represent the Project with respect to ALICE. Any Deputy Project Leaders may be designated to represent the Project Leader when appropriate.

4. Sufficiently complex projects may be divided into Subprojects with Subproject Leaders who shall be nominated by the Project Leader for the Endorsement of the Management Board.

5. The Project Leader or a Subproject Leader is responsible for the execution of the Project or Subproject adhering to the physics priorities; this includes calibration if applicable, maintenance and performance monitoring, and potential changes and upgrades. The Project Leader manages the financial resources of the project.

6. Projects may, upon completion of their intended goals, or due to an end of the need for the completion of the ongoing project, request official termination by the Collaboration Board with the endorsement of the Management Board. The Management Board may also recommend for the endorsement by the Collaboration Board that the process of termination of ongoing projects be initiated for sufficient cause.

Section 10. Diversity Office

1. The ALICE Diversity Office is responsible for:

- a. Advising ALICE Team Members and management as well as serving as a liaison regarding diversity matters;
- b. Promoting diversity initiatives and maintaining diversity web pages;
- c. Monitoring diversity issues, collecting and analyzing data, and reporting regularly to the Collaboration;
- d. Liaising with diversity offices at CERN and in other LHC experiments.

2. The Spokesperson shall nominate the members of the Diversity Office, at least one of whom shall be a Junior Team Member, for endorsement by the Collaboration Board.

3. The Diversity Officers serve 3-year renewable terms.

ANNEX A – Incorporated External Documents

The following Technical Proposals are hereby formally incorporated into this Constitution by reference:

CERN/LHCC 95-71

CERN/LHC 96-32

CERN/LHC 99-13

CERN/LHCC 2001-021

CERN/LHCC 2002-016

CERN/LHCC 2006-014

CERN/LHCC 2012-012

The following *Memoranda of Understanding* are hereby formally incorporated into this Constitution by reference:

CERN-RRB-D 00-41: Memorandum of Understanding for Collaboration in the Construction of the ALICE Detector (and its amendments and addenda)

CERN-RRB-2002-034: Memorandum of Understanding for Maintenance and Operation of the ALICE Detector

CERN-RRB-2005-007: Addendum 1 to the Memorandum of Understanding for Maintenance and Operation of the ALICE Detector - Core Computing

CERN-RRB-2013-125: Addendum 35 to the Memorandum of Understanding for Collaboration in the Construction of the ALICE Detector - Common Infrastructure for the Upgrade of the ALICE Detector

CERN-RRB-2014-104: Addendum 36 to the Memorandum of Understanding for Collaboration in the Construction of the ALICE Detector - Upgrade of the ALICE Inner Tracking System

- ***CERN-MoU-001: Addendum 1 to the Addendum 36 - Participation of University College of Southeast Norway, University of Bergen, University of Oslo, Western Norway University of Applied Sciences in the ALICE ITS Upgrade and Additional contribution of the Czech Republic to the ALICE ITS Upgrade***

CERN-RRB-2015-065: Addendum 39 to the Memorandum of Understanding for Collaboration in the Construction of the ALICE Detector - Upgrade of the Readout & Trigger System

- **CERN-MoU-002:** *Addendum 1 to the Addendum 39 - Participation of iThemba LABS, University of Cape Town and University of Witwatersrand in the Upgrade of the Readout & Trigger System*
- **CERN-MoU-2019-057:** *Addendum 2 to the Addendum 39 - Participation of the Czech Republic in the Upgrade of the Readout & Trigger System*

CERN-RRB-2016-001: Addendum 40 to the Memorandum of Understanding for Collaboration in the Construction of the ALICE Detector - Muon Forward Tracker

- **CERN-MoU-2019-056:** *Addendum 1 to the Addendum 40 - Participation of the Czech Republic in the Muon Forward Tracker*

CERN-RRB-2016-002: Addendum 41 to the Memorandum of Understanding for Collaboration in the Construction of the ALICE Detector - Upgrade of the ALICE Time Projection Chamber

CERN-RRB-2016-003/Rev: *Addendum 44 to the Memorandum of Understanding for Collaboration in the Construction of the ALICE Detector – Upgrade of the Online-Offline System (O²)*

ANNEX B – Team Leader Duties and Responsibilities

1. Each Team Leader shall represent their Member Institute at all formal meetings of The Collaboration Board, either by attendance in person, by appointment of a surrogate from among that Institute's Team Members, or by the assignment of a proxy to another voting member of The Collaboration Board to vote in that Team Leader's place.
2. Each Team Leader is responsible for timely registration and updating of Team Member information from their Institute in the ALICE Database, currently GLANCE.
3. Each Team Leader is responsible for timely and accurate entry of information in the appropriate ALICE Database of all PhD Thesis work performed at their institute.
4. Each Team Leader shall be responsible for monitoring and ensuring that the service tasks, as specified in Annexes C, required of Team Members from that Institute's Team are performed in a timely manner.

ANNEX C – General Team Member Duties, Responsibilities and Restrictions

All Member Institutes **and Clustered Institutes** and Team Members of the Collaboration shall have equivalent rights and obligations as set forth within the provisions of this Constitution, and shall have access to any and all data taken in the course of operation of the ALICE experiment. Any and all operational resources, as well as all software relevant to ALICE shall be available for every Team Member to review and to use, as well as to the general public to the extent required by the applicable laws and regulations.

