The MINOS Collaboration Bylaws

Revision 9 adopted September 2011

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§ 1 Institutional Board

§ 1.1 Institutional Board

The Institutional Board (IB) is the ultimate authority for all MINOS Collaboration matters. The IB responsibilities include the appointment of the Co-Spokespeople and Executive Committee, the approval of distribution of operations costs among the collaborators, and the establishment of rules for admitting new collaborators, governing shifts and the publication of scientific results.

§ 1.2 IB Membership

The number of representatives of a collaborating institution on the MINOS Institutional board shall be based on the institution's level of effort in MINOS-related activities. Fermilab shall be represented by two IB members. All other institutions participating in MINOS-related activities at the level of 1 real FTE, integrated over faculty, research scientists, post-docs, and graduate students, shall be represented by 1 IB member. Institutions contributing less or equal than 1 FTE of combined effort shall be classified as a "Small Institution". Small Institutions shall be represented as a block by one IB member. The IB, by a majority vote, may establish the classification of a collaborating institution. A collaborating institution may at any time petition the IB for reclassification. The IB Chair may invite non-members to attend any IB meeting as observers. The MINOS co-spokespersons, if they are not an IB representative, may attend all IB meetings as non-voting members. In addition, Article §11 of these Bylaws gives the Young MINOS Group the right to send an observer to all IB meetings.

§ 1.3 IB Chair and Secretary

Members of the Institutional Board nominate IB Chair candidates verbally during the IB meeting closest to January 1st of even calendar years. There is then a vote by secret ballot. All members of the IB are eligible to vote in this process. The winner of this election is the candidate who polls a majority of the votes cast in this election. If no nominee receives a majority of the votes cast, a runoff by secret ballot is conducted between the two nominees receiving the most votes. In this runoff election, the Chair will recuse him/herself from casting a vote should there be an even number of electors participating, but otherwise is eligible to vote in the runoff election. The Secretary of the IB is chosen informally by the Chairman of the IB to serve during his or her term. The term of the chair starts the day after the collaboration meeting at which the ballot was held or the 1st January closest to the meeting, whichever is later.

§ 1.4 IB Meetings

The IB meets at every collaboration meeting.

§ 2 Selection of Co-Spokespeople and Deputy Spokesperson

§ 2.1 Spokespeople

The scientific leadership of the MINOS collaboration will consist of two equal Co-Spokespersons elected to interleaved three-year terms. The MINOS Co-spokespersons are the scientific representatives of the Collaboration.

§ 2.2 Election of a Co-Spokesperson:

The elections to co-spokesperson will be timed such that the new co-spokesperson has been selected before the IB meetings closest to 1st July 2005 and 1st January 2007 and at 3-year intervals thereafter.

The term of the new co-spokesperson starts the day after the announcement of the election result or the above date, whichever is later.

The full collaboration will be asked to nominate appropriate individuals two months prior to the IB meeting. Nominations will be made to the IB chairperson. Each collaborator may nominate one candidate. After a one-month nomination period, the IB chairperson will consult with those nominees with 3 or more nominations to ascertain their willingness to stand for the election. If no candidate agrees to stand for election, the terminating Co-Spokesperson will continue to serve for six months, after which a special election will be held. The term of the individual elected in a special election will be reduced by the amount needed to cause the sum of his/her term and the additional months served by the terminating Co-Spokesperson to equal three years.

At least two weeks prior to the collaboration meeting following the nominations, the full list of those who agree to be considered will submit written answers ("candidate statements") on issues of importance to the MINOS Collaboration, and the collaboration will have the opportunity to pose questions to the candidates during a plenary meeting of the full MINOS collaboration. The election will be held by email submitted to the IB chairperson or by a web form by qualified electors. The deadline for receiving votes will be four weeks from the collaboration meeting. In the case of a single candidate, the electors will vote to accept or reject the candidate; a majority of votes accepting the candidate will be required for election. If the candidate does not receive a majority, the terminating Co-Spokesperson will continue to serve for six months, after which a special election will be held. The term of the individual elected in a special election will be reduced by the amount needed to cause the sum of his/her term and the additional months served by the terminating Co-Spokesperson to equal three years.

In all other cases, electors will rank order the candidates. If a candidate receives a majority of all first-place votes cast, he/she will be elected. Otherwise, the candidate with the fewest number of first place votes will be eliminated and the rank lists adjusted

accordingly. This process will be repeated until one candidate achieves a majority of all votes cast, or only two candidates remain, in which case the candidate with the most votes will be elected.. In all cases, ties will be resolved by the continuing Co-Spokesperson.

