

Report from the DUNE IB Governance Document Review Committee

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1 Motivation and Activities of the Committee

The Collaboration Governance Document (CGD) was created shortly after the collaboration formed two years ago. The IB chair established this ad-hoc committee to perform a review of the document to determine if fine-tuning is needed and to address a few known items, such as inconsistencies with the LBNF/DUNE Project Management Plan (PMP) and DUNE Management Plan (DMP) and unanticipated situations not addressed by the CGD, e.g. withdrawals from elected positions before the end of normal term.

The IB chair requested that the committee

- maintain the CGD as a high-level document that defines overall collaboration structure and governance principles
- maintain flexibility to respond to (inevitable) unexpected events but provide sufficient guidance to minimize ambiguity
- relegate details to attachments
- ensure consistency across all collaboration documents and coherency with LBNF management documents.

The committee was formed in May 2017 and had a phone meeting with the IB chair on May 11 to discuss the charge. On May 18, the committee had an in-person meeting during the DUNE collaboration meeting at Fermilab. Three people who were on the original committee that drafted the CGD also attended the in-person meeting to offer their insights. The committee then reviewed the document individually and solicited comments from the IB. One IB member responded to the request for comments. The committee met on June 14 to discuss the comments. The committee met again on June 30 to discuss the draft of the committee report.

This report documents the committee's opinions on what should be changed in the CGD. The next section outlines substantial changes that the committee think the IB should discuss in detail. The last section lists more mundane changes, such as correcting obvious errors or implementing new but noncontroversial procedures. This report will be submitted to the IB and discussed at the IB meeting during the August 2017 collaboration. A vote on potential changes to the CGD will occur at a later meeting.

2 Issues to be discussed by the IB

This section describes issues that the committee felt needed to be discussed in detail by the IB. For each item, two or more options are given to help guide the IB's discussion.

Article 2

Art.2.1, Membership of the DUNE Collaboration

Current: “The founding membership of the DUNE collaboration comprises all individuals who signed the Letter of Intent, “An Experimental Program in Neutrinos, Nucleon Decay and Astroparticle Physics Enabled by the Fermilab Long-Baseline Neutrino Facility”, submitted to the Fermilab Program Advisory Committee on December 22, 2014, or subsequently requested to be added to the collaboration list. They must have also agreed to participate in the DUNE experiment and belong to academic institutions that have at least one faculty member (or equivalent) with intention of making relevant contributions to the DUNE experiment.”

Proposed:

Option A: “Members of the DUNE Collaboration must be affiliated with collaborating institutions. The list of DUNE Collaboration members is maintained by the IB Chair.”

Explanation: Since the collaboration is established, there is no longer any reason to describe the founding membership of the collaboration, only what defines the current membership. State explicitly that members must be affiliated with a DUNE institution.

Option B: “Individuals who contribute significantly to the DUNE Experiment, as well as those who contribute significantly to the LBNF facility required for DUNE, are eligible to be members of the DUNE Collaboration. Members of the DUNE Collaboration must be affiliated with collaborating institutions, and must adhere to the policies adopted by the Institutional Board. The list of DUNE Collaboration members is maintained by the IB Chair. Changes to this list can only be made by each institution’s representative in the IB. Collaboration members have access rights to DUNE/LBNF data as well as to various collaborative tools and resources, including document databases, software code repositories, mailing lists, and computing resources.”

Explanation: Same as option A, plus added language for collaborators’ eligibility, responsibilities, and rights.

Article 2.4, Add option to remove an individual collaborator.

Option A:

Current: “2.4 Removal of Institutions from DUNE”

Proposed: “2.4 Removal of Institutions or Collaboration members from DUNE”

Current: “Removal of an institution from DUNE can be proposed by any IB or EC members for the institution’s actions that are judged to be gravely detrimental to the experiment or for the institution’s extreme inactivity in the experiment (more than one year).”

Proposed: “Removal of an institution or collaboration member from DUNE can be proposed by any IB or EC members for the institution’s or member’s actions that are judged to be gravely detrimental to the experiment or for the institution’s or member’s extreme inactivity in the experiment (more than one year).”

Option B: No change

Explanation: We could give the option to remove an individual collaborator, rather than an entire institution.

Article 3

Article 3.3, Require motions at IB meetings to be seconded.

Option A: Add to Article 3.3 “Any motion made at an IB meeting requires the motion be seconded by another IB member in order to go forward.”

Option B: No change.

Explanation: Requiring that a motion be seconded is common in other IBs, and it’s a good mechanism to prevent personal issues interfering with objective judgement by IB members.

