

# Minutes of the 17th FOM meeting held on 14.07.2009

## 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 16th FOM meeting were approved.

Open actions from last FOM:

- a) the commissioning of the BWS is ongoing. Unfortunately, a degradation of the measurement results compared to the SEM grids has been observed in the PSB. BI and OP have set up a continuous measurement program involving measurements at the test bench and in the PS and PSB machines;
- b) for the BTY.BHZ301, all the operational problems have been solved. The magnet, however, does not go to zero current for cycles played after an ISOHRS cycle except for an ISOGPS and the ZERO cycle. This control problem needs the help of C. H. Sicard, who is for the moment not at CERN;
- c) the problem with the SPS BWS414 is still not solved. This requires an intervention in the tunnel that will probably take place during the next technical stop;
- d) the problem with the ARCON system connection fault has been solved on Friday. A. Bland said that the problem was generated by the network upgrade by IT/CS of last week. The alarm in the CCC was generated every time the network was dropping out. Moving the service from one router module to another solved the problem. IT requests to move also other services to solve the same type of issue. This could be done on Thursday after the end of the MD, in agreement with the LHC cryogenics. The operation will cause the unavailability of some consoles and FECs. The access system will be off for 6-7 seconds as the PVSS clients. Beams will be stopped during the intervention since the MTG will also be affected.  
On Wednesday morning the NA router will be moved. Confirmations of these interventions will be sent out;
- e) in view of the technical stop, the collaborators are reminded to send eventual interventions to the machine superintendents.

## 2. Status of the machines

### **LINAC2 (A. LOMBARDI, mail):**

LINAC2 operated was without any problem.

**PSB (G. RUMOLO):**

The PSB had a good week. The distributor of ring 4 has been reset twice during the week. The extraction septum was tripping several times on Monday. The LHC type beams for the TI tests have been prepared and delivered. The MD on the LHC single batch transfer is ongoing.

**ISOLDE (P. FERNIER):**

For HRS, the previous run finished on Wednesday with the experiment WITCH as users. Unfortunately the measurements could not be completed since the target was at the end of its life with an apparent reduced production yield. The reason of the low measured yield, however, could also be explained by beam requested to be sent to the target and not to the converter, inducing also a wrong evaluation of the yields.

For GPS, after the installation of the UC target, the three user lines have been set-up:

GLM, RA0, CA0-LA0-LA1. The transmission was higher than 90%.

The main issues during the week were:

- 1) opening of the vacuum of the RA0 line to repair a MCP detector. This intervention was done when no beam for physics was planned thanks to H.Vestergard who accepted to do this intervention Thursday evening;
- 2) few problems Sunday afternoon for the laser of Rilis, quickly solved;
- 3) Monday morning the 50 kV high voltage of GPS broke down. Temporarily, the HV of HRS has been connected instead. The repair should be finished by Wednesday.

One of the users infected a PC with a virus from his memory stick. The virus has been found by the antivirus program and cleaned. The PC was luckily on the general network. A. Bland would like to ask everybody never to ignore/cancel the antivirus actions and to inform the PC responsible in case a situation like the one mentioned occurs. Moreover each computer responsible should check that the 'automatic play' option is switched off in case of connection of external devices.

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

The users are very happy and the run was very good.

**PS (Y. PAPAPHILIPPOU for R. STEERENBERG):**

The PS had a good week. On Thursday morning, the radiation shielding of the TOF water station has been increased to allow more intensity on the target. The tests with beam showed that the intensity per second delivered to the target can be raised by a factor of about 3, even if one should aim for a factor of 4 to reach the previously achieved integrated intensity. The tests were done with  $1.4 \cdot 10^{12}$  protons/second on target.

The radiation alarm levels have been raised to  $10 \mu\text{Sv/h}$ , since during the tests the PMTOF03 radiation monitor of the water station was giving steadily  $9.1 \mu\text{Sv/h}$ . Operation will try to put in the super-cycle as many TOF beams as possible, compatibly with the radiation levels in the water station.

The figure-of-eight power converter tripped on Monday due to a faulty interlock on its door. This has been fixed during the access between 4-5pm. The MD on the long LHC cycle to use in case of failure of the MPS was very successful. After a double injection, the beam could be accelerated and the longitudinal gymnastics set. About one half of the nominal intensity could be put in the cycle.

S. Gilardoni mentioned two CO issues. The first one was that the triggers of the OASIS signal of the different machines were mixed up in the application. K. Kostro will follow up this problem.

The second issue is that the AQNs of different equipments are not properly refreshed for super-cycles longer than 30 bp. In particular, some are not refreshed for few minutes. For this problem, K. Sigerud said that there is no immediate solution since it is a problem including most of the control system. A discussion within CO is ongoing to decide how to approach the problem.

S. Hancock asked if the magnetic cycle for the nominal ion beam has been prepared. This is necessary for the cold checkout foreseen by RF for the next week. Y. Papaphilippou will check this.

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

DIRAC and ALICE (T10) had a smooth running. As scheduled, no users are foreseen for IRRAD. The COMPASS tests in T9 have been cancelled in the last minute, and the T11 CLOUD tests have been delayed. The CLOUD hodoscope tests are in preparation. CLOUD will require a 2 x 2 m<sup>2</sup> beam spot size.