Team Members are required to participate in taking shifts in the running of the experiment, in the physics analysis of the data, and to provide service work for the Collaboration. Detailed duties are specified in Annex D.

ANNEX D – Explicit Team Member Required Service Duties

Each current Team Member shall incur the following required duties:

Each year, shift schedules are determined by the Run Coordinator, discussed in the MB and allocated to the Member Institutes based on the M&O-A distribution.

Every institute member of ALICE has to contribute to service work for the Collaboration and it is the duty of team leaders to ensure that every PhD student provide a minimum of six months equivalent of service work for the Collaboration before he/she can get a PhD thesis based in any significant way on the ALICE experiment.

The Technical Coordinator shall oversee the list and distribution of service tasks to ALICE members.

ANNEX E – Collaboration Board Meeting Procedural Rules of Order

1. All ALICE Collaboration Board Meetings shall be conducted under the auspices of a previously circulated **Agenda** as mandated by the ALICE Constitution.
2. ALICE Collaboration Board Meetings shall proceed to consider **Agenda** items in the order in which they appear in the **Agenda** unless that order is modified during the meeting by an approved motion to change the **Agenda** order.
3. The Collaboration Board Chair, a Deputy Collaboration Board Chair or an Alternate person as assigned by the Collaboration Board Chair to act as the Meeting Chair for all or part of the meeting shall chair all ALICE Collaboration Board Meetings.
4. The initial Meeting Chair shall call the meeting to order as soon after the announced meeting starting time as practical, but only if a **Quorum** is present, counting only those members whose presence is specified in the ALICE Constitution as being counted towards the making of a **Quorum**.
5. ALICE Collaboration Board Meetings shall be conducted under the auspices of Robert's Rules of Order (Brief Version), which allows for "suspending" any of the individual rules during a meeting by a vote of the CB. It is important to note that doing so usually requires that an alternative rule or procedure be adopted in the place of the suspended rule.

ANNEX F - ALICE Policy for Publications and Presentations (Adopted November 29, 2019)

- The Conference Committee can be contacted at alice-cc@cern.ch
- The Editorial Board can be contacted at alice-editorial-board@cern.ch
- The Physics Board can be contacted at alice-mgt-physics-board@cern.ch

Section 1. Introduction

This document defines the rules for ALICE publications and presentations. It addresses the following topics:

- ALICE official figures
- Conference presentations: selection of speakers, abstract submission, talk or poster preparation, rehearsals of talks, and conference proceedings
- Procedures for physics publications
- Posting of published data
- Analysis Notes, ALICE Public Notes, Technical Public Notes, Technical Publications
- Student theses
- Authorship rules

Section 2. Physics Analysis Procedures

All data from all parts of the ALICE detector are available to all Member Institutes and Team Members of the ALICE collaboration for analysis. The groups and institutions responsible for each subsystem must ensure that the necessary analysis tools, algorithms, codes, and correction parameters for that subsystem are available, documented, and kept up-to-date.

All physics analyses in ALICE must comply with the ALICE computing rules approved by the Management Board:

<http://alice-offline.web.cern.ch/General-Information/ComputingRules.html>

Physics results presented in ALICE talks/posters, conference proceedings, and publications must be based on analysis carried out within an ALICE Physics Working Group (or Groups, in the case of overlapping topics). The analysis procedures and details of the evaluation of statistical errors and systematic uncertainties must be documented in an Analysis Note.

Section 3. ALICE official figures

This section presents the definition, usage, and approval mechanisms of the various types of official ALICE figures:

- Simulation
- Performance
- Work in Progress
- Preliminary
- Published

All figures related to detector performance or physics results must be approved as official ALICE figures, following the procedures specified in this section, before they can be shown outside the Collaboration.

Each candidate for an official figure must be approved by the relevant Physics Working Group (PWG) or Project Group. If identification of the relevant group is not clear, the Physics Coordination chooses the PWG that is best suited for discussing the figure.

Section 3.1 Bookkeeping of figures

- Each PWG and Project Group, in consultation with the Editorial Board (EB), contributes to an ALICE Repository of Figures accessible via a web interface located at <https://alice-figure.web.cern.ch/>. The Repository is maintained by the ALICE web masters.
- The Repository contains all Simulation, Performance, Preliminary, and Published figures.
- Each figure entry in the Repository specifies a Contact Person and is accompanied by a complete caption.
- Each figure must include the following:
 1. Clearly labelled variables and units of measure
 2. A legend specifying the colliding systems and energy and the nature of the uncertainties (statistical and systematic).
 3. Published figures must explicitly include the label “ALICE”.
 4. In case the figure was published in a Public Note the figure must include a reference to this note.
- Each unpublished figure will be specified with its category (Simulation, Performance, Preliminary).
- Only the most recent version of each Performance plot will be available in the Repository.

The following paragraphs define the various categories of official figures, their usage and their bookkeeping. Identical rules apply for results that are reported as numerical values.

Section 3.2 ALICE Simulation figures

ALICE Simulation figures contain results of simulations of physics events and/or detector response, for example to illustrate expected performance of the detector, the size of corrections for detector effects, or reference distributions from event generators. Simulation figures must be accompanied by all relevant information to reproduce the figure, including version numbers of the software used, generator settings and a precise description of how the quantities in the figure were calculated from the simulation. This

information is stored together with the figure in the Repository. Each ALICE Simulation figure has a unique identification number and must be labelled “ALICE Simulation”.