Article 3.4, Include the possibility of removing an IB chair.

Option A: Add to Article 3.4 “The IB chair can be removed at any time by the IB by a secret ballot of at least 2/3 of the sum of those present at a regularly scheduled Institutional Board meeting. The quorum for the vote is a 2/3 majority of the entire IB membership. A two-week notice is required for a vote for removal and such a vote will be taken if at least five IB members propose such a vote to the IB. One of the IB members proposing the vote will conduct the vote. In the event of a removal, the open position will be filled following the procedure described above. The newly elected IB Chair will have a term that includes the remaining term of the removed IB Chair in addition to the nominal two-year term.”

Option B: No change.

Explanation: There is currently no way to remove an IB chair. There might be situations where the ability to remove an IB Chair is desirable – for example, if the IB Chair stops organizing IB meetings. The current version of the CGD does include provisions on how to remove Co-spokespersons, the Deputy Spokesperson, and institutions.

Article 4

Article 4.2, Role of the Co-Spokesperson Search Committee (CSSC) and issue of lab director approval

Current: “The IB Chair will initiate the election process by establishing a Co-Spokesperson Search Committee (CSSC). The composition of the search committee will be proposed by the IB chair and will be approved by the IB. The CSSC members may not stand for the election. The committee will choose its own chair. CSSC will then receive nominations from all eligible voters (up to three nominations per nominator). The committee will contact all nominees with three or more nominations to produce an initial list of candidates who are willing to stand for the election. The committee will then interview the candidates and produce a short list (nominally comprises three candidates) which will be presented to the collaboration for a general election. In this process, the committee will seek input from the host lab Director.”

Proposed:

Option A (the CSSC carries out a downselect)

“The IB Chair will initiate the election process by establishing a Co-Spokesperson Search Committee (CSSC). The composition of the search committee will be proposed by the IB chair and will be approved by the IB. The CSSC members may not stand for the election. The committee will choose its own chair. The CSSC will then receive nominations from all eligible voters. Each eligible voter may make up to three nominations. The CSSC will contact all nominees with three or more nominations to produce an initial list of candidates who are willing to stand for the election. The CSSC will then interview the candidates and produce a short list comprised of three candidates. The FNAL director will approve the list. In the case one or more nominees are rejected by the director, the CSSC will replace the rejected candidates with others from the initial list of candidates. The list will again be submitted to the FNAL director for approval. This process will repeat until there are three candidates approved by the FNAL director or until the list of candidates is exhausted. The final list will be presented to the collaboration for a general election.”

Option B (No downselect, so the CSSC does not carry out a downselect)

“The IB Chair will initiate the election process by establishing a Co-Spokesperson Search Committee (CSSC). The composition of the search committee will be proposed by the IB chair and will be approved by the IB. The CSSC members may not stand for the election. The committee will choose its own chair. The CSSC will then receive nominations from all eligible voters. Each eligible voter may make up to three nominations. The CSSC will contact all nominees with three or more nominations to produce an initial list of candidates who are willing to stand for the election. The FNAL director will approve the list. The final list is comprised of nominees on the initial list who are not rejected by the FNAL director. The final list will be presented to the collaboration for a general election.”

Option C: No change

Explanation: There are two issues the committee is seeking to address with these optional revisions. 1) The committee felt the IB should revisit the discussion of the role of the CSSC in Co-Spokesperson elections, in particular whether or not the CSSC should have the power to make a short list of candidates from all the nominees. Currently, the CSSC does have this power and it was exercised in the last election. In Option A, the operation of the CSSC does not change, but Option B changes the CSSC to a committee that carries out the election, but does not play a role in choosing the candidates. 2) The other issue is that DUNE/LBNF Project Management Plan says “Fermilab, as host lab, will also provide oversight of the DUNE collaboration and detector construction project through: ... approving the selection of collaboration Spokespersons.” The same language is used in the DUNE Management Plan. The current version of the CGD says the CSSC will “seek input” from the Director when producing the short list, but does not explicitly say that the Director must approve the selection. The committee felt that if the collaboration agrees that spokespersons must be approved by the host lab Director, then this should be stated explicitly in our governance document. The “seek input” language leaves some ambiguity, and therefore seems inconsistent with the DUNE Management Plan. Both options A and B incorporate explicit language on lab Director approval of the Co-Spokespersons.

Article 6

Art.6.1, Role of the Executive Committee

Current: “The Executive Committee is responsible for setting scientific and technical objectives and priorities of the DUNE collaboration taking account of the financial aspects as well as other resources. The EC establishes procedures for making technical choices, and will oversee progress and developments in various projects. The EC will also advise the Co-Spokespersons on all major collaboration matters.”

