

# LHCb Technical Board 28/07/2000

## Agenda

- 1.) Calorimeter TDR, status and schedule
- 2.) RICH TDR, status and schedule
- 3.) DELPHI Control Rooms and Barrel Detector in the LHCb cavern

*Participants:* J. Christiansen, W. Flegel, R. Forty, H.J. Hilke, B. Jost (for J. Harvey), D. Lacarrere, J. Lefrançois, R. Lindner, T. Nakada, T. Ruf, B. Schmidt, A. Schopper, I. Videau, D. Websdale

*Excused:* N. Harnew, J. Harvey, B. Koene, U. Straumann,

- 1.) J. Lefrançois presented a report on the status of the Calorimeter TDR starting with the **schedule** for its preparation:

*29 May: all draft notes as listed below to be available*

*5 June: deadline for comments to all notes*

*12 June: final version of all notes available*

*18 July: draft version 1 of TDR distributed to calo group*

*25 July: deadline for comments on TDR draft by calo group*

*26 July: draft version 2 of TDR distributed to TB members*

*28 July: draft version 2 of TDR available to LHCb collaboration*

*14 August: deadline for comments on TDR draft by collaboration*

*23 August: draft version 3 of TDR distributed to TB members*

*28 August: TDR to be approved by TB*

*7 September: TDR handed in to LHCC secretariat*

*4/5 October: Presentation of TDR to LHCC*

He then summarized and discussed the status of items still in preparation or requiring further iteration. The management is to communicate an author list by mid-August; those authors participating in the project should be given particular attention. The detail required for the table summarizing responsibilities and cost was agreed. The cost issues particular to the Calorimeter will be finalized in a special meeting with the LHCb management. A. Schopper continued with information on the very detailed planning. The TB agreed that only a short summary schedule should be included in the TDR. The meaning of the detailed schedule and a separate list of major milestones was clarified and approved. The TB then commented on a few desirable additions (summary of specifications and parameters, milestones a.o.) and modifications. It was agreed that additional

comments should be sent by e-mail or on paper as soon as possible but at latest by August 14<sup>th</sup>.

- 2.) D. Websdale presented the status of the RICH TDR schedule, starting also with the preparation **schedule** (rev. July 17<sup>th</sup>):

<i>February 22, 2000</i>	<i>Outline contents of TDR</i>
<i>May 12</i>	<i>List of support documents and names of responsible</i>
<i>June 23</i>	<i>Drafts for ALL support documents ready</i>
<i>July 23</i>	<i>First complete draft (RICH group and TB for comments)</i>
<i>July 28</i>	<i>Technical Board meeting to discuss draft TDR</i>
<i>July 31</i>	<i>Deadline for completion of support documents</i>
<i>August 14</i>	<i>Second draft: Release to LHCb Collaboration</i>
<i>August 23</i>	<i>Final Draft</i>
<i>August 28</i>	<i>Second Technical Board meeting to discuss TDR</i>
<i>September 6</i>	<i>Submission of final document to LHCC</i>
<i>October 4</i>	<i>Presentation to LHCC</i>

He continued with discussions on chapters still being worked on. The TB proceeded with a discussion on desirable additions, modifications and re-arrangements. It was stressed and agreed that the early submission was important mainly due to the tight production schedule for the HPDs.

- 3.)

H. J. Hilke introduced the subject by summarizing the LHCb requirements for space in the control rooms, the merit for LHCb and CERN of keeping the DELPHI Barrel detector and possible interference with LHCb installation and operation; see copy of transparencies annexed. He concluded that interference would be minimal and proposed to keep only the largest counting room D (in his mind providing almost 100% of reserve for later additions, when compared with the present requests as compiled by J. Christiansen) and the Barrel detector.

Followed an extensive discussion on worries expressed by some of the TB members, resulting in a demand for keeping in addition control room A, in order to have a larger reserve. The main arguments were the desirability of more pleasant working conditions than for DELPHI during the commissioning phase and possible upgrades, admittedly not coinciding in time.

The TB finally agreed to support keeping counting room D and the Barrel detector and to leave it to the LHCb management to conclude on the possibility and desirability of keeping in addition counting room A. The LHCb management would then communicate its proposal to the CB within a few days, the CERN Management requiring a decision rapidly to finalize the contract for dismantling/scraping DELPHI material by August 15<sup>th</sup>.