ALICE Simulation figures are discussed in the relevant Physics Analysis Group (PAG) or PWG and approved by the PWG convener(s) or Project leader(s) in consultation with the PAG coordinators.

Section 3.3 ALICE Preliminary figures

ALICE Preliminary figures are intended for presentation at conferences and workshops. There are three subcategories of ALICE Preliminary figures:

1. Physics Preliminary figures show the results of analysis and must include estimates of all statistical and systematic uncertainties in the underlying analysis that are relevant for the interpretation of the measurement and the understanding of underlying physics. There will be only one version of each preliminary result. Numerical values of preliminary results may be given to persons who are not members of the ALICE collaboration on request. Such requests are handled by Physics Coordination. Preliminary results are superseded by the published version of the results.
2. Technical Preliminary figures provide supporting information about the analysis. Technical Preliminary figures are for example used to illustrate intermediate steps in the analysis or to compare different analysis methods for the same physical quantity. Technical Preliminary figures may show results that are not corrected for detector effects or results without systematic uncertainties. For Technical Preliminary figures, numerical values are not available to people outside the Collaboration.
3. Derived Preliminary figures contain reported results from Physics (or Technical) Preliminary figures, for example in a different graphical representation, or to compare to a (new) model prediction, to an existing result of a different ALICE measurement, or to results of other experiments.

Each ALICE Technical or Physics Preliminary figure must be presented at the Physics Forum and be approved by the PWG convener(s) and Physics Board before it can be shown outside the Collaboration. Technical Preliminary figures may subsequently be updated (for example with a larger data sample) after approval by the PWG convener(s) and Physics Board. ALICE Physics and Technical Preliminary figures must be accompanied by an Analysis Note, which contains all relevant information about how the figures were obtained, including the software version(s), the data set(s), selections that were used, analysis algorithms and a description of the calculation of all uncertainties. The Analysis Note is reviewed by an Analysis Review Committee which is appointed by the PWG convener(s) in consultation with the PAG coordinators. The Analysis Note is made available to the collaboration before the results are presented at the Physics Forum.

Derived Preliminary figures can only be shown outside the collaboration after approval by the PWG convener(s) and the Physics Board.

Each ALICE Preliminary figure has a unique identification number and must be labelled "ALICE Preliminary".

An ALICE Preliminary figure may be withdrawn in the case that an error is found in the analysis that invalidates the physics message of the figure. Such cases have to be brought

to the attention of the Physics Board by the PWG convener(s) after which the figure will be withdrawn from the Repository. An Analysis Note must be prepared to document the error and the withdrawal of the figure. In this case the PB decides if the withdrawn Preliminary figure can be replaced by a corrected version or only by publishing the result. If an ALICE Public Note is published, a new corrected version containing the correct figure must be submitted to the EB for approval.

Some of the preliminary figures updated by the final analysis might not appear in the publication, for example because of a restriction on the article length. When this is the case, the EB can decide to make them publicly available via a Public Note containing the figures, the corresponding captions and a reference to the publication if the finalization of the figure to a published status is deemed important. Otherwise these preliminary figures are made obsolete.

Section 3.4 ALICE Performance figures

ALICE Performance figures are used to illustrate aspects of detector performance, in a general context, independent of a specific analysis. Any figures that illustrate intermediate steps in an analysis are ALICE Preliminary figures (see Section 3.3).

ALICE Performance figures are intended to illustrate the quality of the calibration, the behaviour of ALICE (sub-)detectors, the resolution for tracking or particle identification techniques, etc. Performance figures can be shown outside the collaboration after approval by the relevant PWG convener(s), the Data Preparation Group (in consultation with the PB), or the relevant Project leader(s). Performance figures evolve with time, for instance with a new version resulting from a new data set. Any change of the figure requires explicit re-approval by the PWG convener(s), or the Data Preparation Group, or the Project leader(s).

Each ALICE Performance figure has a unique identification number and must be labelled "ALICE Performance."

Section 3.5 ALICE Work in Progress figures

ALICE Work in Progress figures are transient, intended only for progress reports to funding agencies, review committees, reports of students within ALICE institutes, and national physics society meetings. They cannot be used for general presentations such as conference talks and seminars, other than these exceptional cases.

ALICE Work in Progress figures illustrate the status of an analysis, in which some corrections may not yet have been applied and from which quantitative physics conclusions cannot be drawn.

Work in Progress figures are for use by individual teams only. Therefore, the responsibility for quality control and approval rests with the corresponding team leader(s).

Work in Progress figures are not entered into the Repository and do not receive any figure identification number.

ALICE Work in Progress figures must not be made publicly accessible, e.g., the slides cannot be made accessible on a web page or in a meeting program.

Section 3.6 Published figures

ALICE Published figures are all figures containing final results that appear in a publication or Public Note. Each ALICE Published figure has a unique number and is stored in the Repository, with reference to the corresponding publication or Public Note. When a figure is published, the corresponding Preliminary figure(s) are removed from the Repository (or marked obsolete).

Section 3.7 Conflicts and exemptions

Conflicts regarding content and presentation of figures will be resolved by the Spokesperson, in consultation with the Physics Board (PB) and the EB chair(s), PWG convener(s) and Project leader(s). Exemptions to the above general rules may only be granted by the Spokesperson, and only in exceptional circumstances.

