

RAT Réunion Avancement Travaux **Beam Dump System**
HARDWARE COMMISSIONING COORDINATION

**Next meeting:
Tuesday June 19th,
10:00 building 2685.**

June 4, 2007, 10:00 - Point 6

Present:

PLANNED INTERVENTIONS IN THE AREA

- ~~DFBAK/L and corresponding proximity equipment are already installed. The TP2 tests are on going, DFBAK w22-w23 & DFBAL w21-w22. FINISHED.~~
- Control cables of the DFBA's proximity equipments campaign on w27.
- Dump Core (UD68) transportation on w.26; transportation of Dump Core-Dump Line connection (UD62 & UD68) on w.24.
- Installation of the roof over MSD platform on w27.
- Test of MSD foreseen for w.34.
- The bake-out of the whole MKDs-to-MKD's sector will be completed by w28. These are the works to be done per vacuum sub-sector:

Sub-sector	Mechanical Installation	Bake-out
ABC5L6	w28	w29
A4L6	w23-w25	w26
IP6	w23-w27	w28
A4R6	w23-w27	w28
ABC5R6	w25	w26

- Water cooled cables positioning: RA63 w24-w26 & RA67 w26-w28.
- Cool-down of sector 5-6 for the beginning of October.
- Cool-down of sector 6-7 for the end of October.

INSTALLATION STATUS

- ~~The installation of MKD magnets in RA63 has been completed and the cables connected. Grounding of the tables is missing. DONE~~
- The installation of MKD in RA67 is on going. The PDC has been inspected and a report will be soon issued by Norisko. A final inspection by Norisko has to be planned after de-condamnation by TS-EL (foreseen for w.33).

- The beam dump line in RA63 will be completed (mounting and alignment) in w.18 an 19; the last part close to the MKDs will be installed after the magnet installation: three days will be needed. **[action B. Henrist]**
- The second beam line in front of the MKDs in RA63 shall be installed after the *Low Level Control Tests HV* (w.26). **[action J.M. Jimenez]**
- ~~Power distribution for MKB controller in UA67: the reception report has been issued by Norisko. Few modifications are requested, most of which require the *deconsignation* from TS/EL. **[action AB/BT & TS/EL]**, DONE~~
- BPM installation: BPMSD are already available and will be installed after completion of the vacuum line. BCTFD will be as well installed after completion of the beam dump line. **[AB/BI]**
- Vacuum pipe on Q4: a verification of alignment to the beam dump line will be carried on after installation of the chamber with a laser tracker.
- Mismatch between the TCDS and the last MSD on each side: a solution has been proposed, which considers the use of standard bellows plus a transition part. A proposition will be made by A. Rossi.

TEST ACTIVITY

- The *Low-level control tests_comm* have been completed for MKD63/MKB67.
- All generators for MKD63 have been tested in parallel. All generators have been pulsed to 450 GeV and all the signals have been properly received in the UA63.
- Some minor problems of cable reversion and pins soldering have been reported.
- A problem of high noise has been pointed out, when making the pulsing at 7 TeV.
- The triggering system towards UA67 is working perfectly but the racks there are still condemned.
- The *Low-level control tests_comm* for MKD67-MKB63 have been already started.

SAFETY

- In accordance with J. Etheridge and under the suggestion of S. Grillot, a new solution has been decided for the safety measures to be put in place around the equipment under test:
 - 2-m-high metallic nets are put around the magnets and flashing lights and advertising panels are attached to them;
 - chains and advertising panels are put close to the racks powering the magnets.

Open Issues

10.04	Installation of BPMSD	AB/BI
10.04	Installation of BCTFD	AB/BI
10.04	Mounting and alignment of beam dump line in RA63	AT/VAC
20.03	Mismatch between TCDS and MSD	AT/VAC&AB/BT
27.02	Vacuum tube between carbon window and TDE (fabrication on going-ready for the end of June)	AB/ATB
27.02	VMTAB bellows are needed for w18	AB/BT
20.02	TDE in UD68 ready for end of June	
20.02	Vacuum pipe on Q4	AT/VAC-AB/BT

Closed Issues

05.06	Grounding of instrumentation/after <i>deconsignation</i>	13.03
05.06	Assembly of PDC for MKDs in UA67	03.04
05.06	Modifications on PDC of MKB-67 requested by Norisko	10.04
08.05	Installation of MKD magnets in RA63	10.04
08.05	Installation of junction modules between MKDs in RA67	10.04
08.05	Inspection by Norisko on PDC of UA63	03.04
08.05	Assembly of PDC for MKDs in UA63	03.04
08.05	Optical fibers for pulsing	20.02
17.04	VAC: bake-out of MKD-6L	20.02
10.04	Beam dump line in TD62	10.04
10.04	BLMs integration	13.03
10.04	Smoothing of the MSD	10.04
03.04	Assembly of PDC for MKBs in UA63	03.04
27.03	Safety inspection by Norisko on power distr.rack (MKB67)	20.02
27.03	Grounding of instrumentation/before <i>deconsignation</i>	13.03
10.04	Mounting supports for second beam (on drawings) (6L&R)	13.03
27.03	Place for storing MKDs in UX65	20.03
20.03	Grounding of magnets	13.03
13.03	Intermediate bellows availability	27.02
13.03	Interference between vacuum support and MKD	27.02
27.02	Space in UJ62 and UJ67 for installation of spare TDE (and transport equipment) – late installation of that part of dump line	20.02
27.02	TCS: installation on w.19	
20.02	VAC: bake-out of MKD-6R	11.05

Completed tests

➤ *Low-level control tests_comm:*

- AS-I test: security monitor programming done for MKD and MKB.
- MPI networks are working for MKDs and MKBs in UA63.
- For PROFIBUS-DP in UA63, the network connection of the generators for the MKB is properly working, as well as that for the generators for the MKD.
- All retriggering lines are installed and tested.