# Minutes of the 33<sup>rd</sup> FOM meeting held on 13.09.2011

#### Agenda:

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

### 1 Follow-up of the last meeting

The minutes of the 31<sup>st</sup> and 32<sup>nd</sup> FOM meeting were approved.

Follow-up from the last FOM:

#### Pending actions:

Status of the PS-Bfield fluctuation with POPS

The action is on hold since POPS is not operating. Action not closed.

#### 2 Status of the machines

#### LINAC2 (R. Wegner):

It was a very good week for LINAC2.

One of the power supply for the LA1QFN02 needed a reset by PSB operators.

Recovering from the power cut on Sunday morning was difficult (there was no cooling water for 3h).

At 16:15 beam was back.

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

It was a very good week.

It took 6 h to recover from the power glitch.

PSB produced a lot of MD beams this week. The InCA colleagues could bring back archives that got deleted and A. Findlay thanked the InCA team for their help.

Other InCA issues are being followed up.

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

It was smooth running for ISOLDE with both GPS and HRS running until Thursday, and only HRS until Monday.

An access is going on in the separator zone to investigate the GLM deflector issue.

#### **ISOLDE** users (M. Kowalska):

It was an excellent week.

GPS could run until Thursday and users were finally very happy despite the difficult start reported at last week's FOM.

HRS users are also very happy and got 90% of the desired beam.

Power cut did not affect ISOLDE users too much and they thank the operation team for the quick restart.

M. Kowalska regretted that the ALARA procedure for deflector took unreasonable time to get the last signature. S. Hutchins took note and said that there will be a new RSO appointed as soon as possible.

T. Wijnands said trained people can help in accelerating the procedure, but M. Kowalska insisted that the delay was not caused on the ISOLDE side where safety and RP responsibles have taken action within very short delay.

#### PS (R. Steerenberg):

It was a difficult week for the PS after the power cut on Sunday.

On Thursday, there was a radiation alarm on Route Goward and this was traced to a BTP line quadrupole, which was off by mistake.

The recurrent trips of the 10 and 80 MHz cavities will be followed up in the PS supervisor meeting.

Intermittent radiation alarms occurred due to non extracted CNGS beam (happens once a day or more). Diagnostics have been put in place to observe what is wrong, and the culprit could be a timing that is not coming out.

Following the power cut on Sunday morning, many specialists were called to get the PS back in operation. The MPS was in particular difficult to restart as it took a lot of time to repair a thyristor, an auxiliary power supply and optic fibers. The search for the problems was difficult and long.

There were also problems with the extraction bump and quadrupoles in the TT2 line. The beam was finally back at 7h30 on Monday. R. Steerenberg sent thanks to all persons that came in on Sunday (day and night) for their help and flexibility.

A few InCA pbs communicated to InCA team and are being followed up.

K. Hanke asked whether there is an update on POPS. R. Steerenberg said that bus bars are planned to be replaced.

#### **East Area (E. Gschwendtner):**

All is fine.

#### **East Area Users (E. Gschwendtner):**

Change of users is taking place.

#### **TOF** ():

R. Steerenberg said that TOF has nearly reached promised value for the year already.

#### AD (L. Botjar):

It was an excellent week until the cut.

A power supply had a pressure issue and an external company had to come in for the repair. The beam was extracted at 10am on Monday.

#### **AD** Users ():

L. Botjar said that there were no complaints from users.

#### SPS (K. Cornelis for E. Métral):

Issues with the water sumps in BA3 caused 2 h downtime. 30 min are needed to access again and this will be arranged by the SPS supervisor.

Usual transmitter trips happened.

CNGS reflector has been tripping even though it was supposed to be fixed during the technical stop.

On Sunday, RF cavities tripped with the power cut.

Communication problems occurred again with the NA and a door will be condemned. K. Hanke will bring up this issue at the IEFC.

#### North Area (E. Gschwendtner):

It was more or less good. There was a water leak in a bending magnet in H4 line and an issue with a beam line magnet in M2, which were fixed. E. Gschwendtner confirmed that the proposed solution is to condemn the door that trips chain 11.

#### North Area users ():

No report.

#### **CNGS (E. Gschwendtner):**

CNGS is very happy and sends congratulations as last year's protons on target value was reached this week. Trips of the reflector are being investigated.

#### CTF3 (D. Manglunki for J. Barranco):

PHIN restarted operations with gun and klystron conditioning.

There was a problem with large emittances. Dispersion measurements were performed to investigate but in fact it appears it is a problem with the quadrupole scan software.

1.5 GHz setup is continuing and a maximum of 20 A was obtained after the combiner ring.

CTF3 was also affected by the power cut on Sunday.

#### TI (P. Sollander):

The power cut was first thought to be due to the outside 400 kV supply. In fact, it appeared it was due to a fault on the internal 18 kV. F. Tarita added that an existing cable termination was faulty and the termination is being replaced.

#### LHC interface with injectors (G. Arduini):

Setting up of 1m beta star for IP1 and IP5 was done. The week was dedicated to ramp up the number of bunches with 1.3e11 p/b. Vacuum activity dumped the beams. LHC is recovering since yesterday and produced 2 good fills.

LHC plans to inject the standard 50ns beam with the same bunch intensity. The intensity per bunch might slightly go up in the second part of the week (max 1.4E11).

#### **IONS**

#### LINAC3 (R. Wegner for D. Küchler):

It was a good week until Wednesday. There were issues to retune the source. On Friday, 16 and 20  $\mu$ A were produced. The source tripped with the power cut and was reset on Monday. The restart was very difficult and further tuning is needed. There is no estimation on when beam will be back. The source will be refilled next Monday morning.

D. Manglunki said this should not cause delays to the ion program unless it takes weeks to restart the source.

#### **LEIR (S. Pasinelli)**

LEIR suffered from instabilities. Early and nominal beams were optimized. There were control issues as no archives were available. An InCA problem occurred and a transformer problem required the replacement of a CPU on a DSC.

The user nominal was at 70% of its nominal intensity. Fluctuation of the linac makes it harder to tune the machine. Nothing was working on Saturday and all was down until Monday as the supervisor was not informed of the problems. It took half a day to restore beam after solving IncA OASIS and RBAC problems. It was reminded that the supervisor should be informed by SPS operation if LEIR is down.

Early and nominal beams were set up.

#### PS (R. Steerenberg)

Intensity from LEIR is correct. EARLY and nominal beams are in good conditions and available to the SPS. It is going well.

#### SPS (K. Cornelis)

Injecting with 3 kicker modules allows having shorter time between batches in the PS and more bunches in LHC.

- T. Bohl said single bunches were captured and accelerated. More setting up needs to be done.
- T. Bohl added it is too early to say he is not worried.

# 3 Schedule / Supercycle / MD planning

The 2011 schedule (V3.2) is available at:

https://espace.cern.ch/be-dep/BEDepartmentalDocuments/BE/injector\_schedule.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

Y. Papaphilippou said that the MD page for the upcoming floating MDs will be up soon.

### 4 AOB

## 5 Next meeting

The next meeting will be held on Tuesday, 20<sup>th</sup> September at 10:00 in 874-1-011. Preliminary Agenda:

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Minutes edited by B. Salvant