Section 4. ALICE Presentations: Conference talks and posters, major seminars, and technical presentations

An ALICE Presentation is a talk or poster by an ALICE Collaborator, presented on behalf of the ALICE Collaboration. ALICE Collaborators should use good judgment in determining whether a presentation is being made on behalf of ALICE, and should contact the Conference Committee (CC) in case of doubt. While a sharp distinction sometimes cannot be drawn between an ALICE and a non-ALICE presentation, there are several elements that clearly require designation of a presentation as being on behalf of ALICE, including:

- Invitation for major seminars or conference talks to present ALICE results
- Submission of a contributed conference talk or poster to present ALICE results
- First public presentation of a Preliminary figure
- Significant discussion of Performance figures and their underlying analyses
- Discussion of ALICE technical issues
- Invitation for a seminar or conference talk which was arranged through the ALICE CC, even if not only ALICE results are presented

The following committees and individuals play a role in the review and the approval of a public presentation (abstract, talk, poster, and proceedings):

- The Presenter is the person giving a public presentation (talk or poster) on behalf of the ALICE Collaboration. The Presenter is responsible to ensure that all appropriate steps are followed and that all approvals are obtained before showing or publicly discussing ALICE results outside the Collaboration.
- The Project Group(s) and/or the Physics Working Group(s) are the primary venues where the Presenter discusses the results to be presented. The abstract, talk/poster, and proceedings must be circulated in the PWG or Project Group for discussion prior to delivery or submission to the conference, according to timelines defined below.
- The Team leader of the Presenter (or a person delegated by the Team leader) reviews all material, i.e. abstract, talk, poster, and proceedings, and indicates their approval in the Repository.

- Project leader(s) or PWG convener(s) are responsible for quality assurance of the material, and must approve the abstract, talk/poster, and/or proceedings for topical presentations prior to delivery or submission to the conference.
- The CC coordinates all aspects of ALICE Conference presentations, with the goal of equitable distribution of talks across the collaboration, effective quality assurance, and efficient procedures. The CC chair(s) act on behalf of the CC, consulting and delegating to members of the CC as appropriate. The CC calls for conference speakers and selects speakers for oral presentations. The CC reviews abstracts, talks and posters to ensure high scientific quality, and CC approval is necessary before submission or presentation. The CC notifies the Team leader, PWG convener(s), and Project leader(s) about all material that requires their review and approval. If one of the latter bodies does not act even after a reminder, the final decision about approval rests solely with the CC. However, due to the fact the abstract approval by the Team Leader implies also financial support to attend a conference, the Team Leader approval for abstract submission remains strictly mandatory.
- The EB provides oversight and management of conference proceedings and any other related document. The EB reviews each document submitted to conference proceedings and must approve it prior to submission.
- The CC organizes public rehearsal sessions in order to review presentations. The CC decides which conferences and speaking opportunities require rehearsals, and must communicate those decisions to the Collaboration.
- Physics Coordination is responsible in consultation with the Spokesperson for the selection of speakers and the organization of rehearsals of talks for specific occasions such as CERN seminars and at the LHCC sessions.
- The Spokesperson is the final arbiter of all disputes arising at any stage of the conference presentation process.

The primary criteria of the CC for selecting speakers are the capability of the speaker to effectively address the audience with a high quality presentation of ALICE results and a fair and equitable distribution of talks among individuals and groups who have contributed to a given analysis or project. Concerning the latter, also career considerations, equal opportunity, major presentations in the recent past or near future, and responsibilities for and contributions to the Collaboration are taken into account. The CC will seek input from the PB, PWG Convener(s) or Project leader(s), and the Spokesperson. The CC will maintain lists of eligible speakers on various topics, as appropriate, and review and revise such lists on a regular basis. Higher priority will be given to young scientists who have not yet obtained stable employment.

In the interest of valuing and promoting the work done by junior scientists in the collaboration, former ALICE Collaborators (having left the Collaboration by no more than 12 months) on request are allowed to act as presenters (talk or poster) on behalf of the ALICE Collaboration, but only for presentations on work with a significant direct contribution by them within ALICE (typically a former PhD student, no longer with ALICE, presenting ALICE results, discussed in his/her thesis). These requests shall be considered and granted by the CC chairs in consultation with the Physics Board.

The talk rehearsal plays a crucial role in the preparation of a major seminar or conference talk. Its purpose is to ensure a high quality of the presentation. The approval of figures and the discussion of their physics message should take place prior to the rehearsal.

There are three general categories of ALICE talks: (i) Invited conference and major seminar talks, (ii) Contributed conference talks and posters, and (iii) Technical Project presentations.

The mechanisms for discussion and approval of each of these are:

Section 4.1 Speakers and Abstracts for Invited Conference Talks and Major Seminars

- A Major Seminar is defined as a high profile talk to a broad audience at a specific institution. These may be known in different places as PH Seminar, Departmental Colloquium, Departmental Seminar, Invited Lecture, etc. The CC should be consulted in case of doubt whether a talk should be considered as a Major Seminar.
- The CC is responsible for selecting the ALICE speaker for an invited Conference Talk or Major Seminar. The CC can seek input from the Physics Board or poll the Collaboration for nominations. ALICE Collaborators who have been invited ad personam for a Conference Talk or a Major Seminar on ALICE physics must request approval from the CC. The CC can suggest an alternative speaker.
- A CC chair is the point of contact between the Collaboration and each Conference organizing committee. The CC receives the conference invitation and corresponds with the conference organizing committee regarding the nature and scope of the talk.
- The CC will maintain an up-to-date list of all conference and major seminar invitations received and nominations made.
- The speaker nominated by the CC is responsible for composing and submitting the abstract, and for ensuring that all approvals for the abstract, talk and proceedings are obtained in a timely fashion, first from the Team leader, then from the PWG convener(s) or Project leader(s), and finally from the CC (for abstracts and slides) or the EB (for proceedings).
- The CC is responsible for the final approval of the abstract before it can be submitted. The abstract must be distributed to the Collaboration for discussion via upload to the Repository at least 7 days prior to the submission deadline of the conference. The speaker has to take the Collaboration discussion into account and revise the abstract appropriately. The CC will then approve the abstract for submission to the conference.

