

# The LDC outline document

The outline document:

requested from concept groups by the WW organising committee

To be delivered in draft form at Bangalore

The outline document will serve as input for the detector volume of the Reference Design Report, expected at the end of 2006

# The DOD

- fairly concise description of the detector concept
  - ➔ overall detector concept, ideas behind the system choices
  - ➔ description of the subdetector concepts, including some idea about technologies wherever possible
  - ➔ description of anticipated performance and comparison to benchmarks, wherever possible
  - ➔ a first attempt at costing
  
- Overall length of the document:  $O(100)$  pages or less

# Structure of the document

- Introduction (including physics case and outline of detector) **max 10 pages**
- Subdetector Description **max 50 pages**
  - Tracking
  - Calorimeter
  - Coil
  - Muon
  - DAQ
- Machine Detector Interface **max 5 pages**
- Detector Integration **max 5 pages**
- Performance **max 20 pages**

total 90-100 pages

# DOD

## Subdetectors:

include general description of the detector system, including justification for the layout choice

include outline of implementation (technology, possibly more than one technology)

include brief state-of-the-art description

include brief summary of needed R&D (refer to R&D document)  
(this should be kept short)

## Compared to the TESLA TDR:

probably more compact (its only an outline)

more open for alternative technological options

but: more concrete in the implemented ones reflecting the state of R&D

# Performance Section

This will be the most difficult section to write:

Tracking and Vertexing: base this on work done at DESY and RAL for tracking and VTX reconstruction (some version in hand)

Calorimetry/ Particle Flow: lots on ongoing studies: we can only give a status report on the current state of the art.

Main problem: justification of the performance which goes beyond the arguments brought forward for the TDR

Given the state of analysis and software I doubt that we will have significant new results in time for the DOD!

# Milestones

Now: define layout, responsibilities, agree on rough page count

Feb 14/15: meeting of editors at DESY (in connection with EUDET kickoff)  
to discuss a first version of the text

each group should be prepared to have a complete first version  
ready by this date!

If you cannot attend the DESY meeting, we will broadcast it  
at least in part,  
plus make sure you send your contribution in time

End of Feb: Release a first complete version to the complete LDC community  
for comments.