

Minutes of the 6th FOM meeting held on 08.03.2011

Agenda:

- 1) Follow-up of the last meeting (B. Mikulec)
- 2) Status of the machines (Supervisors)
- 3) Schedule (B. Mikulec)
- 4) AOB
- 5) Next agenda

1. Follow-up of the last meeting

The minutes of the 5th FOM meeting were approved.

Follow-up from the last FOM:

Pending actions:

- a. *Status of the PS-Bfield fluctuations:* R. Steerenberg said that work is ongoing. Right now, priority is given to investigations on the Bdot noise. Action not closed.
- b. *PS references in LKTIM are not written in LSA database:* K. Kostro said that this was a known issue that cannot be solved easily. K. Sigerud it being a long term problem with many related discussions. R. Steerenberg added that while LKTIM issues in combination with Inca cannot be solved in the short term, several urgent problems would need a temporary fix. K. Sigerud said S. Deghaye should report on the planning and time estimates at the next FOM. Action not closed.
- c. *Repair the PS LKTIM editor:* Linked to solving the action above. Action not closed until time estimate is given.
- d. *Follow up the need to reduce the voltage program for C46 to prevent a trip with the LHC25 beam in the PS:* A dying preamplifier was exchanged yesterday by the HL RF specialists. Issue is solved. Action closed.
- e. *Check for loose cables in the PS doublets during next technical stop:* To be remembered for the technical stop in W13, but R. Brown has it on his list. Action not closed.
- f. *Position problem of SPS wire scanners for wire in:* Issue is solved. Action closed.
- g. *Put ISOLDE physics start and AD closure in the injector schedule:* Done. Action closed.

- h. *Status of TSM application after user redefinition*: S. Hancock said N. de Metz-Noblat fixed the problem and it works. It will be available in the console manager very shortly. Action closed.
- i. *Status of eventual problems caused to BI by the redefinition of MTG user names*: R. Steerenberg said that there is a need for a meeting next week with S. Bart and J. Belleman. Action not closed.
- j. *Monitor the pressure in Section 68 in the PS*: J. Hansen said that a pressure rise is still observed, but that the peak pressure goes slowly down with time. To be followed up. Action not closed.
- k. *Monitor the Bdot at the reference magnet*: R. Steerenberg said that the POPS team has installed a measurement probe with high frequency sampling on the POPS connections. Slow extraction was prepared in order to assess the impact of the Bdot ripple. This is being put in place and investigated. B. Mikulec asked whether the two actions (Bfield fluctuations and Bdot ripple) could be combined. R. Steerenberg answered that the Bdot noise was introduced by POPS while the Bfield fluctuations were not. On Bdot noise there should be results today or tomorrow, and a report will be given next week by the PS supervisor. Action not yet closed.
- l. *Check the polarity of all the BBS in SPS before NA startup*: to be remembered for the technical stop in W13. Action not closed.
- m. *Look at the impact of the cut of the ventilation in BA3 during the next technical stop*: S. Deleval said a meeting occurred with EL. The conclusion is that no stop of ventilation would occur in the CCC, but a short stop of the chilled water cooling the CCC and faraday cage ventilation is needed. No real impact is expected (maybe 1 degree temperature change). There is in addition a buffer of chilled water. However two stops of the ventilation in the BA3 Faraday cage are needed and may have an impact. T. Bohl was informed. Action closed.
- n. *Send the list of activities for the next technical stop to the machine superintendents*: Action not closed.

2. Status of the machines

LINAC2 (report from M. O'Neil sent before the meeting):

It was a quiet week, with just two faults of the watchdog due to the same G64 power supply affecting LA1.QFN52. This power supply was subsequently replaced by the Piquet PO.

PSB (G. RUMOLO):

It was a quiet week. LHC50 double batch is being set up and is planned to be delivered on time.

A pulsing problem of the shavers in ring 1 was solved.

A water flow problem caused a trip in C02 and C16. This issue was fixed the following day.

An interlock occurred with the distributor of ring 4. The problem was linked to a wrong setting, but the reason for the interlock was not yet understood. This wrong setting may be related to the distributor breakdown that occurred at the end of last year. This is being followed up.

PS (R. STEERENBERG):

It was a good week for the PS.

The LHCPROBE, LHCINDIV, LHC75, LHC25 were delivered to the SPS and good progress was obtained on nTOF ($8.5e12$ p/b) and CNGS ($2.1e13$ p/b). CNGS setup is well under way.