Section 4.2 Speakers and Abstracts for Contributed Conference Talks and Posters

- The ALICE PWGs will take a strategic approach to ALICE contributed conference presentations. The PWG convener(s) will solicit abstracts from the PWGs, to be considered as contributed talks and posters for a given conference. As part of this process, the PWG will identify analyses and physics topics appropriate to a given conference, and the PWG convener(s) will work with the members of the PWG to ensure contributed abstracts in these areas.
- Any member of ALICE may propose an abstract for consideration by the PWGs as a contributed talk or poster.
- An abstract may have only one author, who will be the Presenter. Two PhD students or a postdoc and a PhD student can be joint authors of a poster.
- The PWG convener(s) will identify cases of multiple abstracts on the same or largely overlapping topics. Such conflicts will be resolved by the CC and PWG convener(s), and not delegated to the conference organizers by submitting

multiple overlapping abstracts. The CC chair(s) will have final say in case of conflict.

- The abstract must be distributed to the Collaboration for discussion via upload to the Repository at least 7 days prior to the submission deadline of the conference. The author has to take the Collaboration discussion into account and revise the abstract appropriately. Upon review and approval from the author's Team leader and the PWG convener(s) or Project leader(s) the CC will review the abstract and give the final approval for submission to the conference.
- For selected conferences the CC may decide that abstracts will not be submitted individually by the Presenters but centrally by the CC and anonymously "for the ALICE Collaboration". In that case, the abstracts will be prepared by the PWG convener(s) or Project leader(s) or by persons designated by the PWG convener(s) or Project leader(s). The review and approval procedure will be the same as for abstracts prepared by individual Presenters with the exception of the Team leader approval. The latter will be required once the presentation is assigned to an individual Presenter. The CC will inform the PWG convener(s) and Project leader(s) when the central and anonymous submission process will be used for a conference.
- Upon approval by the CC, the abstract is submitted to the Conference by the Presenter or a person in charge "for the ALICE Collaboration."
- For some conferences the submitted abstracts are published as proceedings. Such abstracts have to be uploaded by the Presenter to the Repository not later than 10 working days before the abstract submission deadline. These abstracts are reviewed by the EB and CC, which will grant the final approval in agreement with the EB chair(s), in addition to the normal approval procedure.

Section 4.3 Preparation of Presentations for Invited and Contributed Conference Talks, Major Seminars and Posters

- In general, new Preliminary Results are first reported at Conferences and not seminars. Presentation of new Preliminary results at a Major Seminar requires approval of the Spokesperson.
- Only approved ALICE figures may be shown. Refer to Section 3 for the definition of each type of figure and its intended use. It is the responsibility of the Presenter to ensure that appropriate approval has been obtained for all figures.
- A draft of the talk slides must be uploaded to the Talks Repository (located at <https://alice-conferences.web.cern.ch/>) for Collaboration discussion at least 7 days prior to the seminar or the start of the conference. It is understood that for major conferences, preceded by the approval of new results, less time might be available for the review and approval of slides or posters. In such cases the CC may communicate different deadlines.
- Talks of a broad nature must be uploaded to the "General Talks" section of the Repository. Talks of a topical nature have to be uploaded to the corresponding PWG or Project section of the Repository. The Presenter has to take the Collaboration discussion into account and revise the slides/poster appropriately. The slides/poster have to be reviewed and approved by the Presenter's Team leader, Physics Coordination (in case of General presentations), the appropriate PWG convener(s) or Project leader(s) (in case of Topical presentations), and by the CC prior to the seminar or start of conference.
- The CC will determine whether the figures are appropriate for the occasion.

- Upon approval by the CC, which may require a rehearsal as described below, the presentation is posted on the ALICE Conferences web page as the “As Approved” version. Only cosmetic changes can be made after this point, and no changes may be made to the approved figures. The final version should be uploaded as the “As Given” version.
- Conference presentations including results of several experiments are approved by the ALICE CC in agreement with the CC (or their equivalents) of all other involved collaborations.
- Poster review is carried out according to the procedure of contributed presentations.

Section 4.4 Rehearsals for Invited and Contributed Conference Talks and Major Seminars

For major conferences and individual presentations, in particular those which include new results, the CC may require the rehearsal of talks by the presenters. The CC will communicate to the relevant PWG convener(s), Project leader(s), and presenters for which conferences or presentations rehearsal sessions will be organized by the CC. The rehearsal sessions are open to the Collaboration and active participation is encouraged.

