

# Minutes of the 13th FOM meeting held on 16.06.2009

## Agenda:

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

## 1. Follow-up of the last meeting

The minutes of the 12th FOM meeting were approved.

Open actions from last FOM:

- a) LASER did not show any alarm when the MTG went off last week because the alarm has a too low priority to be shown on the consoles in the CCC. This alarm has priority one, whereas only alarms with priority bigger than two are shown. OP will compile a list of alarms for which the priority should be risen;
- b) the DSCISOPOW problem has been traced back to an error in the GM server. The error could not be found yet but a procedure to reboot the DSC without the risk of damaging the target has been put in place;
- c) the high radiation levels in the ISOLDE area were related to a bad BTY steering. A procedure to reinforce the checking of the steering before providing beam to ISOLDE has been implemented;
- d) the power converter of the AD RFQD will be maintained by the RF group but with a low priority;
- e) the calibration of the AD transformer of the extraction line is giving 10% lower intensity than expected;
- f) the BTY.BHZ301 problem is not solved yet;
- g) the IEFEC decided to postpone the repairing of the LINAC2 lift to the shutdown 2010-2011.

## 2. Status of the machines

### **Linac2 (K. Hanke):**

The Linac2 had no major problem during the week. The town cooling water temperature was too low on Wednesday. This perturbed the RF, and it took about 2 hours before the tanks could stabilise. At the same time there was an intervention for the vacuum.

### **PSB (A. FINDLAY):**

The VELO measurements finished on Thursday, with the users very satisfied. On Wednesday, the beam had to be cut for the PS intervention. Instabilities at injection were suddenly observed. The compensation of the PS stray field did not work any more due to a change of the name of

the DSC controlling the correction. This was corrected on Thursday. Stable beam was finally observed only since Saturday morning, with an evident difficulty since then for the beam setting up. Since Wednesday, it is not possible to access to the WIKI web pages with the beam references. This constitutes an important issue, since the pages contains all the references and the setting up instructions. On Saturday morning, the B field measurement was blocked. The LHC25 beams at different intensities were reloaded from the archives without any problem.

During the week, quite often LASER alarms were not coherent with the real status of the DSCs and equipments.

### **ISOLDE (E. PISELLI):**

HRS had stable beam in preparation for the REX run. The GPS beam was sent to GLM without any problem. On Tuesday, a vacuum valve could not be open, first for GLM, then for the central beam line. The vacuum expert solved the problem. On Wednesday night, the target HV has been reduced since the target was sparking too much. A water leak in the ISOLDE HALL was solved by S. Delaval. The water was dripping on a power converter. The radiation levels went back to normal values after the improving of the beam steering. K. Hanke stressed that in the future the steering will be tuned and more carefully checked before doing the proton scans.

### **ISOLDE users (J. Van de Walle):**

The experiment of solid-state physics could conclude their program. An ion target has been contaminated.

### **PS (Y. PAPAPHILIPPOU):**

On Tuesday night, a vacuum leak appeared between the SS50 and SS60, with a pressure up to  $10^{-3}$  mbar. Unfortunately, the vacuum logging did not work so it was not possible to understand the development of the leak. Apparently the problem was generated a bad middleware subscription. The leak detection started in the morning. At the same time, the BT colleagues intervened to dry the septum SMH57. This was necessary to allow the leak detection and the following intervention. Finally a vacuum joint between two vacuum chambers has been found damaged by an electrical arc. The arc has been generated by an RF bypass found broken. Fortunately and thanks to the BT intervention, no bake out of the septum was necessary. Already at 20:30 the vacuum reached  $10^{-7}$  mbar and low intensity beams could be injected. By Thursday morning, the operation went back to normal. Since then, the intensity of nTOF was limited to  $600 \times 10^{10}$  due to the suspect that the RF bypass was damaged by the high intensity and fast accelerated nTOF beam. In the meanwhile, investigations in the RF laboratory are carried out to determine the cause of the RF bypass failure. On Sunday afternoon, 2 hours were lost because an injection bumper was not pulsing correctly. The commissioning of the BWS is progressing. Some bugs in the application have been fixed. A series of measurements have been done to compare the BWS results with the ones of the SEMFIL in TT2. Whereas a very good agreement has been found for the vertical plane, for the horizontal one more investigations are necessary since the emittances differ by a factor of two and differences are observed also between the two wire speeds. K. Hanke added that the same problems have been observed in the PSB. U. Raich added that systematic measurements will be done. L. Soby added that, due to limited resources of the DSC, the sampler of the BT.BCT has been moved to another front end. The CPU of the Tune meter DSC had to be changed. S. Hancock added that in the past the nTOF beam intensity was higher than today, up to  $800 \times 10^{10}$ , with no problem for the RF bypasses. According to this, it is not clear why the nTOF intensity has been limited to  $600 \times 10^{10}$ .

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

Nothing special.

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

DIRAC has been in physics mode since 1 week during which the new aereogel calorimeter has been commissioned. Few users were surprised about the long MD block. The T2K test beam has been concluded.

**AD (T. ERIKSSON):**

AD has been delivering beam to three experiments since the last 3 weeks, with very good intensity and efficiency. The only breakdowns were due to AD equipments. The piquet PO had to intervene three times to repair the converter of a dogleg dipole. During the night between Thursday and Friday, FIRSTLINE intervened twice. Unfortunately, since the first intervention took too much time, the second was delayed by 4 hours due to the contractual time constraint. The PU of the stochastic cooling blocked again several times. On Friday the alarm of the AD ring safety chain triggered due to an emergency exit forced. The ring had to be patrolled before restarting operations.