Proposed:

Option A: EC as primary decision-making body of the collaboration

“The Executive Committee is responsible for setting scientific and technical objectives and priorities of the DUNE collaboration taking account of the financial aspects as well as other resources. The EC establishes procedures for making technical choices, and will oversee progress and developments in various projects. The EC is the primary decision-making body of the collaboration. The EC decision-making process is described in the DUNE Management Plan (see Attachment A.2).”

Option B: No change

Explanation: Currently, the CGD describes the role of the EC as an advisory body to the spokespersons. The text of the DUNE Management Plan describes the EC the main decision-making body. It would be good to clarify whether or not the EC’s main role is to advise or to make decisions.

3 Proposed changes

This section describes items for which the committee would like to propose a specific change. Most of these items are factual corrections, clarifications, or removal of language that was only relevant at the beginning of the collaboration.

Preamble

Current: “The DUNE experiment is...”

Proposed: “The Deep Underground Neutrino Experiment (DUNE) is ...”

Explanation: Define the acronym.

Current: “... and a far detector composed of a set of large liquid argon TPC’s situated deep underground at the Sanford Underground Research Facility, Homestake, South Dakota, U.S.A.”

Proposed: "... and a far detector composed of a set of large liquid argon TPC's situated deep underground at the Sanford Underground Research Facility, Lead, South Dakota, U.S.A."

Explanation: Homestake is the retired name of the mine itself. The locale of the Sanford Underground Research Facility (SURF) is Lead. Change Homestake to Lead.

Current: "The relationship between the LBNF and the DUNE, formerly known as "ELBNF", collaboration..."

Proposed: "The relationship between the Long-Baseline Neutrino Facility (LBNF) and the DUNE collaboration..."

Explanation: Define the acronym LBNF and remove historical reference to ELBNF.

Current: "... are described in the "Draft Whitepaper on LBNF International Governance, Version 3, 15 January 2015" (See Attachment A.1)."

Proposed: "... are described in the DUNE/LBNF Project Management Plan (See Attachment A.1)."

Explanation: The DUNE/LBNF Project Management Plan supersedes the Draft Whitepaper.

Article 1

Current: "Preparation, Approval and Amendments of the Agreement"

Proposed: "Amendments"

Explanation: There's no mention of the preparation of the document, and it has already been approved, so there's no longer any reason to describe the approval process.

Current: "This document shall become effective with an approval by a 2/3 majority vote by the current DUNE interim IB, which will also signify the commencement of the formal DUNE collaboration.

Amendments to this document can be made in the future as needed by a 2/3 majority vote by the DUNE IB. The proposed amendments must be announced at least 4-weeks ahead of a face-to-face IB meeting and the outcome will be determined by a vote."

Proposed: "Amendments to this document can be made as needed by a 2/3 majority vote by the DUNE IB. The proposed amendments must be announced at least 4-weeks ahead of a face-to-face IB meeting and the outcome will be determined by a vote."

Explanation: The document has already become effective, so there's no longer any reason to describe the process.

Current: "The proposed amendments must be announced at least 4-weeks ahead of a face-to-face IB meeting and the outcome will be determined by a vote."

Proposed: The proposed amendments must be announced at least two weeks ahead of a face-to-face IB meeting and the outcome will be determined by a vote."

Explanation: Two weeks is sufficient time to review amendments. If the IB needs more time, the vote can be delayed until the next meeting.

Article 2.2

Current: "...at least four weeks prior to the meeting of the IB..."

Proposed: "... at least two weeks prior to the meeting of the IB..."

Explanation: Two weeks is sufficient time to review an application.

Propose to add: "Existing senior members of the collaboration who move to a different collaborating institution do not require IB approval."

Explanation: There's currently no rule for senior members switching institutions.

Propose to remove: “For a successful application, there must be at least one senior member in the institution who has relevant expertise for the DUNE experiment.”

Explanation: The IB has the power to accept or reject based on whether the institution’s expertise is suitable for DUNE. There’s no reason to include a vague requirement of ‘relevant expertise’ in the governance document.

Current: “If consensus is not possible, an “open (non-weighted)” vote will be taken on admission.”

Proposed: “If consensus is not possible, an open, non-weighted vote will be taken on admission.”

Explanation: No reason for quotes. No reason for ‘non-weighted’ to be parenthetical.

Current: “An IB approval should be sought if new persons of rank equivalent to a tenured faculty at a member institution wish to join the collaboration.”

