

# Minutes of the 34th FOM meeting held on 10.11.2009

## Agenda:

- 1) Follow-up of the last meeting (K. Hanke)
- 2) Status of the machines (Supervisors)
- 3) Schedule (K. Hanke)
- 4) CV activities during the Xmas stop (S. Deleval)
- 5) AOB
- 6) Next agenda

## **1. Follow-up of the last meeting**

The minutes of the 33rd FOM meeting were approved.

Open actions from last FOM:

- a) Follow up with RP specialists radiation alarms linked to PS extraction.  
S. Gilardoni mentioned that a series of measurements (beam losses vs. radiation field) will be taken after the stop of CNGS and fixed target physics beams.
- b) Eventual procedure to adopt for OP in case of failure of TIM and LASER.

K. Hanke mentioned that in case of failure of both TIM and LASER, the TI operator will inform the experts that their equipment is temporarily not remotely surveyed by TI. A list of experts to be informed in such a case is already available for TI. The colleagues are invited to subscribe to the list.

## **2. Status of the machines**

### **Linac2 (R. SCRIVENS):**

The Linac had a good week without any problems.

### **PSB (K. HANKE):**

The PSB had an excellent week. On Wednesday, many applications received a TGM time-out and stopped working. The piquet CO solved the problem. On Thursday, the BWS application was blocked. The piquet CO could solve also this problem.

During the weekend, the CPS complex provided the LHCPROBE beam regularly to the LHC.

The distributor of ring 4 had to be reset few times. The problem will be followed up by the expert.

**ISOLDE (E. SIESLING):**

ISOLDE had an excellent week.

GPS: all the chain was running for MINIBALL. After the usual

setting –up period, the run could start one day in advance with respect to the schedule. On Sunday morning, the facility stopped due to a problem with the main PLC. After a reset, all the equipments went back to normal operation.

HRS: HRS was in stand-by mode until Monday. On Monday, the scheduled target exchange was not successful: it was not possible to unclamp the target. A second attempt will be done after a discussion with RP. The run is scheduled to start only next week, so the intervention can be planned with a good contingency. After the meeting it was confirmed that an access to the target zone will be needed and the upcoming HRS run had to be cancelled.

**ISOLDE users (A. HERLERT):**

The users are very happy.

**PS (R. STEERENBERG):**

The PS had a very good week, reaching 99% availability.

Between Tuesday and Wednesday, the MD on the new pickup configuration of the radial loop was completed. The new configuration improved the radial position of the beam. All beams needed minor readjustments.

On Wednesday, the MPS tripped due to a wrong programming of the supercycle. The TSTPS beam, programmed in the BCD as one bp cycle, was programmed in the MPS editor as a 2 bp, causing the MPS to trip.

On Friday it was realised that the request of the LHC mastership was not executed at the right moment, but with a delay of one supercycle. A temporary fix was put in place to allow the injection tests during the weekend. A definitive fix will be implemented in the current week.

K. Hanke asked about the MTE status. S. Gilardoni replied that the beam is regularly sent to the SPS with a typical intensity of  $1.6-1.7e13$  per injection. The work concentrates on two sides: in the PS on the improvement of the spill, on the SPS on the understanding of injection oscillations.

**East Area (L. GATIGNON):**

All the lines had a smooth running for the entire week.

**East Area Users (H. BREUKER):**

All users are satisfied. IRRAD finished the run which was followed by a period of radiation cool-down. DIRAC data taking was progressing smoothly. The T9-T10 lines had three different users. CLOUD will start to take data next week.

**AD (C. OLIVEIRA):**

The AD had a smooth week. The only problem to mention was related to a jitter at extraction. The problem was caused by problems with the cooling of a crate controlling the RF.

**AD users (H. BREUKER):**

The extension of the AD run has been approved. The AD will stop on Monday the 7 December at 8:00 AM. A new user schedule is in preparation.

ATRAP had a busy week. ALPHA was running without any problems. The ASACUSA Vienna group completed their physics program. The next group will be from Tokyo.

**NTOF (H. BREUKER):**

The Nickel run was completed. The experiment is now preparing the data taking of next year.

The delivered intensity is currently 96% of the promised one.

**SPS (K. CORNELIS):**

The SPS had a good week. During the weekend, the LHC 50 ns beam and the 75 ns beam (single batch Booster-PS transfer) were regularly taken. The intensity per batch was even larger than specified, well within the nominal emittances. No emittance blow-up could be seen between the PSB and the SPS. The vacuum did not show any particular problem.

Thanks to the single batch injection in the PS, the SPS could inject five batches instead of four. This will speed up the LHC filling by 20%.

On Tuesday, the recovery from the MD was longer than foreseen due to an LSA upgrade. It was not possible to trim the TT20 line and there was a bad beam sharing between the experiments.