- The rehearsal will in general take place during the week before the start of the conference, prior to CC approval of the slides.
- The rehearsal of each talk requires a member of the CC to be present. For topical talks a representative of the corresponding PWG or Project is required to be present. For general talks a representative of Physics Coordination is required to be present.
- The presenter will consider comments and modifications suggested in the discussion which takes place after each rehearsal talk. The presenter will upload a revised version of the slides to the Repository for further review and approval.

Section 4.5 Conference Proceedings

- A Conference Proceeding is the write-up of a presentation at a conference.
- It is the responsibility of the Presenter to ensure that the necessary approvals are obtained in a timely fashion.
- For topical presentations, the Proceedings draft is distributed by the Presenter, after approval by their Team leader, for discussion within the appropriate Physics Working Group at least 15 working days prior to the conference deadline. After discussion, the PWG convener(s) review the Proceedings draft and, upon approval, send it to the EB for review and approval. Submission of the proceedings to the EB must occur at least 5 working days prior to the conference deadline.
- For general presentations, the Proceedings draft is made available for the Collaboration on the ALICE web site at least 15 working days prior to the conference deadline. The EB reviews the Proceedings draft. The EB may delegate the review of proceedings to other ALICE Collaborators, as appropriate.
- Upon approval by the EB, the Presenter submits the Proceedings to the Conference and may post it on the arXiv.
- Conference Proceedings including results of several experiments are approved by the ALICE EB in agreement with the EB (or their equivalents) of all other involved collaborations.

Section 4.6 Project Technical Presentations

- Project Technical Presentations are conference talks and seminars of a technical nature, presenting results from an existing ALICE Project or developments towards a potential future ALICE Project.
- Project Technical Presentations may be made either on behalf of the entire ALICE Collaboration or of a subset of ALICE working on a specific Project. The Project leader(s) and the CC determine the authorship of the contribution. The procedures in this section apply in both cases.
- Such presentations may arise due to an invitation from a conference, contribution of a presentation to a conference, or invitation for a seminar.
- The Project leader(s) are responsible for choosing the speaker.
- Only official figures from the Repository can be included in Project Technical Presentations.
- The procedures for reviewing and approving the abstract, the slides/poster, and the proceedings are the same as for all other ALICE presentations.
- For some Technical Presentations proceedings are requested by the organizer before the conference. Such proceedings have to be uploaded by the author to the Repository not later than 10 working days before the start of the conference, and these are reviewed by the EB and CC, which will grant the final approval in agreement with the EB chair(s), in addition to the normal approval procedure.

Section 5 Procedures for Physics Publications

The following committees and individuals play a role in the preparation of each Physics Publication:

- The Paper Committee (PC) can only be formed when the analysis results fulfil at least the criteria for being approved as preliminary; i.e., the results have been presented and approved at the Physics Forum, the corresponding Analysis Note has been approved by the PWG convener(s). The content of the paper should be defined.
The PC is headed by the PC chair, who is responsible for the editing and assembling of material. The PC may be composed of further members e.g. having carried out the analysis. A large PC (more than 4 persons) may be formed in case of long papers and complex analyses. The PC is appointed by the PWG convener(s) and approved by the PB. The PC is responsible for all steps from the first draft until the final publication.
- The Internal Review Committee (IRC) is appointed by the EB once a first complete draft of the paper is made available for review.
One member of the IRC is appointed to be the IRC chair, serving as the primary contact person for the IRC and managing the IRC activities. The IRC comprises experts and non-experts on the topic of the manuscript, drawn from across the Collaboration. The IRC carries out a comprehensive review of the physics analysis, accompanying documentation, and the text of the initial manuscript, as well as revisions to the manuscript and responses to comments from the Collaboration and the journal referee at subsequent stages of the publication process. The EB defines the charge of each IRC, and may include special tasks and requests in certain cases.

- The Editorial Board (EB) provides oversight and management of the publication process, ensuring that ALICE Publication Procedures are followed. The EB chair(s) act on behalf of the EB, consulting the members of the EB as appropriate. The EB chair(s) periodically report on the status of all papers in preparation during EB meetings. The EB decides on a list of actions to be taken for delayed papers, with the aim of bringing them to completion.
- The Physics Board (PB) provides oversight and review of the physics content of the manuscript.
- The Spokesperson is the final arbiter of all disputes arising at any stage of the publication process.

Preparation of a Physics Publication occurs in several distinct steps, with a recommended time schedule. Paper Flow scheme is presented at: <https://alice-publications.web.cern.ch/sites/default/files/documents/PaperWorkflow.pdf>

Section 5.1 Initial preparation of manuscript and supporting documentation

- Once an analysis is sufficiently advanced, an Analysis Note is prepared and presented to the PWG. This note contains all information needed for the reproduction of the analysis. A contact person is appointed by the PWG convener(s) for each Analysis Note. Analysis Notes are internal and signed by a subgroup of the collaboration, essentially all those who have contributed to the analysis. Authorship is decided by the PWG convener(s).
- The PWG convener(s) and PAG coordinator(s) appoint Analysis Review Committees (ARC) whose task is to follow the analysis progress and the preparation of the Analysis Note critically and provide support and feedback to the people carrying out the analysis. An ARC member is expected to give a statement when the results are presented at the Physics Forum.
- The PWG convener(s) may propose an ALICE Public Note containing preliminary results to be approved. A contact person is appointed by the PWG convener(s) for each Note. The ALICE Public Note can result from merging of several Analysis Notes and is signed by the Collaboration. The names of the authors of the Note are documented and visible within the collaboration. The PWG convener(s) appoint an internal committee reviewing the Note (NC). The NC is usually composed of members of the PWG and a person from a different PWG to give feedback from an external member. The results of the ALICE Public Note are presented and approved at the Physics Forum. Before the results are publicly shown, the Note has to be approved by the EB. The Note is made publicly available on CDS at the time when the results are publicly shown. The convener(s) should encourage the members of the PWG to provide ALICE Public Notes to accompany ALICE preliminary results whenever possible.
- The PWG convener(s) determine if a physics analysis is ready for consideration as a paper; i.e. the content of the paper is defined, the Analysis Note is approved and, if prepared, the corresponding ALICE Public Note is approved.
- The PWG convener(s) recommend the paper for the presentation at the Physics Forum and for the PB approval.
- Upon the PB approval the PWG convener(s) appoint the PC to prepare the initial manuscript and to create a dedicated page on the ALICE publication web site. The