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

CLOUD safety tests will be done this week, even if the experiment will start only in September. The detailed planning will be discussed in the afternoon. The users are happy, in particular NTOF.

#### **AD (P. BELOCHITSKII):**

The AD had a good week. On Wednesday there was a minor problem with the vertical pre-driver of the stochastic cooling. On Friday one of the ALPHA line quadrupoles that had tripped could be fixed. A transformer in the common line broke down and work is ongoing to fix it.

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

ATRAP quenched the beam line. During the recovery, the beam was shared by the other experiments. There are still problems after the large water leak at ASACUSA of few weeks ago. In particular, one of the transverse profiler tank (MWPC) is still full of water. Since it is not easy to access it, it will be removed the 27th of July. P. Belochitskii mentioned that the intervention will be done during one of the ASACUSA shifts. However, since the intervention will take about 8 hours, the agreement of all experiments will be discussed during the AD user meeting.

#### **NTOF ():**

No report.

**SPS (K. CORNELIS):**

The SPS had a good week. During the weekend the TI2 tests took place. For this, an access was needed to open the water-cooling circuit of the TED at the end of TT60. The tests during the weekend were successful, with the program concluded only with minor problems, like the LHC request being coupled to the CNGS request. It turned out that the momentum acceptance of TT60 is not centered with respect to the geometrical aperture.

On Sunday morning there was a problem with the triggering of the extraction kicker. An electronic card had to be changed. Later, the kicker was not working due to a bad distribution of the pre-pulses generated by the RF. Then, the MPS station 6 went off due to a broken 50 V power supply.

During the MDs, there was an access to the CNGS area for maintenance.

The MD for the UA9 experiment with the machine on coast was very successful.

H. Vincke added few remarks concerning interventions in the tunnel. During the access of the 1st July there has been an oil refill near the TIDV dump. This, however, should be done at the end of a shutdown, since the dump is very radioactive. M. Hourican said that this was not possible due to an oil leak. Except for urgency refills, oil refills should fall into maintenance work performed during shutdown.

H. Vincke asked if the losses at the location of the exchanged magnet have disappeared. K. Cornelis replied that no more losses are present.

H. Vincke asked if it would be possible to have the accesses, even during short breaks, organised by N. Gilbert instead of OP. K. Cornelis replied that the superintendents are already coordinating the accesses and long-lasting or delicate interventions, like a magnet exchange. However, for short period accesses and on short notice it is not feasible to have the organisation done by others than OP who have the responsibility during the operational period. B. Mikulec added that a discussion has been started on this subject in the IEFC.

**CNGS (K. CORNELIS):**

CNGS is progressing well. At the stop of CNGS on Sunday, 8 1018 pot have been delivered. The goal of 1019 pot should be reached by the end of the month.

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

The running has been smooth. COMPASS decided on Tuesday to switch to a positive beam. Since the yields for positive particles is much higher than for negative ones, the intensity on the T6 target can be reduced to 4-5 10<sup>12</sup> pot.

Since the spectrometer magnet trips at every new beam loading, an address card has been exchanged in SM2.

**North Area users (H. BREUKER):**

On H2-H4 there was a switch between users. On H6 all was fine. On H8 the ATLAS straw experiment was not ready, and a replacement could be found (GOSSIP).

**LINAC3 ():**

No report.

**LEIR (S. PASINELLI):**

The week was very good. The problem with the electron cooler could be solved. Thanks to the help of CO, PO and RF, the setting up could advance rapidly to inject, accelerate and extract the beam. A minor problem appeared on the control of the oil of the extraction kicker. On Monday, a problem with a LSA update required a fix for the GM POW\_V class.

**CTF3 (P. SKOWRONSKI, mail):**

“It was a very difficult week due to severe gun instability. Few accesses were made to check the device locally.

Finally only on Friday it was discovered that the cathode heater impedance was changing in time. Later that day rusty contacts were found on the cathode plug that were of course cleaned. Since then, the gun is stable, however it has different characteristics, what implies setting up the injector from scratch.

The machine operated in two modes

1. Delivering not recombined beam (3A) to two Beam Test Stands for PETS conditioning
2. Re-setting up the beam recombination with the Delay Loop.”

**TI (P. SOLLANDER):**

Nothing particular to mention.

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

The 2009 schedule (V3.4) is available at:

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

The supercycle composition is available at [this web page](#).

The schedule of the MD can be found on the MD web page.

The NA network intervention will take place on Wednesday morning. The network intervention concerning the routers announced by A. Bland this meeting will probably happen on Thursday morning from 7:30-8:00.

The planned interventions during the injector stop on the 10<sup>th</sup> of August should be sent to the machine superintendents.

### **4. AOB**

M. Widorski reminded that in case of the need of an access, the request should be entered in the CPS web form. This helps the RP colleagues to organise the supervision of the different interventions.

## **5. Next meeting**

The next meeting will be held on Tuesday, July 21<sup>st</sup> at 10:00 in 874-1-011.

Preliminary Agenda:

1. Follow-up of the last meeting
2. Status of the machines
3. Schedule
4. AOB
5. Preliminary list of activities for the next technical stop (tbc)

Minutes edited by S. Gilardoni