

## Research Director's Report

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### What will happen after the DBD

Right now, the two detector groups are striving to update their detector concepts towards the detailed baseline design (DBD) aimed to be completed in 2012. This includes many activities such as component R&D, integration of the components of detectors and further into the accelerator, and the simulation of performance. [I have described](#) that resources are indispensable for these efforts and made requests for support. There is another important point, which has a significant effect to the incentive of the groups to conduct the programme. Detector groups often raise the question of what will happen to the DBDs when they are completed. The question reflects another one, namely how the ILC project will proceed after the present TDR phase. These are questions that inquire about the prospect of the future programme for ILC exceeding my given mandate. Nevertheless I am also very much concerned about them since they strongly affect the morale of the community. It is quite

natural for the detector groups to hope that when DBDs are ready to present a good physics case for ILC, they will become useful for the programme to realise the ILC. And this hope gives incentive to them to work hard under the difficult environment. I had the impression the recent meeting of the International Linear Collider Steering Committee (ILCSC) could strengthen such incentive.

It is the enthusiasm of the community that supports and pushes a project from the bottom. The community also wishes that its effort and enthusiasm is rewarded in the future. Once this hope begins to fade, the enthusiasm may shrink rather rapidly. The community is rather fragile and also changeable. We are aware that much of the resources for detector R&D for ILC are obtained by the effort of each participating group. What link them together and strive for the common goal in the ILC detector activity is the hope that ILC will be built and provide an excellent physics opportunity.

We are in the middle of the so-called [LOI process](#) towards the DBD with a clear time table. When the present goal is reached, we will tackle the next step. There will be R&D programmes and refinements of simulations remaining after the DBDs are completed. The ILC will require many steps before it can be proposed for construction. Nevertheless some concrete ways to approach the final goal should be planned so that we can proceed into a new stage with a certain prospect for building the real machine.

I was encouraged very much to learn that the ILCSC seriously considers the next step for the post TDR phase. The last ILCSC meeting during [ICHEP in Paris](#) seemed to indicate a clear move for a step forward by discussing possible ways. While it may take more time to come to a conclusion, I hope the notion of such move will encourage the detector community substantially when the details of the discussions are made public. I wish the community also participates in the considerations how to establish the path towards the final goal. This gives the community good chance to make their elaborated DBD more significant.

-- Sakue Yamada

