

Updated 2009/08/01

### **Work plan after validation till 2012**

Each validated detector group will produce a detailed baseline design by 2012. To this end the following steps are planned.

1. Demonstrate proof principle on critical components.  
When there are options, at least one option for each subsystem will reach a level of maturity which verifies feasibility.
2. Define a feasible baseline design.  
While a baseline will be specified, options may also be considered.
3. Complete basic mechanical integration of the baseline design accounting for insensitive zones such as the beam holes, support structure, cables, gaps or inner detector material.
4. Develop a realistic simulation model of the baseline design, including the identified faults and limitations.
5. Develop a push-pull mechanism, working out the movement procedure, time scale, alignment and calibration schemes in cooperation with relevant groups.
6. Develop a realistic concept of integration with the accelerator including the IR design.
7. Simulate and analyze updated benchmark reactions with the realistic detector model. Include the impact of detector dead zones and updated background conditions.
8. Simulate and study some reactions at 1 TeV, including realistic higher energy backgrounds, demonstrating the detector performance.  
For 7 and 8, Specific physics channels will be investigated and defined by the Physics Common Task Group and supported by the Software Common Task Group.

9. Develop an improved cost estimate.

Include in this work the identification of cost drivers and specification of main uncertainties.

For each of the above items, a detailed timeline with identified milestones will be constructed, leading to a detailed baseline design of the detector by 2012. Required resources, whether currently in place or not, will be specified. The Research Director will support the effort of the detector design groups to obtain resource support from the respective funding agencies.

The IDAG will review development of the progress of each validated detector design group with respect to their planned timeline and milestones.

Key points are listed below.

IDAG report presented in Albuquerque ALCPG Workshop September-October 2009

WWS LCWS workshop in Beijing, Spring 2010

ICHEP in Paris Summer 2010 (oral report ?)

ECFA LC joint meeting in Geneva, September 2010

Interim report by the RD to ILCSC in 2010

IDAG will be invited to join WWS-LCWS and ECFA-LC WS to examine progress.