

LHCb Outer Tracker – Electronics (NIKHEF)

Meeting Minutes

07 July 2005

Present :

A. Berkien, W. Gotink, E. Heine, J. Koopstra, A. Pellegrino

A. Minutes

No minutes from previous meeting. These minutes can be found at

<http://www.nikhef.nl/pub/experiments/bfys/lhcb/outerTracker/Documents/Meetings/OT-Electronics-NIKHEF/07-07-2005/>

B. Accompanying Documents

- Summary of OT Milestones (A. Pellegrino)
- Schedule Electronics (E. Heine)
 - Part I - FE Electronics and Dist. Boxes
 - Part II – C-frame assembly at NIKHEF
 - Part III – Installation and Commissioning at CERN

These documents can be found at

<http://www.nikhef.nl/pub/experiments/bfys/lhcb/outerTracker/Documents/Meetings/OT-Electronics-NIKHEF/07-07-2005/>

C. New Issues

Possible conflicts between the proposed schedule and the OT milestones were discussed. In particular:

- C1-C6 frame transport foreseen for January 2006, C7-C12 for February 2006. Milestone to finish frame assembly of the whole detector is February 2006 and completion installation (including electronics) is July 2006. Open issues:
 - *hard deadline is half detector ready before April 10 (begin beam-pipe installation)*
 - *unclear under what conditions one could complete installation second half of detector*
 - *not enough room for first C-frame (change of design etc.) **MUST be created***
- Series production LV and HV dist. boxes by end of October 2005. Open issues:
 - *Conflict with schedule assembly first C-Frame*
 - *Decide assembly external/internal (Eric and Ad evaluate man-power)*
- Series production Control Box is May 2006, which means Ctrl Box is no longer a C-frame deliverable, but an installation deliverable, like the FE electronics. Open issues:
 - *Must be 100% clear that Ctrl Box can be installed in closed C-frame*
 - *At least two (eventually working prototypes) Ctrl Boxes must be ready at all times for FE tests.*
- FE Electronics production staged:
 - ✓ Pre-series 10 FE boxes ready by December 2005
 - ✓ Bulk of production ready by September 2006

Open issues:

- *Related milestones are beginning of global commissioning November 2006 and collisions at LHCb July 2007. It is three months later than planned completion of installation.*
- *Must be clarified when batches become available to plan commissioning (eventually would into global commissioning with only part of the detector)*

D. Open Issues

The following issues are still open:

- Order of cables and connectors for C-frame assembly (target September):
 - LV and HV [T. Sluijk]
 - Ctrl SCSI [A. Pellegrino]
 - Optical breakout [A. Zwart & A. Pellegrino]
- Assembly of 6+6 OTIS boards and appointment with Joop for bonding (possible conflict with his vacation); delivery of connectors expected Tuesday [A. Berkien and W. Gotink]
- Design of “small” FE boxes: problem found with gas pipes, needs change in design [A. Berkien and H. Band]
- After-pulse problem with ASDBLR: it is decided to continue with production pre-series and in parallel provide report requested by LHCb Technical Board.
- Serial No., Labeling, Tracking, Databases and all that

E. Action List for Next Week

High Priority:

- 1) Order HV Boards [J. Kopstra & A. Pellegrino]
 - a. Check components
- 2) Order ASDBLR Boards [J. Kopstra & A. Pellegrino]
 - a. Check components
- 3) Fix appointment for bonding 6+6 OTIS Boards [W. Gotink & A. Pellegrino]
 - a. Check connectors, push RIPA, talk to Joop
- 4) Estimate man-power assembly LV and HV Dist. Boxes [A. Berkien & E. Heine]

Lower Priority:

- a) Fix appointment with discussion with F. Schimmel [J. Spelt]
- b) Activate STRATIX Readout [A. Pellegrino & A. Zwart]
- c) Report After-Pulse for TB [A. Pellegrino & Student]

F. Agenda for Next Meeting

- Checklist Open Issues and Station Action List
- Discussion Schedule

Adjournment:

The next meeting will be at 13:30 on Tuesday July 12 2005 in N-248.

Minutes submitted by: A. Pellegrino

Approved by:

