LHCb Technical Board 3 & 4 December 2001

Agenda

- 1. Discussion of DAQ & ECS TDR
- 2. Status of RICH Photo Detector review
- 3. M & O cost in 2002, cat A & B
- 4. Tracking / LHCb light
- 5. Submission dates for TDRs outstanding

AOB

Detector layout conflicts Future Beam Time Allocation

Announcement on EDMS demonstration and discussion on DSS questionnaire

Beat Jost Dave Websdale Hans Jürgen Hilke Tatsuya Nakada/Marcel Merk

Rolf Lindner Rolf Lindner

Participants: G. Carboni, J. Christiansen, B. D'Alemagne, H. Dijkstra, W. Flegel, R. Forty, C. Gaspar (for point 1), J. Harvey, H.J. Hilke, B. Jost, D. Lacarrere, J. Lefrançois, R. Lindner, C. Matteuzzi, M. Merk, T. Nakada, C. Padilla, T. Ruf, B. Schmidt, O. Schneider, A. Schopper, A. Smith, O. Steinkamp, D. Websdale Excused: U. Straumann

H.J. Hilke started the meeting with the introduction of A. Smith as the new LHCb Resources Manager and C. Padilla as new Outer Tracker Project Leader, succeeding B. Koene.

1. B. Jost presented the latest version of the Online System TDR, focusing on the project planning and hardware responsibilities. An extensive discussion followed chapter-by-chapter. The TB concluded that the TDR is very well written; only minor modifications were requested.

The TB agreed to the schedule proposed: Comments from the whole collaboration should arrive $< 14^{th}$ December. The final version should be sent to the print shop on the 19^{th} December.

- 2. D. Websdale reported on the status of the RICH Photon Detectors and presented the comments and final recommendation from the review panel: The HPD will be maintained as baseline and the MAPMT as backup solution, the October 2001 milestone for the final choice of photo detectors, including all technical requirements will be shifted to June 2002. The failure of the milestones will trigger the switch to the MAPMT, only in the event of a further delay of the LHC start up this decision may be reviewed. The TB endorsed the RICH HPD panel recommendation.
- 3. H.J. Hilke reminded the TB members, that R. Cashmore insists on more detailed information concerning M&O costs category 'B'. Coordinators and Project

Leaders are asked to study their particular subsystems. A. Smith will follow up this issue.

- 4. Tatsuya summarized the status of 'LHCb-Light' studies, concentrating on a comparison between 'Classic' and 'Classic-minus. 'Classic-minus' T1, all three magnet stations and one of the four seeding stations are suppressed. This results in a reduction of X₀ by 15%. Tracking efficiencies have been shown to be very similar and particle identification to be only slightly worse for 'Classic-minus'. Ks reconstruction is significantly worse, but improvements should be possible. The TB, therefore, concluded that in view of the limited resources we should concentrate on a single direction and
 - ➤ take 'classic-minus' as baseline from now on and
 - > continue strongly our efforts to further reduce X_0 and λ_i (VELO, RICH1) and optimise the layout (split TT1, B-field)
- 5. Submission Dates for TDRs outstanding:

\triangleright	Inner Tracker	October 2002
\triangleright	Trigger, including the high level	January 2003
	Computing	end of 2003
	LHCb light	October 2002

AOB

- 6. R. Lindner summarized the areas, where the present detector layout shows conflicts:
 - > Between RICH 2 and the electronic racks of the first Muon station
 - Between the Outer Tracker 9 support and RICH 2
 - In case we would keep T1 there would not be enough space between VELO and RICH 1
- 7. R. Lindner showed the revised test beam schedule for 2002. The new schedule included the 20-30% reduction in beam time compared to the user request from October 2001.
- 8. EDMS: D. Lacarrere asked all LHCb groups to start using the EDMS system as soon as possible.
- 9. DSS: Coordinators and Project Leaders should prepare information on their needs by February 2002.

Rolf Lindner