

Minutes of the 31st FOM meeting held on 17.08.2010

Agenda:

- 1) Follow-up of the last meeting (B. Mikulec)
- 2) Status of the machines (Supervisors)
- 3) Schedule (B. Mikulec)
- 4) Special topics: Preliminary list of activities for the next technical stop
- 5) AOB
- 6) Next agenda

1. Follow-up of the last meeting

The minutes of the 30th FOM meeting were approved.

Follow-up from the last FOM:

- a) Status of the PS B-field fluctuations.
R. Steerenberg reported that there are no particular news.
- b) Status of AD bunch-length.
T. Eriksson reported that the bunch length is still longer than nominal. Some further attempts to reduce it were done, but they were not successful.
- c) Send activities to superintendents for next technical stop. See 'Special topics'.

The beam statistics can be found [here](#).

2. Status of the machines

Linac2 (R. SCRIVENS):

The Linac was running without any particular problem.
During this week (at latest Monday 23rd), an access to the Linac tunnel will be needed to take some measurements in preparation of an installation during the technical stop.

PSB (A. FINDLAY):

The PSB had a good week.

B. Mikulec and A. Guerrero took a series of measurement with the BWS to qualify the new phototubes. The data have been analysed and a discussion about the results is ongoing together with the BI colleagues, since the measurements show several issues. The ring4 horizontal BWS has to be changed during the next technical stop.

The investigations concerning the ISOLDE watchdog are progressing.

ISOLDE (D. VOULOT):

HRS: REX has been set up for Miniball.

GPS: After the end of the run, and the necessary cool-down, ISOTRAP started on Friday. On Thursday, an access was done to finish some work on the switchyard at separator 2.

ISOLDE users (M. KOWALSKA):

ISOLDE had a good week. The GPS users were satisfied. The target production was fine. ISOTRAP was running during the weekend. There were few trips of the HV voltage.

The primary proton beams were good, with the intensity increased every time there was enough space in the supercycle and respecting the 2 μA limit. The secondary beam suffered a bit from a wrong isotope contamination.

REX could start on Monday, with the setting up faster than foreseen.

PS (A. GRUDIEV):

The PS had a good week.

On Tuesday, the DIRAC beam intensity was increased as requested by the experiment. These beam conditions will remain for about one week for some tests of a new Be target.

The 88-80 MHz cavity has been tuned for the ion runs. This implies that there is no hot spare available for the protons. In case of a problem with a proton cavity, the LL-RF and the RF power specialists should intervene to retune the ion cavity.

On Thursday, the MDION and the LHCION beams have been accelerated and extracted. Those two users correspond to the nominal and the early ion beam. The longitudinal parameters are within the specifications, whereas the transverse emittances have not been checked yet.

On Saturday the EAST physics had to stop for about one hour and a half due to a problem with the access system. A bad manipulation of the users caused the loss of the security chain. The piquet access and Z. Zaharieva had to intervene to re-establish the good conditions and to re-train the users to respect the procedures of the access system.

On Monday, during the setting up of the ions, the EN/STI expert had to intervene to put back in operation the control of the stripper in TT2.

The INCA-PPM copy is not yet operational. Some of the equipment settings are not yet copied correctly.

EAST AREA (L. GATIGNON):

The intensity of the DIRAC beam has been increased for some tests.

T7 has been running without any problem.

The T9 line has been restarted smoothly after a stop of six weeks. The NA62 run started.

T11 has been restarted for a test beam.

The aforementioned problem with the access system was caused by rather un-experienced shifters of ALICE.

EAST AREA USERS (H. BREUKER):

Due to the request of ALICE and NA62, EASTA will continue to receive two spills, at the expenses of T7 that will receive only one.

In T11 there is an experiment testing gas-track chambers for the Jefferson LAB.

TOF (H. BREUKER):

The experiment concluded the first ten days of the Am run.

The intensity delivered to the experiment is beyond the promised one.

AD (L. BOJTAR):

The AD had a good week.

A lot of effort was put into the check of the relative alignment between the electron and the anti-proton beams. The measurement of the electron beam in the electron cooler unfortunately is not available.

Some noise has been found on the signals of the stochastic cooling.

Two minor problems were due to two power converters fixed by the piquet.

AD USERS (H. BREUKER):

The too long bunch length constitutes a problem only for the ASACUSA experiment. The most recent improvements satisfied the experiment.

ATRAP gave two hours to operation for investigating the issue of the bunch length. Thanks to this, the intensity delivered increased by about 10%.

SPS (D. MANGLUNKI):

On Tuesday there was a problem with the MKP in the inflector zone. This was solved by the BT expert during an access where some insulation oil was added.

During the same access, a water leak on the dump was repaired.

Some ripple was found on the QD circuit on Tuesday evening, which disappeared on Wednesday.

On Friday, CNGS had an access to fix a 40 V power converter.

Also on Friday AMS changed back to the secondary beam.

On Sunday, the record of $3.7 \cdot 10^{17}$ pot could be delivered to CNGS. Currently, $2.4 \cdot 10^{19}$ protons were delivered for $2.1 \cdot 10^{19}$ scheduled.

