

# **RAT** Réunion Avancement Travaux **Beam Dump System**

## HARDWARE COMMISSIONING COORDINATION

**April 17, 2007, 9:00 - Point 6**

Present: Alain Antoine, Etienne Carlier, Francesco Castronuovo, Laurent Ducimetiere, Carlos Fernandez Robles, Katy Foraz, Brennan Goddard, Bernard Henrist, Jacky Mazet, Gerard Pastor, Mirko Pojer, Wim Weterings.

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### INTERFERING ACTIVITIES

➤ DFBA transport/installation during next weeks:

- DFBAK: Proximity equipment still to be transported on w.18.
- DFBAL-LCM/HCM: transport on w.19.

These transports will be confirmed in advance to AB/BT group, so that work can be planned accordingly and changes dealt with.

### INSTALLATION STATUS

- ~~Vacuum components installation: bake-out of MKD line in RA63 will be finished by the end of w.15. Jackets still to be removed. [action J.M. Jimenez]~~
- Some junction modules between MKDs in RA67, which are presently missing, will be installed on w.17; installation of jackets for bake-out will start right after. [action J.M. Jimenez]
- The installation of MKD magnets in RA63 will start on w.16 and it will last 3 weeks (cabling included). The holes for the supports have been checked.
- The beam dump line in RA63 will be completed (mounting and alignment) in w.18 and 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.25). [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]
- The assembly of the missing distribution racks is the following:
  - for MKBs in UA63, it is already completed;
  - for MKDs in UA63, the assembly of the rack will finish by the end of w.17 and the installation will start right after;
  - for MKDs in UA67, the assembly will be carried out starting from w.18, after completion of the previous one.

- According to the previous point, the reception of the racks in UA63 has been fixed for second half of w.18 [**action AB/BT & SC/GS**]. (“note de calcul” to be sent to Norisko!!! [**action A. Antoine**])
- Optical fibres for pulsing: only the part on surface is missing [**action K. Loukili – TS/EL**]. ~~The communication problems detected between UA63 and UA67 are still under investigation [**action TS/EL and AB/BT**].~~
- 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**]
- The TCSG will be installed on w.18. [**AB/ABP**]
- 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.
- The ground connections between local earth plane and earth need to be done, plus final checks after *deconsignation* by TS/EL [**action E. Carlier**]
- 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

- *Low-level control tests\_comm*:
  - The programming of the addresses for AUL is missing (to be done after PDC installation).
  - Coupling between MKD63 controls and MKB67 controls is on going.

#### SAFETY

- J. Weber has given his opinion on the safety measures put in place for the HV tests:
  - the tunnel should be closed near to the magnets under test – flashing lights and panels for information, and people to contact in case of tunnel passage, should be put in place;
  - the circulation of people needing to access the tunnel should be done through the UAs (K. Foraz reminded that transport and geometers could need to pass through the tunnel, which will be coordinated by HCC); the transformers and racks will be delimited with plastic red & white chains.

#### PLANNED INTERVENTIONS IN THE AREA

- The bake-out of the whole MKDs-to-MKD sector will be completed by w28.
- A cabling campaign (including fire detection system) is foreseen for w16 to w19. No interferences have been pointed out during the inspection visit of AB/BT, TS/EL and TS/HDO.

- A water maintenance intervention has been scheduled for the w18 to w20 (demineralised water, cryogenic services and iced water will be affected).
- Test of the MSD foreseen for w.29-30.
- Cool-down of sector 5-6 for mid August.
- Cool-down of sector 6-7 for mid October.

## Open Issues

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10.04	Installation of BPMSD	AB/BI
10.04	Installation of BCTFD	AB/BI
10.04	Modifications on PDC of MKB-67 requested by Norisko	AB/BT
10.04	Mounting and alignment of beam dump line in RA63	AT/VAC
10.04	Installation of MKD magnets in RA63	AB/BT
10.04	Installation of junction modules between MKDs in RA67	AT/VAC
03.04	Inspection by Norisko on PDC of UA63	
03.04	Assembly of PDC for MKDs in UA63	AB/BT
03.04	Assembly of PDC for MKDs in UA67	AB/BT
20.03	Mismatch between TCDS and MSD	AT/VAC&AB/BT
13.03	Grounding of instrumentation/after <i>deconsignation</i>	AB/BT
27.02	TCS: installation on w.18	
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	VAC: bake-out of MKD-6R	AT/VAC
20.02	TDE in UD68 ready for end of June	
20.02	Vacuum pipe on Q4	AT/VAC-AB/BT
20.02	Safety inspection by Norisko on PDC for MKD63 and MKB63	
20.02	Optical fibers for pulsing	K. Loukili-TS/EL

## Closed Issues

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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

## Completed tests

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➤ *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.

**Next meeting:  
Monday April, 23  
9:00 building 2685.**