Proposed: “An IB approval should be sought if new persons of rank equivalent to faculty at a member institution wish to join the collaboration.”

Explanation: There’s an inconsistency: The title of the article includes “Admission of ... New Senior Members...” and inside the article the text says that persons of rank equivalent to tenured faculty must be approved by the IB. This would seem to imply that senior members are defined as tenured faculty or equivalent. But elsewhere in the same article, senior member is explicitly defined as faculty or equivalent. Furthermore, the equivalent of ‘tenured faculty’ at a lab or at universities outside the US is not as clearly defined as the equivalent of faculty.

Article 2.4

Current: “Removal of an institution from DUNE can be proposed ... for the institution’s extreme inactivity in the experiment (more than one year).”

Proposed: “Removal of an institution from DUNE can be proposed ... for no activity in the experiment for more than one year.”

Explanation: “Extreme inactivity” is very subjective.

Current: “An “open” vote will be taken on removal.”

Proposed: “An open vote will be taken on removal.”

Explanation: No reason for quotes.

Article 3.2

Current: “The Fermilab will be given two seats...”

Proposed: “Fermilab will be given two seats...”

Explanation: Grammar

Article 3.4

Current: “The IB Chair is elected by the IB in every odd year starting 2015 for a two-year term. The term is renewable. The IB Chair election process should commence in March in the election year.”

Proposed: “The IB Chair is elected by the IB for a two-year term. The term is renewable. The IB Chair election process should commence in March in the election year.”

Explanation: There’s no reason to specify the starting year, now that we’re established.

Current: “The IB chair may appoint a vice-chair with the same 2 year term, subject to the approval of the IB.”

Proposed: “The IB Chair may appoint a vice-chair with the same term, subject to the approval of the IB.”

Explanation: Other proposed changes make it possible for the IB Chair term to be less than 2 years. The vice-chair's term should be linked to the chair's term no matter the duration.

Propose to add to the end of 3.4: "In the event that the IB Chair cannot complete the full two-year term, a new IB Chair will be elected immediately according to the procedures described above, except that the IB will decide when the special election should commence. The newly elected IB Chair will serve the remainder of the term of the replaced IB Chair in addition to the nominal two-year term."

Explanation: Add a provision in the case of an IB Chair stepping down.

Article 3.5

Current: "... nominally a preliminary agenda should be distributed to the IB at least 4-weeks ahead of the IB meeting."

Proposed: "...nominally a preliminary agenda should be distributed to the IB at least two weeks ahead of the IB meeting."

Explanation: Two weeks is sufficient time to review materials before the meeting.

Article 4

Current: "During the proposal phase of the experiment considering the international nature of the project, it is generally desirable to have on co-spokesperson from US institutions and the other from non-US institutions."

Proposed: "Considering the international nature of the project, it is generally desirable to have on co-spokesperson from US institutions and the other from non-US institutions."

Explanation: We don't see any reason to single out the proposal phase only.

Article 4.1

Current: "The Co-Spokespersons will also work closely with the host lab Director, the LBNF/DUNE International Joint Oversight Group (IJOG) and the LBNF management team."

Proposed: "The Co-Spokespersons will also work closely with the host lab Director and the LBNF management team."

Explanation: The IJOG is defined in the "Draft Whitepaper on LBNF International Governance" which is obsolete.

Article 4.2

Current: "The Co-Spokespersons elected prior to the effective date of this document will serve two and three year terms, respectively, from March 2015 in order to create a staggered election of a new Co-Spokesperson each year. The Co-Spokesperson elected hereafter will serve a two-year term, and the term is renewable. However, it is renewable only once."

Proposed: "The Co-Spokespersons will serve two-year terms, staggered so that one new Co-Spokesperson is elected each year. The term of a Co-Spokesperson is renewable, but it is only renewable once."

Explanation: No need to describe the procedure to start the staggered terms any more.

Propose to add to the end of 3.4: "In the event that one of the Co-spokespersons cannot complete the full two-year term, a new Co-spokesperson will be elected using the procedure described above, except that the IB Chair will decide when the special election should commence. The newly elected Co-spokesperson will serve the remainder of the term of the replaced Co-spokesperson in addition to the nominal two-year term."

Explanation: Add a provision in the case of a Co-spokesperson stepping down.

Article 4.3

Current: “In the event of a removal, the open position will be filled following the procedure described above.”

Proposed: “In the event of a removal, the open position will be filled following the procedure described above, except that the IB Chair will decide when the special election should commence.”

Explanation: The “procedure described above” says specifically that elections commence in January. Need to make sure the election can happen immediately upon the removal of the Co-Spokesperson.