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

So far is difficult to understand how efficiently the users are using the beam.

**NTOF:**

The problem with the beam transformer used to normalise the data has been solved. The collaboration wants to thanks all the colleagues who solved this major problem. U. Raich added that two electronics are now running in parallel giving the same measured intensity. The company of the cooling system found a bug in the automatic mechanism, which has been solved. The system will be officially delivered on Wednesday. The ventilation system has still some problems. The flux is too low due to, most probably, a hole in the B-zone. Investigations are ongoing to find it. The shielding is now correct and RP gave the agreement for the full intensity. R. Steerenberg added that no beam will be delivered during day time on Monday and on Wednesday.

**SPS (D. MANGLUNKI):**

CNGS (67% availability) average intensity 2E13/extraction.

North area (70% availability) 40E11 on T2, 40E11 on T4, 160E11 on T6

The whole week was plagued by RF power problems (9 h down time), with RF piquet and specialists present in BA3 most of the weekend to try and identify the cause for trips on the TRX. Whenever one transmitter was down and waiting for repair, the intensity was lowered in order to give at least some beam to the users, particularly CNGS.

There were also several beam stops due to a faulty switch on MKD.

During the 25 hour beam stop due to the PS vacuum leak, an access was done to check the condition of magnet MBB62130 which showed some damage by the beam. The PS gave beam at low intensity just before midnight on Wednesday evening, and by 1:30 all North Area beams were back at nominal intensity, CNGS 2 hours later.

The LHC beam has been set up with 12 and 24 bunches, up to nominal intensity.

On Sunday, the faulty switch #1 on MKDV was replaced by the BT piquet, partly in the shadow of a PS injection problem.

Another concern is a software problem with the SIS subscription loss for BLMs, which caused about 1.5 h of beam unavailability.

On Monday beams were stopped at 8:15 to prepare the MD; started to take LHC beam at 13:00.

An MKP problem developed during the night with an intervention ongoing on PFN6.

K. Sigerud commented that the problem with the SIS was due to a library which has been corrected and released again. D. Manglunki added that, apart from not having been informed about the fact that CO did something to solve the problem, the problem was apparently not solved since it reappeared during the weekend, after the new library release. A. Bland reminded that the new SPS page 1 will be released next Thursday. H. Vincke asked if the MB exchanged has been already planned, if the damage was due to an accident and if it is necessary to check its alignment before changing it. D. Manglunki replied that the alignment is necessary to understand the source of the damage. N. Gilbert said that a tentative date for the intervention is the 1st of July.

U. Raich added that during the last 2 hour stop the BWS 521 has been repaired.

K. Kostro added that in case of a problem like the one with the SIS, an OP issue should be done to assure a better CO support and traceability of the problem.

#### **CNGS (H. BREUKER):**

OPERA is taking data whereas there is no official information from ICARUS.

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

No major problem apart a with the access system. DIRAC is analysing the data after the intensity increase on T6.

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

NA61 and NA63 finished their data taking. The wobbling on T2 has been changed to allow CMS-CASTOR finishing the data taking. On H6, the new telescope installation was concluded. On H8, the calibration of the chamber for the ATLAS upgrade is ongoing. NA62 will restart after the MD block.

#### **LINAC3 (R. SCRIVENS):**

The LINAC is starting up.

#### **LEIR (mail from S. PASINELLI):**

“Après les tests aimants sans capots de la semaine dernière, nous avons remis les capots fait la patrouille et déconsigné la machine.

Actuellement, nous faisons plus particulièrement des tests du système de contrôle.

Ces tests ont permis de mettre en évidence un certain nombre de dysfonctionnements:

Pour InCA : problème de configuration

Pour les CVORB (nouveau GFA) : Problème de configuration DB suite au regroupement des CVORB dans le DSC dleipow2 (résolu).

Aléatoirement les fonctions envoyées aux alimentations sont fausses (investigation en cours).

Pour les CBMIA (nouveau 1553): Impossible de contrôler depuis les WS/Knobs les alimentations (Investigation en cours).

Quelques problèmes mineurs :

- Sampler du ETL.BHN10 (DPRAM résolu)
- Alimentation du châssis des MTV's dleim1 (résolu).
- Release de certaines applications (en cours)"

### **CTF3 (D. MANGLUNKI):**

During week 24, a series of quadrupolar scans in Delay Loop were done and finally a very good agreement between scans before and after Delay Loop screens had been found. The last week-end PETS operations not too successful as data collection stopped early on Friday night. On Monday morning MKS02 not giving the nominal power; it was a controls problem due to a defective bit and was repaired mid-afternoon. The plans for the current week are:

- \* restarting with 1.5GHz in view of recombination in Delay Loop
- \* commissioning of the CALIFES probe beam has restarted.

### **TI (P. SOLLANDER):**

The DNS upgrade will be done on Thursday.

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

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

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

The change of the DNS name and time server will be done on Thursday.

The change of the damaged SPS magnet is tentatively scheduled for the 1st of July, to be confirmed.

R. Steerenberg will revise the supercycles to optimise the ISOLDE cycles.

The MD block of week 37 will be shortened by one day which will be recuperated during week 39.

## **4. AOB**

K. Sigerud presented the list of the WEB page that will be not accessible anymore by the consoles in the CCC on the technet. The colleagues check the list, available with the [slides here](#), and inform CO about any comment.

## **5. Next meeting**

The next meeting will be held on Tuesday, June 23th 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. CO review (K. Kostro)

Minutes edited by S. Gilardoni