On Monday, the LHC150 has been sent to the LHC for some tests.

CNGS (L. GATIGNON):

Nothing special to report.

NORTH AREA (L. GATIGNON):

There were no particular problems with the operation.

The only issues were due to the numerous requests of AMS to change the beam conditions and for the installation.

In order to deliver the requested intensity to AMS, the other experiments received less beam.

NORTH AREA USERS (H. BREUKER):

NA61 and COMPASS suffered from the reduced intensity due to the AMS beam requests.

The AMS run should finish the 20/8.

The RD51 experiment is running with about ten different groups.

CTF3 (D. MANGLUNKI):

At the beginning of the week the factor 4 re-combination in the Combiner Ring using the 3 GHz beam was re-established. The delay loop was bypassed. On Tuesday a stable recombined beam with about 14 A was available to be sent towards the CLEX hall. In addition numerous dispersion measurements from the CT-line down to TL2 have been done, and the beam has been optimized accordingly.

Wednesday and Thursday the beam was sent to CLEX for experiments in the TBTS and in TBL. A combination factor of 2 was used and about 6A of beam current.

Friday was dedicated to bunch length measurements using the RF deflectors and a 1.5 GHz beam.

There were some technical problems with klystrons and timing mainly on MKS11, which have been partly resolved.

LINAC3 (R. SCRIVENS):

The source oven was refilled and the beam was available on Monday and Tuesday. The operation was rather stable, but it was noticed that for intermediate repetition rate the buncher cavity was sparking.

The oven will be refilled on Thursday and the beam should be available again on Friday.

B. Mikulec asked about the beam intensity. R. Scrivens replied that 22 muA are delivered in stable conditions.

C. Carli mentioned that RP would like to install some monitors and do measurements next week.

D. Manglunki said that the SPS would like to take the ion beam next week.

LEIR (C. CARLI):

LEIR is running fine.

The intensity is about the nominal one. The beam was delivered to the PS already last week, in advance with respect to the schedule by one week.

The setting up of the RF was done in parallel.

A. Findlay reported about a problem with the spare RF cavity. There is a RF hot spare installed in the ring that is not operational due to a missing modulator.

B. Mikulec asked about the status of the EARLY beam. C. Carli said that the beam was stable, but the intensity was slightly lower than nominal. To compensate for the missing intensity there would be the possibility to inject multiple Linac pulses.

PS-IONS (D. MANGLUNKI):

R. Steerenberg reported that the first emittance measurements in TT2 were done on Monday evening.

D. Manglunki added that about 1 μm (1 sigma normalised) were measured in both planes. The right TT2 optics, however, has not been implemented yet in the SEMGRID application.

The intensity is about 30% too low, already at injection from LEIR.

SPS-IONS (D. MANGLUNKI):

The first ion beam will be injected next week on a flat cycle at injection energy. The RF, in fact, will be available only from week 36.

TI (P. SOLLANDER):

The only problems of the week were related to the CNGS 40 V power converter.

LHC interface with injectors (B. MIKULEC):

Tests with the LHC150 are still ongoing today.

3. Schedule / Supercycle / MD planning

The current version of the 2010 official schedule (V1.7) is available at:

https://espace.cern.ch/be-dep/BEDepartmentalDocuments/BE/2010-injector-schedule_v1.7.pdf

A new version of the schedule will be available soon. Two new MD blocks will be added plus the most recent floating MD of next week.

The MD will take place on Tuesday.

The technical stop of week 42, as the MD block, will be moved to week 43.

All these changes in the schedule will be confirmed after the approval by the LMC, and B. Mikulec will transfer this information to the FOM mailing list as soon as available.

For the next technical stop, RP will communicate the stop of the beams next week.

CTF3 will not stop.

K. Kostro said that a configuration database intervention is foreseen during the first hour of the technical stop. During the intervention it will not be possible to open new working sets.

A. Bland said that few consoles will also be rebooted during the technical stop.

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>.

There will be a series of electrical interventions that can be found here:

ELECTRICITE – ZONE OUEST MEYRIN - BATIMENT 547 - Changement armoire EBD11*59P et remplacement tiroir alimentation sur distribution onduleur zone TT6 EOD1T6 . départ EOD1*66 dep.23 » prévue le lundi 30/08/2010 de 7h30 à 17h30

<https://espace.cern.ch/be-dep/FOM/Presentations%202010/08-17-2010/Note%20de%20coupure%20zone%20Ouest%20Ntof.v2.doc>