The list of electors will be the same as the current author list on the first day of the election as defined by the MINOS Authorship and Publication Rules

§ 2.3 Selection of Deputy Spokesperson

The Deputy Spokesperson is elected by the Institutional Board to assist the Co-Spokespeople in resource management and representation of the collaboration. The Deputy Spokesperson is nominated by the Co-Spokespeople and then confirmed or rejected by a majority vote of IB members voting by secret ballot. The term of the Deputy Spokesperson is three years commencing 1st January 2004 and at 3 year intervals thereafter unless the IB decides to remove the Deputy Spokesperson at an earlier time as prescribed below. If the office of Deputy Spokesperson is vacant the Co-Spokespeople will nominate a new Deputy Spokesperson to be confirmed or rejected by majority vote (secret ballot) of the IB.

§ 2.4 Removal of a Co-Spokesperson or the Deputy Spokesperson

Any of the Co-Spokespeople or Deputy Spokesperson can be removed at any time by the Institutional Board by a secret ballot of at least 2/3 of the sum of those present plus those voting by proxy (to the Chair) at a regularly scheduled Institutional Board meeting. A two-week notice is required for a vote for removal and such a vote will be taken if at least 5 IB members propose such a vote to the Chair. In the event of a removal, the open position(s) will be filled following the procedures described above.

§ 3 Executive Committee

The Executive Committee (EC) sets scientific and technical policy for MINOS. The EC establishes procedures for making technical choices, e.g. creating technical panels. The longest serving of the Co-Spokespeople serves as the EC Chair. Three members of the EC are chosen each year, at the IB meeting closest to 1st January, for a three-year term. The term will start after the collaboration meeting at which the ballot was held or the 1st January closest to the meeting, whichever is later. The election procedure is as follows. Members of the Institutional Board each submit three names by secret ballot. A nominee is considered nominated if she or he receives at least two votes. This is followed by a closed vote among the six (plus ties) nominees with the most votes. (If there are fewer than six nominees, all are on the ballot.) Each IB member votes for three nominees. The three with the highest numbers of votes are declared elected. This procedure does not include a vote from the Chair of the I.B. unless such a vote is necessary to break a tie. (The Chair can vote for up to three nominees, if necessary, to break ties.) The EC consists of nine elected members. An outgoing co-spokesperson (if available) serves on the executive committee for an additional 2.5 or 3 years (timed to end at an election of the executive committee). Ex-officio members are the Co-Spokespeople, Deputy Spokesperson, the MINOS Operations Manager, the IB chair and a representative of the Young MINOS Group (Article §11).

If a member of the EC resigns or becomes unable to fulfill his duties, there will be a special election at the next IB meeting to fill the vacancy. If a newly elected Co-Spokesperson is a current Executive Committee member, an election for a new Executive Committee member will be held immediately following the election of the Co-Spokesperson for the remaining Executive Committee term of the new Co-Spokesperson.

§ 4 NuMI Project Manager and MINOS Manager

(Was removed in March 2004.)

§ 5 Other MINOS Committees and Documentation

The IB, EC and/or the Co-Spokespeople may also establish standing and Ad Hoc committees as necessary. The up-to-date list of these committees will be maintained in the MINOS Organization Document. The MINOS Organization Document is a summary of collaboration committees and working groups and their relationship to each other. This document is periodically reviewed and updated as described in detail below. In addition, the IB maintains the MINOS Collaboration Membership List as defined in Article 8.

§ 6 Admitting New Institutions to MINOS

A prospective new institution, after conferring with the Co-Spokespeople, will submit a written proposal to the Institutional Board (IB) at least two weeks prior to the meeting of the IB at a regularly scheduled Collaboration meeting. The proposal will state the contributions that the prospective institution is proposing to make to the experiment and include a list of the proposed senior members from the institution (see article 8). The Co-Spokespeople will schedule a presentation by the prospective institution at the Collaboration meeting. The Chair of the IB will circulate the proposal to the IB members prior to the meeting and put consideration of the application on the agenda of the IB meeting. The IB may ask for written clarifications of items in the proposal. At the following regularly scheduled Collaboration meeting, having received any requested written clarifications prior to the meeting, the IB may;

- (1) approve the proposal and formally admit the institution to the Collaboration,
- (2) request further written clarifications to be considered at the next Collaboration meeting, or
- (3) reject the proposal.

The IB will attempt to make decisions on admission of new institutions by consensus. If consensus is not possible, a closed vote will be taken on admission. Admission will require a favorable vote of at least 75% of those representatives with the right to vote present and voting (an abstention is not a vote for this purpose).