PB may require at this stage revisions or the merging of several ongoing analyses into a single paper.

- The PB recommends to the EB that an IRC be formed.
- The PB determines the target journal for the manuscript, in consultation with the PC and IRC.
- The EB announces the appointment of the IRC and the target journal on the web pages.
- The PB is responsible for ensuring that the software and data used for the analysis comply with the ALICE computing rules (<http://alice-offline.web.cern.ch/General-Information/ComputingRules.html>). All analysis code has to be uploaded to the ALICE software repository.

Section 5.2 First Collaboration Review

- The IRC reviews the manuscript and supporting documentation, and recommends corrections and changes as necessary.
- Upon approval of the draft by the IRC, the EB verifies that the actions of the PC and IRC meet the required standards, and reviews the draft before approving it for circulation to the full collaboration. The EB review is expected to be delivered within 5 working days.
- Upon EB approval, the EB circulates the draft to the full Collaboration for detailed comment for 10 working days. This review period may be extended by another 5 working days if it takes place during periods in which limited reviewer availability is foreseen or if more extended feedback is desired.
- All supporting material specifying additional analysis details must be made available to the collaboration at this stage.
- This is the main review period for the Collaboration, and it is expected that any remaining significant issues will be raised at this step.
- Up to 5 member institutes are specifically requested by the EB to comment in detail during the Collaboration review period.

Section 5.3 Second Collaboration Review

- The PC prepares a new draft and a set of replies to the Collaboration comments.
- The IRC and the EB review the revised draft and responses to comments, and recommend relevant corrections and changes as necessary and appropriate.
- The PB is involved in case of major changes or open issues.
- Upon IRC approval, the EB circulates the revised manuscript, including revisions to the author list that arose, to the full collaboration for comments for a minimum of 5 working days. This period can be extended by up to 5 more days in case very significant modifications to the paper are introduced after the first collaboration review.
- The main purpose of this second comment period is for the Collaboration to verify that all points raised in the first comment period have been addressed, though on occasion a significant new issue may still be raised at this step.
- The PC prepares a new draft, in response to new comments received. It also prepares a file in a format supported by the HEPData database, containing the numerical values corresponding to the published results.
- The IRC reviews the changes and the file prepared for the HEPData database and performs a check of the numerical values in the HEPData file, and upon acceptance recommends to the EB that the paper is ready for publication.

- The EB carries out a final review of all comments and revisions, and submits the paper draft for CERN review. CERN comments and approval are expected within 1 week.

Section 5.4 Submission to journal and response to referees

- The manuscript submission to the journal and arXiv and the uploading of the HEPdata file are carried out by the EB chair(s) or a person in charge.
- The response from the journal referee(s) is made available to the Collaboration via the corresponding website.
- The PC prepares a revised manuscript and a response to the referees' comments.
- The IRC reviews the modified manuscript and response to the referees' comments, and recommends corrections and changes as necessary.
- Upon approval by the IRC, the EB reviews the changes to the text and the responses to the referees' comments.
- In case of major changes, the EB, in consultation with the PB, sends the revised manuscript and responses to the referees to the collaboration with a deadline for comments of 5 working days. The PC prepares a new draft in response to comments received from the Collaboration at this step.
- The IRC reviews the changes, and upon acceptance recommends to the EB that the paper is ready for resubmission.
- The EB carries out a final review of all comments and revisions, and upon acceptance the EB chair(s) or a person in charge resubmits the manuscript to the journal and posts the revised version on arXiv.

Section 5.5 Final steps

Upon submission to arXiv the paper is made publicly available on the CERN Document Server and on the ALICE web site.

If the paper is rejected by the journal or changes requested by the journal are deemed unacceptable to the Collaboration, appeal or resubmission to a different journal will be considered and formulated by the Spokesperson, the EB chair(s) and the PB coordination in consultation with the PC, IRC, PB, and EB.

Section 5.6 Exceptions

Procedures deviating from the above can be approved by the MB for individual papers in order to speed up the publication process in exceptional circumstances. Such exceptions are communicated to the PB.

Section 6. Posting of Published Data

All figures and data from every ALICE physics publication will be made publicly available on the ALICE web site. Each paper will have a web page that includes links to all figures in the paper in formats suitable for inclusion in both presentations and documents.

Section 7. Other types of publications and notes

Section 7.1 Analysis Notes

Analysis Notes contain all information needed for the reproduction of the analysis.

They are intended to communicate information to the collaboration and document it for future reference. Analysis Notes are signed by a subgroup of the collaboration and are approved by the PWG convener(s).