Rolf Lindner  
03/08/00

## DELPHI COUNTING ROOMS + BARREL

H.J.H. 28.7.00

### CONSTRAINTS

- DELPHI DISMANTLING/  
SCRAPPING  $\geq$  OCT. '00

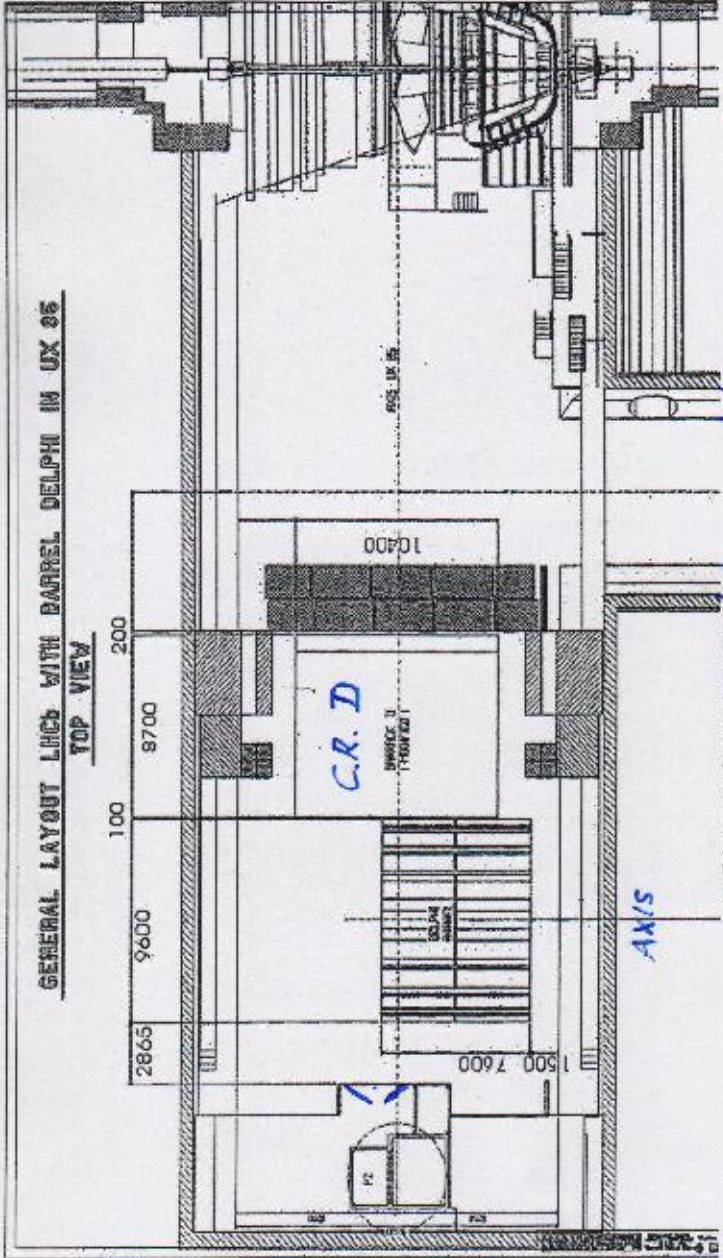
⇓

- NEED DECISION ~ NOW,  $\leq$  15. AUG.!

(DATE POSTPONED FOR US FROM 15. JULY.)

GENERAL LAYOUT LINC WITH BARREL DELPHI IN UX 86

AXIS TOP VIEW



http://dtdb.cerl.cri.res.ibm.com/ibm/ux86/ux86.htm



## WHY BOTHER ABOUT DELPHI BARREL ?

\* UNIQUE CHANCE FOR LHCb  
TO ATTRACT VISITORS (VIP, SCIENT. + PUBLIC)

- WOULD OTHERWISE GO TO  
CMS : 1. MAGNET SECTION VISIBLE NOW!  
or ATLAS : BIG PIECES VISIBLE SOON

### EXQUISITE SHOW-PIECE :

- RECENT DET. ⊕ FUTURE EXPERIMENT
- ONLY ONE TO BE VISITED UNDERGROUND
- SHOW RE-USE OF FACILITY

↓  
ALSO PUBLICITY VALUE FOR CERN,  
SHOULD EARN 'CREDIT FOR GOOD WILL'  
(J.L.)

### INCONVENIENCE SMALL !

- COUNTING ROOMS : > 50 - 100% SPARE SPACE !
- INTERFERENCE W. INSTALLATION AND OPERATION : MINOR !

(DETAILS BELOW)

## SPACE IN COUNTING ROOM(S)

- $\Sigma$  LATEST REQUESTS : 60 RACKS INS. C.R.  
(J. CHRISTIANSEN) (PROB. CONSERV.!)  
UNDECIDED : 12 "

### • COUNTING ROOM D :

- 1. + 2. FLOORS : 100 RACKS FOR EL.  
+ TABLES  
+ CONTROLS POWER  
+ " SAFETY
- 3. FLOOR : 20 RACKS POSS.  
+ GAS DISTRIBUTION



\* C.R. D ALONE GIVES 50-100% 'SPARE SPACE'



NO PROBLEM OF SPACE FOR DELPHI BARREL.

NB ANOTHER 50-100 RACKS POSSIBLE  
ON PLATFORMS AT END OF CAVERN!



— INTERFERENCE W. INSTALLATION:

NEGLECTIBLE!

BECAUSE • INST. AREA COMPLETELY UNTOUCHED!

(SEE LAYOUT)

- VISITORS ONLY NEAR ENTRANCE
- KEEP BROAD ACCESS TO C.R.
- NOT DISMANTLING BARREL SALES  
~ 2 MONTHS OF VALUABLE TIME. (C. JORAM)

NB. CONCRETE WALL TO BE ERECTED IN '02-03!  
READY FOR 'INJECTION TESTS'

⇓ BOTH CRANES INS. INSTALL. ZONE

— ELEVATOR OCCUPANCY BY VISITORS (1 'TRIP'  
≤ 1 min)

~ 10-20 MIN / DAY (W. TYP. DELPHI #)

MORE ON WEEK-ENDS, WINTER SCHOOL HOLIDAYS.

x LHCB HAS ALWAYS PRIORITY!

— ACCESS : • RULES TO BE AGREED BY TIS

• WILL HAVE 'RESTRICTED PERIODS'