On Monday, the water flow of the electrostatic septum was not correct. The experts checked whether there was a problem with the flow meter or with the flow itself.

M. Hourican mentioned that the problem was a real reduction of the flow which was causing tripping and this has been temporarily fixed to enable operations. Further work will be carried out to resolve this problem.

CNGS beams were stopped in order to take a water sample from the humidifier to monitor the tritium content in the target area air.

The promised intensity on the CNGS target of  $3.2 \cdot 10^{19}$  protons has been reached.

**CNGS (E. GSCHWENDTNER):**

The run was very good, with the promised intensity of this year delivered.

**SPS North Area (L. GATIGNON):**

Some time was lost for the H6 line due to a controls problem with the collimators and the magnets. A reload of all the magnet currents solved the problem.

**SPS North Area Users (H. BREUKER):**

NA61 will finish the physics program the next weekend.

The NUCLEON experiment will take data during the last week of the run. All the other users are happy and satisfied.

TI will follow-up the repair of the road lights outside the BHN1 buildings.

**LINAC3 (R. SCRIVENS):**

The Linac was running for the LEIR commissioning until Friday. Then the source has been dismantled to start the conversion to the 18 GHz operation. The run for the new source commissioning, together with a part of the Linac, will continue until week 51 (Wednesday).

**CTF3:**

No report.

**TI (P. SOLLANDER):**

On Sunday, a fire alarm was triggered in one of the PS ventilation station rooms. The station was stopped and monitored for a possible fire development. So far, the alarm did not trigger again. The PS can run safely without this ventilation station, which will be repaired during the Xmas stop.

**LHC interface with injectors (M. LAMONT):**

The beam was sent up to IP5 during the weekend. Then the HW commissioning continued. The schedule foresees to have beam in the rings the 20 November to establish circulating beam during the following week.

### **3. Schedule / Supercycle / MD planning**

The 2009 schedule (V3.7) is available at:

<https://espace.cern.ch/be-dep/BEDepartmentalDocuments/BE/Schedule2009.pdf>

The current week foresees normal operation.

The physics run will end the 23 November.

The extension of the AD run has been approved. The AD will stop the 7 December at 8:00.

The AMS experiment will take data in the North Area between the 7 and the 12 December.

The intervention agenda can be found at:

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

### **4. CV activities during the Xmas stop (S. DELEVAL)**

S. Deleval reported about the activities foreseen in the injectors for cooling and ventilation during the Xmas stop.

The slides with the detailed list of the activities are available [here](#).

The cooling will be stopped the 21 December, for Linac, LEIR, PS, PSB and TT2.

There is still no clear planning for the SPS since the list of the activities was not finalised yet and apparently one magnet needs to be exchanged. The confirmation of this last intervention is still pending.

The cooling circuits will be put back in operation on Friday, 1 January.

The interventions will be done during four days within the two weeks of the Xmas stop during daytime.

K. Hanke asked whether a possible leak would be detected during the weekend after switching the water back on Friday 1 January. S. Deval replied that most of the circuits will always remain under pressure, and a major leak will be immediately detected. The specialists will constantly supervise the circuits. After the meeting it was confirmed that the water will be switched back on only on Monday after the X-mas stop to exclude any risk of a non noticed leak.

R. Scrivens asked if the chilled water will be stopped. S. Deval replied that the chilled water will be available, and the circuit will be only checked.

After the meeting it was confirmed that the CV interventions will be the only interventions taking place during the X-mas closure.

## 5. AOB

N. Gilbert announced that a number of interventions in the SPS during the LHC commissioning phase should be scheduled as soon as possible. This includes for example the RP survey that usually takes place 30 hours after the stop of the high intensity beams.

K. Hanke asked I. Floret to communicate at the next FOM meeting the exact RP requests.

N. Gilbert added that the RF group requires about half a day of maintenance to be done during the LHC run.

K. Hanke said that the various requests for interventions will be properly scheduled at the next FOM meeting.

More interventions might be scheduled in case of a stop of the LHC following the X-mas break. It is presently not yet confirmed whether the LHC will re-start immediately in the first week of the year. This will be only known at relatively short notice, depending on the progress with LHC commissioning. K. Hanke added that, if the LHC will stop during the first three weeks of January, it should not be forgotten that some time has to be allocated to safely restart the complex.

## 6. Next meeting

The next meeting will be held on Tuesday, 17 November at 10:00 in 874-1-011.

Preliminary Agenda:

- 1) Follow-up of the last meeting
- 2) Status of the machines
- 3) Schedule
- 4) Complex running after the end of the non-LHC physics run (K. Hanke)
- 5) AOB

Minutes edited by S. Gilardoni