Analysis Notes are not publicly available and may not be distributed outside the Collaboration. They are accessible to all members of the Collaboration on the ALICE web site <https://alice-notes.web.cern.ch/Documents/Review>.

Section 7.2 ALICE Public Notes

- ALICE Public Notes accompany preliminary results and publications. They contain supporting material, additional and complementary figures and explanation of the methodology used in the analysis.
- ALICE Public Notes can result from merging of several Analysis Notes.
- ALICE Public Notes are authored by the ALICE Collaboration. The names of the authors of the analysis are documented and visible within the collaboration on the link: <https://alice-notes.web.cern.ch/>
- The EB circulates the Public Note to the collaboration for at least 5 working days and may designate one member institute to comment in detail.
- Upon EB approval, the ALICE Public Note is submitted to the CERN Document Server <https://cds.cern.ch/collection/ALICE%20Public%20Notes>.

Section 7.3 Technical Public Notes

- ALICE Technical Note contains technical information about the ALICE detector and its performances, including both hardware and software.
- The authorship of the Note shall be defined by the appropriate Project leader(s).
- The Project leader(s) circulate the Note among all members of the Project for comments and approves it for submission to the EB.
- If a Technical Note is authored by the whole collaboration the EB circulates the draft to the collaboration for comments for at least 5 working days.
- Upon EB approval, the Note is submitted to the CERN Document Server: <https://cds.cern.ch/collection/ALICE%20Public%20Notes>.

Section 7.4 Technical Publications

The purpose of an ALICE Technical Publication is to communicate technical information about the ALICE detector and its performance, including both hardware and software, to the scientific community. The authorship of these papers shall be defined by the appropriate Project leader(s).

The Project leader(s) circulate the draft among all members of the Project for comment, and approves it for submission to the EB, along with a recommendation for the journal. The EB reviews the draft and either returns it to the Project leader(s) with comments or approves it for publication.

The EB chair(s) or a person in charge submits the manuscript to the journal and post it on the arXiv. Response from the journal and referee reports will be circulated among all members of the Project for comment, and resubmission will follow the same procedure as the initial submission.

Section 7.5 Usage of ALICE data and methods in non-ALICE publications

- Members of the ALICE Collaboration may be authors of review papers and papers on general methods, etc.
- ALICE physics and technical data that have not been published by the ALICE Collaboration, in conference proceedings or in a refereed journal, may not be included in non-ALICE publications.
- ALICE physics and technical data that are presented in a student thesis but not in conference proceedings or in a refereed journal may not be included in non-ALICE publications.

Section 8. Student theses

The Editorial Board maintains a list of ALICE students and their thesis topics. This list can be used by the CC, Physics Board and Physics Working Groups to track student activity and promote student involvement in conferences. It is the responsibility of the PWG convener(s), and Project leader(s), together with the thesis advisor(s), to ensure that an electronic copy of the thesis is uploaded in a timely fashion.

Data and analyses presented in a student thesis but not in ALICE Conference Proceedings or in ALICE refereed publication are not considered to be published ALICE results. Results obtained by the student must be labelled "this thesis". The text must be clear in order to prevent such results being taken from a publicly available thesis and considered erroneously as results of the ALICE Collaboration.

All student theses presenting ALICE data must be made available to the collaboration upon acceptance of the thesis and uploaded to CDS. Thesis subjects are on GLANCE, thesis on CDS. It is the responsibility of the thesis advisor and the PWG convener(s) or Project leader(s) to ensure an electronic copy of the thesis and that it is uploaded in a timely fashion.

Section 9. Authorship

The Institute Team leaders are responsible for supplying a list of names, in accordance with the ALICE procedure for M&O payments and related descending authorship rights (c.f. document ALICE-INT-2006-005), in the corresponding GLANCE database. This list contains the names of the authors, the institute to which they belong and the date of joining the ALICE collaboration. The Institute Team leader is also responsible for announcing the departure of people from the collaboration.

Qualifications to sign physics publications:

1. A person must be registered in the ALICE Collaboration Database with the following status: Physicist, Postdoc, Senior Engineer or PhD Student;

2. Physicists, Postdocs and Senior Engineers must be ALICE members for at least one year to be eligible for authorship rights; in addition they must count for the sharing of the budget for Maintenance and Operation Cat. A. If a postdoc was previously an ALICE student, their authorship starts immediately;
3. PhD students must be ALICE members for at least 6 months to be eligible for authorship rights; If a PhD student was previously an ALICE Master student, their authorship starts immediately;
4. PhD students must provide six months equivalent of service work for the Collaboration; Failure to do so in due time can lead to the suspension of signature rights;
5. The corresponding institute must be in good standing, as determined by the Collaboration Board and the Constitution;
6. The qualification period stops when leaving ALICE: PhD students keep authorship rights for 6 months after their departure date. Physicists, Postdocs, Senior Engineers keep authorship rights for 12 months after their departure date;

Exceptions from this rule may be granted by the MB on suggestions from the EB chair(s) in consultation with the EB and spokesperson.

Any author can remove their name from the author list in a particular case. Removal of a qualified author from the author list by the Team leader requires a mutual agreement between the author to be removed and the Team leader.

In the case of a change of affiliation within the collaboration the member stays affiliated with the institute that pays the M&O cost for the one additional year. Other procedures are possible with the agreement of all parties involved.