

Preparation for the ILC Pre-Lab

Adopted from proposal to ICFA by the Linear Collider Board, 31 July 2020

Confirmed by ICFA, 2nd August, 2020

Preamble

In its Statement on February 22nd 2020, the International Committee for Future Accelerators (ICFA) stated that “ICFA advocates establishment of an international development team to facilitate transition into the preparatory phase” for the construction of the ILC in Japan and asked the Linear Collider Board (LCB) to work out a proposal for the transition team.

Following the proposal by LCB, as the first step towards the preparatory phase of the ILC project, ICFA will establish the ILC International Development Team (Team). This document elaborates the terms of reference of the Team.

The Team will replace the LCB/LCC organization, whose mandate ended on June 30th 2020.

Terms of reference

Mandate

The mandate of the Team is to prepare the ILC Pre-Lab without pre-empting the work of the Pre-Lab. The mandate includes:

- clarifying the function and organization of the ILC Pre-Lab based on the KEK International Working Group report,
- developing a common understanding for the condition to start the ILC Pre-Lab,
- providing an international framework for the ILC accelerator effort and coordinating further R&D and engineering design work for the ILC in order to sustain the community effort and to guarantee a smooth transition to the ILC Pre-Lab phase,
- providing an international framework for the ILC physics and detector activities and coordinating physics and detector R&D effort in order to sustain the community effort and guarantee a smooth transition to the ILC Pre-Lab phase,
- negotiating with international partners (e.g. universities, national and regional laboratories) for resources needed for the ILC Pre-Lab, and
- providing necessary information to the national authorities to support their discussion of the establishment of the ILC Pre-Lab.

The Team will regularly report its activities to ICFA.

Structure and Function

The Team is hosted by KEK and consists of the Executive Board (EB) and three Working Groups (WG1, WG2 and WG3):

- The EB comprises a chair, three members reflecting the three regions contributing to the ILC effort (Americas, Asia-Pacific and Europe) and three ex-officio members (KEK liaison officer and Chairs of WG2 and WG3, whereas WG1 is chaired by the EB Chair). The EB members are appointed by ICFA. The EB has the overall responsibility for the Pre-Lab preparation; some of the work will be carried out at KEK.
- WG1 carries out the main task of the Team, i.e. working out the function and organizational structure for the Pre-Lab, as well as supporting the preparation of Memoranda of Understanding (MoUs) among the national laboratories and other interested parties needed for the operation of the Pre-Lab, and supporting discussions at the national authority level.
- The membership is established by the EB and includes the EB members. It is chaired by the EB Chair.
- WG2 conducts the ILC accelerator and facility work. It is responsible for continuing the accelerator and facility work as previously carried out under the LCC framework. The WG2 effort will be taken over by the ILC Pre-Lab when it will become operational. The members are appointed by the EB.
- WG3 carries out the ILC physics and detector activities. It continues the study of the ILC physics capabilities and detector efforts as previously carried out under the LCC framework, reflecting the on-going progress of the field. It guides the community to be ready when the ILC Pre-Lab will establish its physics program. The members are appointed by the EB.

Resources

Limited funding is required to support the EB activities in personnel and operational costs as well as for administrative work. The LCB proposes that the required support will come from the host laboratory, KEK, as well as other interested international partners, moderated by the Funding Agencies for Large Colliders (FALC), in a similar way that the LCC activities were supported.

KEK's role as a host

KEK hosts the Team and provides support that includes:

- office space and necessary utilities in the Tsukuba campus, and
- administrative and travel support as agreed by KEK and the Team.

Timeframe

The Team will commence preparation for the ILC Pre-Lab as soon as it is established by ICFA and finish its mandate and term with the start of the Pre-Lab operation. It is anticipated that the work will be completed in one to one and a half years. If the activity is not completed by the end

of 2021, ICFA will need to evaluate the progress and to decide how to proceed.