

The Mandate of the International Detector Advisory Group

June 24, 2008

Dear IDAG members,

Following the discussions at the first meeting in Warsaw, I wish to clarify the mandate of the International Detector Advisory Group (IDAG).

The original mandate for IDAG is given in the document of ILCSC, which describes the charge of the Research Director (RD), that IDAG is set up by the RD and it advises the RD on ILC experimental program issues. To be precise, the part is repeated below.

“In order to perform these tasks, the RD will

1. form a management structure under him/her to execute these tasks,
2. appoint a detector advisory group, the IDAG (International Detector Advisory Group), with the approval of the membership by the ILCSC.

The IDAG will

1. advise the Research Director on ILC experimental program issues
2. make recommendations to the Research Director on the choice of two detectors for the engineering design effort based on detector Letters of Intent. The Research Director will present these recommendations to the ILCSC for approval.”

The entire document can be found in the following ICFA web page of the ILC related formal documents, http://www.fnal.gov/directorate/icfa/recent_lc_activities.html.

At the ILCSC meeting on February 11, 2008, this mandate was modified regarding last item no. 2 for the following two points:

- a) IDAG does not advise on the choice of two detectors but on the validation of submitted LOIs,
- b) The validation is not for the engineering effort but for technical design effort.

A summary of the meeting is reported at the bottom of the ILCSC page of ICFA:

http://www.fnal.gov/directorate/icfa/International_ILCSC.html.

In the same meeting, the timeline of the process was expanded. The due date is shifted to end March 2009. The validated detector groups will participate in the technical design of the GDE's ILC project proposal which will be completed in 2012.

For the validation, I would request IDAG to examine the following points in concrete.

1. Are the physics aims of the detector convincing for an experiment at ILC?
2. Is the detector concept suited and powerful enough for the desired physics aims and the expected accelerator environment? Namely, is the arrangement of the employed detector components adequate?
3. Do the mechanism for the push-pull operation, related alignment and calibration methods enable the desired switching process?
4. Is the detector feasible? Namely, is the required R&D for the selected technologies advancing fast enough so that they can be completed during the design phase? Are the estimated cost and the way to obtain it reasonable when examined at the time of LOI?
5. Is the group powerful enough to accomplish the required design work through the technical design phase?

In principle each LOI will describe these topics in detail. At present the initial energy of ILC is considered to be 500 GeV as recommended by the ICFA parameter group of which report can be found also in the above ICFA web page.