



Summary of the 23rd FOM Meeting

Held on Tuesday 29th August 2017

Agenda (<https://indico.cern.ch/event/fom170829>)

- 1. Follow-up of the last FOM*
- 2. Status of the machines*
- 3. Schedule updates*
- 4. AOB*

B. Mikulec chaired the meeting.

The list of presence can be found in [Annex 1](#).

1. Follow-up of the last FOM

Minutes of the previous meeting were approved.

2. Status of the machines

Linac2&Linac3

R. Scrivens reported the status of the Linacs ([Annex 2](#)). A very good week for Linac2 with 99% availability. On Monday night problem with preamplifier of buncher, fixed on Tuesday. Spark rate is back to an acceptable value of 2 per day, which means that no intervention is needed.

Linac3 had an excellent week with 100% availability. Tank1 tube will have to be exchanged soon.

LEIR

N. Biancacci reported for LEIR ([Annex 3](#)). A good week with 98% availability. Issues:

- On Monday ER.DWH11 and ER.DEH21 needed piquet intervention to perform reset.
- The same day a few minutes intervention on CRF41.
- On Wednesday ETL.BHN10 current at extraction was changing sign leading to large current excursion. It posed problems to all subsequent cycles (EARLY, NOMINAL or MD). The reason is still not completely clear although it seems that trimming the injection function of ETL.BHN10 in the NOMINAL cycle somehow affected the extraction function. The K values were reloaded and it solved the issue.
- Also on Wednesday, air conditioning in LEIR local control room malfunctioned blowing dusty air. A fix is being investigated.

- On Thursday removed bump in sector 4 as the vacuum issue of the last year seems to be gone.

PSB

J.-F. Comblin presented the status of the PS Booster ([Annex 4](#)). Good week with more than 96% availability. On Sunday kicker repair took 2h30 because the piquet was on intervention in the LHC. SIS had an issue with monitoring of number of turns. The LHC 8b4e beam was made available.

ISOLDE

M. Lozano Bonito reported the status of ISOLDE ([Annex 5](#)). Quite difficult week for ISOLDE. Carbon isotope $^{15}\text{C}^{5+}$ at 4.3 MeV/u was sent to the XT03 line, which had to be recommissioned. There was big discrepancy between the expected intensity and the one reported by the experiment. It was finally found that the experiment measurement was faulty. Couple of small problems with RF and some trips of the target heater.

ISOLDE Users

K. Johnston: This was the first experiment to take beam into the newly-commissioned XT03 beamline where scattering experiments on the halo nucleus ^{15}C are planned. The transmission of the beam to the experimental setup turned out to be very challenging and took a number of days to understand fully. Fortunately, the support from the ISOLDE operations team was fantastic and the beam was successfully delivered to the experiment on Saturday evening. Since then the operation has been quite smooth and the first data look promising.

PS

K. Hanke reported the status of the PS ([Annex 6](#)). Good week with 96% availability, but the downtime was mostly due to the faults of the upstream machines. There was a planned stop for RF cavity repair. A lot of trips on KFA71, but now the situation got improved. Also PR.WDW was often tripping. Currently running PR.WDW with a spare power supply, today the original one should be put back in place.

On the beam side, IRRAD took for the first time a very low intensity EAST beam; this was very successful. For the LHC the 8b4e beam was checked, and for TOF logging of the beam position in TT2 was ensured.

East Area

B. Rae: It was a good week. Intermittent problems with a computer in T9 have been reported to BE-CO. ZT10.QDE5 is tripping rather often without apparent reason. Otherwise smooth running in T8 and T9, with frequent access in both lines. CLOUD will start running in T11 from September 18th: magnet tests can start from now on.

East Area Users



No report.

Comment from **H. Vincke**: RP performed an experiment in the EA and would like to thank for the setting up of the low intensity beam.

nToF

M. Bacak: On the weekend performed beam position tests and found that one of the areas is sensitive to the position. Will run with couple of different settings to define a good setting to the operation team.

AD

P. Freyermuth reported on the AD status ([Annex 7](#)). A good week in AD with 97% availability. Only faults to report were a trip of C02 RF cavity and a quickly solved issue with an injection line power supply.