§ 7 Removal of Institutions from MINOS

The Chair of the IB should annually identify inactive institutions, using the criterion that active institutions must have performed a reasonable amount of active work on MINOS within the previous twelve months and submit this list to the IB for approval. The Chair of the IB will write letters to institutions on the approved list inquiring whether they intend to work on MINOS in the future, and asking them to describe their plans for such work. The IB will take appropriate action based on the response to these letters.

§ 8 MINOS Collaboration membership

§ 8.1 MINOS Collaboration membership

A senior member of the Collaboration is a physicist from a collaborating institution who has a permanent appointment or an appointment that under normal circumstances can be expected to be renewed indefinitely. All other members of the Collaboration are regular members. Senior members are admitted to the Collaboration individually. Regular

members are selected by their institutions. The only distinction between senior and regular members is the method by which they are admitted to the collaboration, as provided by this Article.

Senior members are admitted to the Collaboration in one of four ways:

- (1) by being on the Collaboration membership list as of the Ely 2000 meeting,
- (2) by being on the approved list of senior members when their institution was admitted to the Collaboration (see Article 6),
- (3) by being a regular member of the collaboration and receiving a position at any collaborating institution that would qualify him or her for senior membership status, and (4) by individual application.

A senior physicist at a collaborating institution who is not a member of the Collaboration and who wishes to join the Collaboration, applies for membership in the same way as a new institution, as provided in Article 6, except that a presentation at a Collaboration meeting is not necessary and that the IB may act on the application at the same meeting that the application is received.

The Membership List (see Article 5) distinguishes between members on the "author" list (for publications, as described below) and other members.

§ 8.2 Updating MINOS membership rules

Each MINOS institution will be responsible for updating/verifying the MINOS Collaboration Membership List for their institution at least once a year. A yearly questionnaire will be distributed by the IB Chair to each institution to help keep track of all members and their status.

§ 8.3 Leaving a collaborating institution

Individuals maintain their membership in the Collaboration automatically for one year after they leave a collaborating institution. They can maintain a longer-term association with MINOS by being "adopted" by a collaborating institution, with the approval for this process being ruled on by the IB on a case-by-case basis.

§ 9 Publication and Authorship Rules

The rules governing MINOS authorship and publications are set in a separate document.

§ 10 Amending the MINOS Bylaws

These Bylaws may be amended by the IB. The new bylaw or an amendment shall be presented to the IB at one of its regularly scheduled meetings for consideration. This proposed amendment will be distributed via e-mail to the entire collaboration for their comments following this meeting. The IB will then consider the amendment for adoption at the next regularly scheduled meeting of the group. An amendment receiving an affirmative vote of two-thirds of the IB membership will be considered approved.

§ 11 Young MINOS Group

The young members of the collaboration constitute the "Young MINOS Group". These are students as well as post-docs in an early stage of their career. They have the right to send an observer to all IB meetings and to appoint an ex-officio member of the Executive Committee.

Revisions:

All articles, EXCEPT Article 9, were approved in the MINOS IB meetings held at Fermilab on September 22 and 23, 2000.

Paragraph 1-3 was modified at the Ely'2001 meetings.

Paragraphs 1-2 and 1-3 were modified on October 20, 2001 at the IB meeting at Fermilab.

Modifications to allow co-spokespeople were made at the April 2002 meeting

Paragraph 2.2 was modified at the June and December 2002 meetings

Modifications for co-spokespeople finalized and approved December 2002

Modifications December 2003 to refer to co-spokespeople and to clarify the dates of elections were approved at the January 2004 IB meeting in Cambridge.

Modifications in May 2004 to better define the start of terms for the IB chair, cospokespersons and executive committee members. The old article 9 was replaced with a reference to MINOS publication and authorship rules. Layout changes

Adding the Young MINOS Group and changing the ex-officio members of the EC in January 2005.

Paragraph 4 was removed and the ex-officio membership of EC modified in March 2005.

The co-spokesperson election procedure was modified in June 2006 to include candidate statements and Q&A session at the collaboration meeting.

Change to allow co-spokesperson to attend IB meetings, if not institutional representative in December 2006.

Change to include updated list of IB responsibilities in June 2007

Change to clarify the date and allowed method of the co-spokesperson election June 2008

Changed to eliminate IB shortlisting, institute preferential voting, require 3 nominations for co-spokesperson, and clarify the duties of the deputy spokesperson September 2008

August/September 2009 – text changes solely to reflect previous decisions on removing shortlisting.

March 2010 – Changed electors to be the same as the current author list, and added a previous cospokesperson to the executive committee

January 2011 – Added outgoing cospokesperson to xcom

September 2011 – Clarified outgoing cospokesperson term on xcom