

Tohoku University GDE Meeting
Working Group on ILC Cost Reduction Studies (WG-1)

Conveners:

Nick Walker

John Carwardine

Tetsuo Shidara

Request for input.

Cost control (reduction) of the ILC RDR value estimate is a stated priority for the GDE Technical Design Phase. During the upcoming GDE meeting at Tohoku University, the TD Phase project management will begin to focus on possible strategies for further cost reduction. To facilitate this, we have decided to dedicate a working group to discuss, catalogue and *rank using a consistent methodology* possible cost saving measures, and eventually make recommendations for further study of those ideas which look most promising.

The discussions on cost reduction will be structured in a collegiate fashion in open sessions. All suggestions and proposals for cost reduction measures are welcome and will be considered during the parallel sessions. Those actually physically attending the workshop are welcome to attend the Working Group and participate in the process of ranking the proposals.

As a first step, we intend to continue the process initiated after the Vancouver GDE meeting in 2007, which culminated in a significant reduction in the value estimate, ultimately leading to the published value in the RDR. During that period, several of the proposals were rejected for various reasons. All of these will now be re-tabled and re-evaluated for further cost reduction.

In addition, we would like to canvas the community for further cost reduction measures, with an aim of reducing the current RDR value estimate by ~25% (approximately 1.6 Billion ILCU).

Please send your suggestions to nicholas.walker@desy.de, carwar@aps.anl.gov and tetsuo.shidara@kek.jp by Monday 3.03.2008. The proposal should be in the form of a short description, including (if possible) a rough cost reduction estimate, together with an estimated impact on the machine performance (increased risk, reduced overhead or margin, reduction of peak luminosity *etc.*)

The concept is to provide an open-forum for innovative concepts which will lead to possible cost reduction. The WG is open to everyone willing to participate constructively in the discussions. However, all final design decisions for the machine reside with the Project Management, the EC and the GDE director. The primary goal of the working group is to provide input for those decisions.

Proposed programme for WG1:

Tuesday March 4th

Morning session

1. Cost reduction proposals and introduction to the WG process (N. Walker)
2. The cost of performance: influence of machine parameters on cost (*TBD*)
3. Cost reduction ranking methodology (T. Himel)
4. Expanded breakdown of the value estimate (P. Garbincius)
5. Preparation for afternoon team sessions.

Afternoon session

WG will divide into small teams (2-4 people), and each team will be assigned a number of cost reduction items to rate using the methodology presented in the morning session.

Wednesday March 5th

Morning Session

1. Brief report from ranking teams
2. Consolidation of complete ranked list
3. Discussion of results and proposals for further studies (top-ranked items)

Afternoon Session

1. CFS cost reduction possibilities (chaired by: Marc Ross)
 - a. processed water
 - b. underground volume (civil engineering)
 - c. shallow site studies
2. ILC-CLIC collaboration discussions (chaired by: tbd)