Article 5

Current: “5.3 Removal of Deputy Spokesperson”

Proposed: “5.2 Removal of Deputy Spokesperson”

Explanation: Skipped over 5.2

Article 5.3 (to be 5.2)

Current: “Deputy Spokesperson can be removed at any time by the IB 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.”

Proposed: “The Deputy Spokesperson can be removed at any time by the IB by a secret ballot of at least 2/3 of the sum of those present at a regularly scheduled Institutional Board meeting.”

Explanation: There is no mention of proxy voting anywhere else in the document. There’s no reason to say it here. Article 3 specifies that IB members can designate another representative from their institution to attend meetings and vote.

Current: “The term of the newly appointed Deputy Spokesperson will be the remaining term of the removed Co-spokesperson.”

Proposed: “The term of the newly appointed Deputy Spokesperson will be the remaining term of the removed Deputy Spokesperson.”

Explanation: Typo.

Article 6.3

Propose to add: “In the event that one of the elected members of the EC cannot complete the full two-year term, a new EC member will be elected using the procedure described above, except that the IB Chair will decide when the special election should commence. The newly elected EC member will serve the remainder of the term of the replaced EC member in addition to the nominal two-year term. In the event that one of the appointed members of the EC cannot complete the full one-year term, a new EC member will be appointed immediately using the procedure described above. The newly appointed EC member will serve the remainder of the term of the replaced EC member in addition to the nominal one-year term.

Explanation: Add a provision in the case of an EC member stepping down.

Article 9

Replace Article 9 with the following text: “The Technical Coordinator and Resource Coordinator serve as the lead technical and financial managers in the context of the international collaboration. They are appointed by the Co-Spokespersons in consultation with the Fermilab Director and have reporting responsibilities to both. The responsibilities of the Technical Coordinator and Resource Coordinator are listed in the DUNE Management Plan. (See Attachment A.2.)”

Explanation: Article 9 should be updated to be consistent with DUNE Management Plan. The inconsistencies between the current version of Article 9 and the DUNE Management Plan (DMP), include

- The CGD says the Resource Coordinator chairs the Finance Board. DUNE does not have a Finance Board. The Resource Coordinator chairs the Collaboration Resource Board, which is described in the DMP.
- The CGD says both the Technical and Resource Coordinators are “selected by the collaboration and the Fermilab Director,” while the DMP says the Coordinators are “appointed by the Co-Spokespersons in consultation with the Fermilab Director.”
- The CGD specifies only one Technical Board, but the DMP says that “separate Technical Boards will be constituted for each main detector construction activity (e.g. Single-Phase Far Detector, Dual-Phase Far Detector and Near Detector)” in the near future.
- The CGD says specifically that the host laboratory Deputy Director chairs the Resource Review Board, but the DMP just says a representative from the Fermilab Directorate is the chair (doesn’t specify who from the Directorate).

The committee feels this change is necessary so that the IB doesn’t have to update the CGD when changes are made to the roles of the coordinators or the structure/names of the Technical Board, Resource Review Board, and/or the Collaboration Resource Board.

Article 10

Propose to add: “See the DUNE Management Plan (See Attachment A.2).”

Explanation: Management structures are defined in the DUNE Management Plan.

Article 12

Propose to remove Article 12

Explanation: The agreement is already effective. No need to mention the “proto-collaboration”.

Article 13

Current: “A.1 Draft Whitepaper on LBNF International Governance, Version 3, 15 January 2015”

Proposed: “A.1 LBNF/DUNE Project Management Plan, DUNE-DocDB-117”

Explanation: Draft whitepaper is obsolete.

Propose to add:

“A.2 DUNE Management Plan, DUNE-DocDB-2145”

“A.3 DUNE Speaker’s Committee Rules, DUNE-DocDB-57”

“A.4 DUNE Publication and authorship procedures, DUNE-DocDB-1115”

Propose to remove: the list of “expected attachments”.

Explanation: When we have documents that should be attached, we can add them. But there’s no reason to have a list of documents that don’t (and may never) exist.

General

Current: “regularly-scheduled IB meeting”

Proposed: “scheduled IB meeting”

Explanation: There are several places in the document that reference the “regularly-scheduled IB meeting.” We are unclear what “regularly” means in this context, since IB meetings are generally not on

a fixed schedule. We agree that “scheduled” is important, meaning that spontaneous IB meetings are not allowed.

4 References

- Collaboration Governance Document (CGD), DUNE-DocDB-1
- LBNF/DUNE Project Management Plan, DUNE-DocDB-117
- DUNE Management Plan, DUNE-DocDB-2145