Work was done on the slow extraction towards the dump. This required an access in the PS as well as DSO tests. These were done and, by the end of the week, slow extraction was ready.

Setting up of MTE with septum SEH31 started.

A series of problems occurred:

- many resets on cavities,
- replacement of a power supply of kicker KFA45,
- a temperature interlock on septum SMH57,
- the specialist repaired a problem with the electrostatic septum,
- the ppm copy application stopped and blocked others application from opening. This has been fixed but not released yet,
- difficulties to measure beam profiles with the fast wire scanners and the SEM-wires. A. Guerrero is working on it. Remark (after meeting): A. Guerrero mentioned that both problems were solved.

SPS (K. CORNELIS):

Setup of LHC75 was finished, but only with 1 injected batch.

Outgassing was observed on MKE4 with LHC75 without beam degradation. However, on LHC25, the outgassing was much stronger and the beam was dumped after 300 ms. Scrubbing helped and the beam could be kept on the flat bottom. Setup of the longitudinal and transverse feedback was done. There is still a problem with the

horizontal damper, and it is likely that a solution cannot be found before W. Hoefle comes back from holidays.

The plan is to work on CNGS this weekend and have beam extracted on Monday. However, there is a problem with the ventilation in the CNGS area: the fan regenerating the air broke down. CV is looking at what is the problem and it is not clear whether it will need to be changed or repaired. B. Mikulec asked if there were spare parts available. S. Deval answered that there was no spare fan. An update on how long it may take will be given this afternoon. Remark (after meeting): the ventilation unit could be repaired, allowing a CNGS startup according to schedule.

K. Cornelis mentioned that he will be giving access in BA6 and 7 while LHC does not take beam (e.g. for HiRadMat, cabling, magnet, PS tests). He warned that this would not be possible that easily after CNGS starts.

CTF3 (D. MANGLUNKI):

Drive beam:

There is a problem with the 2nd amplifier of the sub-harmonic buncher. There is only 1 amplifier left out of 3, which means that the level of satellite bunches is too high and CTF3 cannot run with the delay loop. The issue is being looked into.

An access is needed for the gun.

Klystron MKS13 is working.

PHIN:

The run has been extended for a few days and a new cathode is being tested.

TI (P. Sollander):

P. Sollander mentioned the ventilation issue. B. Mikulec asked about the major events that occurred last week. P. Sollander replied that the report on the 400kV event was complete and available.

LHC interface with injectors (M. LAMONT):

Multi-bunch injection is planned for this evening. Collimation was set up at high energy and first collisions are expected this week end.

3. Schedule / Supercycle / MD planning

ISOLDE will get beam a few days earlier than originally planned. This is already reflected in version 1.4 of the schedule.

The MD session in W19 is split up and the MD session in W25 will take place before the technical stop. It was asked whether there was a plan to change the technical stops in August and September. B. Mikulec answered that no change is foreseen yet, but that this was no guarantee.

D. Manglunki said that an SPS ion run was approved by the RB. It will start W45 with 2 weeks of MD and 3 weeks of physics (fixed target for NA61). K. Cornelis asked whether CNGS can run in parallel. D. Manglunki answered that beams others than FT beams should not be affected. This has to be checked.

Next week there will be a presentation of the planned interventions in W13.

R. Brown asked when beam would be stopped for the technical stop in W13. B. Mikulec said that RP will recommend different beam stop times for the different machines so that accesses can start from 8am. H. Vincke mentioned that access might not be allowed in BA1 to install the scraper due to high dose levels.

The 2011 schedule (V1.4) is available at:

https://espace.cern.ch/be-dep/BEDepartmentalDocuments/BE/2011-injector-schedule_v1.4.pdf

All planned interventions for the injector complex are available via the on-line agenda:

<https://espace.cern.ch/be-dep/FOM/Lists/Agenda/calendar.aspx>.

4. AOB

Next week the FOM will be chaired by D. Manglunki.

5. Next meeting

The next meeting will be held on Tuesday, 15th March at 10:00 in 874-1-011.

Preliminary Agenda:

- 1) Follow-up of the last meeting
- 2) Status of the machines
- 3) Preliminary list of interventions for the technical stop (machine superintendents)
- 4) Schedule
- 5) AOB
- 6) Next agenda

Minutes edited by B. Salvant and S. Gilardoni