T. Eriksson reported on **ELENA**: Slow progress in ELENA. With p-bar could see some traces of deceleration. This week development of the profile measurement system with some good results (first b-bar profile looked good). Today and tomorrow survey of survey. Lots of problems with H-stability, suspecting fluctuating field in the main bends. G-bar is expecting H- test beam in a few weeks time, and it is not operational yet.

Question from **B. Mikulec**: The poor H- stability, is it a new problem?

Answer: Not really. It was never stable, but now it looks even worse, however, it is not obvious. Will see how it goes with p-bar.

AD Users

No report.

Comment from **T. Eriksson**: The experiments look for solution of the issue with shortage of helium. At least for the week of Jeune Genevois a solution was found.

SPS

K. Cornelis reported the status of SPS ([Annex 8](#)). 93% availability.

HiRadMat run on Monday and Tuesday with 144 and 288 bunches. Observed an increased spark rate on ZS.

Struggled to increase the intensity for the fixed target MTE beam by 10%.

The 8b4e and 50nsec beams were checked in SPS. Observed increased spark rate on ZS with 8b4e. It is still not fully operational because the transfer to the LHC still needs to be done, which might not be straight-forward as the beam is fatter and the batch length different.

AWAKE is running since Friday. An issue with influence of a TT40 corrector on FT orbit was solved. It turned out to be set to DC while it needs to be pulsed.

Kicker electronics had issues and whole electronics rack had to be exchanged (4h downtime).

North Area



B. Rae: On Friday, H4-QUAD power converter could not reach the value we asked for. First Line investigated for 1.5h and finally decided to run at lower current. Investigations will continue tomorrow.

K12-BEND1 had several trips (supply failures) over the last few days, requiring First Line interventions over the weekend. A detailed investigation was done on Monday, but has to continue during the Wednesday MD.

Otherwise, good beam conditions with good transmission from T4 to T10, but since the end of last week high radiation levels above the H6 beam.

Question from V. Kain: The radiation was because of the wobbling issue?

Answer: The radiation problem on H6 yesterday was due to the change of a beam file by the user. However, even with the beam turned off on H6 the radiation alarm above H6 stays on.

Comment by K. Cornelis: I think it is also due to beam size fluctuations. Also, there are many changes on super-cycle and each time the conditions are slightly different.

North Area Users

No report.

HiRadMat

No report.

AWAKE

No report.

LHC

R. Steerenberg: LHC had a very difficult week because of the 16L2 issue. It is caused by condensated gas in the vacuum chamber. It was checked if higher intensity beam performs better and it was not successful. The intensity was reduced to 1500 bunches, which runs OK now. The 8b4e beam should suppress completely the electron cloud, and it will allow to compare with conditions with and without the electron cloud. There were many beam dumps over the week-end. An important leak has developed on August 18 on the B2 dump requiring large amounts of nitrogen gas to maintain the over-pressure inside the dump. It was evaluated safe for further operation under these conditions.

TI

B. Mikulec: J. Nielsen passed the information that there is nothing special to report for TI.



3. Schedule Updates

B. Mikulec presented the latest version of the [injector schedule](#).

UA9 run will take place on September 18, before the TS on the 19th of September. The TS will be followed by a COLDEX run. The exact times still need to be defined.

The facility coordinators for all the machines are requested to present the lists of the technical stop activities during the next meeting.

On August 30 there will be dedicated SPS MD and during this time there will be no beam to NA.

4. AOB

Maintenance of nTOF Target (TFT) access points YEA01.TFT=802 and YEA02.TFT=801 from August 30 at 08h30 until September 1 at 17h30. IMPACT=99474 ([Annex 9](#)).

Maintenance of East Area (EA1) access point YEA01.EA1=157 from September 4 at 08h30 until September 6 at 17h30. IMPACT=99475 ([Annex 10](#)).

RP needs to confirm the intervention and the respective machine representatives approved these interventions.

RP confirmed by email their approval for the interventions.

Comment from V. Kain: LHC machine coordinators agreed to give reports and define beam requests during the FOM meetings starting from the next week.

Next Meeting: 5th of September.

Minutes reported by P.K. Skowronski on 30th of August.