ENNC_2010_112 "ELECTRICITE - SITE DE MEYRIN - BAT. 175 - Rajouter un départ climatisation dans tableau EBD11*4M" prévue le mardi 31 août 2010 de 7h30 à 8h30

https://edms.cern.ch/file/1086520/1/ENNC_2010_112_.pdf

ENNC_2010_113 "ELECTRICITE - SITE DE MEYRIN - BAT. 806 - Rajouter Remplacer un disjoncteur F32 15A dans l'armoire ventilation TT10 par un C60N 16A pour alimenter un équipement RAMSES" prévue le mardi 31 août 2010 de 8h00 à 9h30

https://edms.cern.ch/file/1086521/1/ENNC_2010_113_.pdf

ENNC_2010_114 "ELECTRICITE - SITE DE MEYRIN - BAT. 361 - Rajouter deux départs dans l'armoire EBD14*25 pour alimenter un rack BTS et un équipement RAMSES" prévue le mardi 31 août 2010 de 8h00 à 10h30

https://edms.cern.ch/file/1086522/1/ENNC_2010_114_.pdf

ENNC_2010_115 "ELECTRICITE - SITE DE MEYRIN - BAT. 355 - Remplacement cartouches relais SEPAM des départs EMD205*6 et EMD206*6" prévue le mardi 31 août 2010 de 9h00 à 11h00

https://edms.cern.ch/file/1086523/1/ENNC_2010_115_.pdf

ENNC_2010_116 "ELECTRICITE - SITE DE MEYRIN - BAT. 151 - Rajouter un départ dans l'armoire EBD13*SHC pour alimenter un équipement RAMSES" prévue le mardi 31 août 2010 de 10h00 à 11h30

https://edms.cern.ch/file/1086524/1/ENNC_2010_116_.pdf

ENNC_2010_117 "ELECTRICITE - SITE DE MEYRIN - BAT. 193 - Rajouter un départ dans l'armoire EBD12*49 pour alimenter un rack BTS" prévue le mardi 31 août 2010 de 13h30 à 15h00

https://edms.cern.ch/file/1086525/1/ENNC_2010_117_.pdf

ENNC_2010_118 "ELECTRICITE - SITE DE MEYRIN - BAT. 1229 - Rajouter un départ dans l'armoire EBD11*25B pour alimenter un équipement RAMSES" prévue le mardi 31 août 2010 de 13h30 à 15h00

https://edms.cern.ch/file/1086526/1/ENNC_2010_118_.pdf

ENNC_2010_119 "ELECTRICITE - SITE DE MEYRIN - BAT. 1222 - Rajouter un départ dans l'armoire EBD13*64 pour alimenter un équipement RAMSES" prévue le mardi 31 août 2010 de 15h00 à 17h00

https://edms.cern.ch/file/1086527/1/ENNC_2010_119_.pdf

ENNC_2010_120 "ELECTRICITE - SITE DE MEYRIN - BAT. 3192 - Rajouter un départ dans l'armoire EBD2*2MI pour alimenter un rack BTS" prévue le mardi 31 août 2010 de 15h00 à 17h00

https://edms.cern.ch/file/1086528/1/ENNC_2010_120_.pdf

ENNC-2010-108 "ELECTRICITE - LHC SC18 - BAT. 3153 - Installation d'un départ électrique pour alimenter un starpoint" prévue le jeudi 2 septembre 2010 de 9h00 à 10h00 https://edms.cern.ch/file/1086424/1/ENNC_2010_108.pdf

ENNC-2010-109 " ELECTRICITE - LHC SE18 - BAT. 2173 - Installation de deux départs électriques pour alimenter les deux nouvelles climatisations de la SE18" prévue le jeudi 2 septembre 2010 de 9h00 à 10h00

https://edms.cern.ch/file/1086425/1/ENNC_2010_109.pdf

"ELECTRICITE - SITE DE MEYRIN - BAT. 214, 363, 588, 359 - Déconnexion définitive du transformateur EMT107*23 pour projet LINAC4" prévue le lundi 30 août de 7h00 à 14h00

https://edms.cern.ch/file/1086519/1/ENNC_2010_111.pdf

4. Special topics: Preliminary list of activities for the next technical stop.

D. Mcfarlane presented the activities for the next technical stop for the Linac, PSB and SPS. The list of the activities can be found [here](#).

Three magnets in the SPS will be exchanged for the e-cloud studies. For this reason, the SPS technical stop will last 48 hours instead of 36. Then the orbit should be checked since the new magnets are not shimmed.

J. Tan added that a transformer will be changed in the CNGS line. This activity has not been included yet in the list.

D. Mcfarlane added that the colleagues accessing the SPS tunnel should be inscribed to the SPS access list.

R. Brown presented the activities for the PS. The list of the activities can be found [here](#). S. Gilardoni asked if, following the doubtful results of the BWS with the new phototubes in the PSB, it is advisable to install them also in the PS. B. Mikulec replied that the problem is under discussion with BI. S. Gilardoni asked if there were interventions nearby septum 16. R. Brown replied that this should not be the case, but he will check again.

There is going to be a perturbation of the cooling water that might affect Linac2.

B. Mikulec asked if Linac3 will stop as well. R. Scrivens replied that this is not confirmed yet.

5. AOB

6. Next meeting

The next meeting will be held on Tuesday, 24 August at 10:00 in 874-1-011.

Preliminary Agenda:

- 1) Follow-up of the last meeting
- 2) Status of the machines
- 3) Schedule
- 4) Special topics: updated list of activities for the next technical stop.
- 5) AOB
- 6) Next agenda

Minutes edited by S. Gilardoni