

Minutes of the 1st FOM meeting held on 04.02.2014

Agenda:

- 1) Follow-up of the last meeting
- 2) Update on LS1 (S. Mataguez)
- 3) Start-up planning for Linac2, PSB and PS (D. Küchler, J.-L. Sanchez Alvarez, R. Steerenberg)
- 4) AOB
- 5) Next agenda

1 Follow-up of the last meeting

The minutes of the 9th FOM meeting (2013) were approved.

Pending actions:

There are no pending actions.

2 Update on LS1 (S. Mataguez)

The presentation can be found at

[https://espace.cern.ch/be-dep/FOM/Presentations 2014/Forms/AllItems.aspx](https://espace.cern.ch/be-dep/FOM/Presentations%202014/Forms/AllItems.aspx)

S. Mataguez reported on the 2014 schedule for LS1. The schedule is well established and the activities are on track.

On the weekend 10/11 February the AUG test (arrêt d'urgence) will take place. No access would be possible in the injectors (it concerns only the Meyrin site).

On February, machine by machine, the new access system will be commissioned to prepare for the First Global Access Test in week 11 and the Second Global Access Test in week 14.

In March, Linac2 will enter in its hardware test phase and the source will be switched on by end of week 14.

In week 14 the PSB will start its hardware tests in parallel with POPS maintenance. Before Easter the MPS will undergo maintenance to be ready for the PS hardware tests after Easter (week 17). In week 21, after the POPS cooling maintenance, operation will switch to the POPS. During 2014 PS run POPS will be used. S. Mataguez informed that this decision has been already approved by J.-P. Burnet.

In weeks 20-22, Linac2 will be commissioned with beam and will deliver it to the PSB by the end of May. The PS will receive beam in week 25 (mid-June) and in the meantime Linac3 will start its setup with beam.

3 Start-up planning for Linac2, PSB and PS (D. Kuchler, J.-L. Sanchez Alvarez, R. Steerenberg)

The three presentations can be found at

https://espace.cern.ch/be-dep/FOM/Presentations_2014/Forms/AllItems.aspx

3.1 Linac2 (D. Kuchler)

D. Kuchler reported on the present status of the LS1 activities in Linac2. All slits are installed but some minor work remains still to be done. The installation of the new pick-ups started on the 30 January and should be completed by the end of this week (week 6). The maintenance of the tanks and the RFQ cooling is completed. In week 6 the cabling activity will be completed.

The Linac2 will be closed on the 28 February. Commissioning of the source will on the 4 April, and Linac2 will start its commissioning on the 17 April. The 50 MeV beam will reach the dump on the 21 April. Beam will be delivered to PSB on the 30 May or earlier if possible.

The hardware tests will concern the new pick-ups, the new control hardware (all systems are interested but power converters and RF) and the new control software. From the preliminary test the new control system restart was smoother than last year restart.

3.2 PSB (J.-L. Sanchez Alvarez)

J.-L. Sanchez Alvarez reported on the schedule for the PSB restart. The hardware tests will start on the 31 March and will last four weeks. From week 19 to week 22 the PSB cold check-out will take place. On 30 May the PSB Setup with beam will start. On 20 June beam will be delivered to the PS and 10 July ISOLDE setting up will start.

During the PSB hardware tests, the list of equipment to test will be defined by TE-EPC together with the Machine Control Coordinator (J. Betz). One PSB operator will be available from 6 h to 21 h from Monday to Friday.

During the PSB cold check-out there will be 3 shifts per day including weekends. Thousands of systems have to be verified. F. Pirotte asked to add in the schedule the security test of the 5 May. J.-L. Sanchez Alvarez will add it.

The PS Setup with beam will last three weeks (10 days of low intensity and 10 days of high-intensity setting-up). The commissioning of the machine will start with the single rings (from R3 and then R2, R1 and R4). The same approach will be adopted for the commissioning at the higher intensity. On 20 June the PS will be filled using the R3 at low intensity.

M. Zerlauth asked if the new Beam Interlock System has to be operational from the machine start-up. J.-L. Sanchez Alvarez answered positively.

J.-L. Sanchez Alvarez asked to M. Gourber-Pace if during the cold check-out period a CO specialist could be available even during the week ends and festivity. M. Gourber-Pace replied that the request would be discussed.

3.3 PS (R. Steerenberg)

R. Steerenberg reported on the PS start-up planning.

The PS restarts consists of 4 phases:

- 1) PS PPS test period (weeks 7-14, under the responsibility of EN-MEF and GS-ASE). From 10 to 28 February one person will be available in the CCC from 08h00 until 18h00 (no weekends). In March there will be 2 shifts from 07h00 to 20h00 (no weekends).
- 2) HW Test Period (weeks 15-21, under the responsibility of EN-MEF). Starting from 5 May, the PS operators will be available also during the weekends. From 21 May there will be full shift coverage. The CCC operations team will provide support for the tests and will start doing preliminary tests on available systems.
- 3) Cold check-out period (weeks 21-25, under the responsibility of BE-OP). OP assumes that all systems are available and passed successfully the HW tests (including their controls). The plan consists in having 12 days for individual equipment tests according to the check lists and 15 days for system oriented tests. There would be no detailed and fixed dates but milestone planning to allow a higher flexibility. From 19 May to 7 July, every morning from 08h30 to 09h15 a re-commissioning briefing will take place in the CCC glass box.
- 4) Beam Commissioning period (weeks 25-28, under the responsibility of BE-OP). The first beam from PSB will be injected on the 20 June (single bunch from PSB R3, 5E11 ppb on 26 GeV/c cycle on H8 with normal fast extraction). On 10 July beam will be provided to nTOF, AD and East Area. On 15 July the physics in nTOF and East Area will start (IRRAD will be commissioned later). In a second stage, the SFTPRO beam will be commissioned with MTE using the dummy septum and the LHCPROBE will be commissioned for the LHC sector test (1-3 November).

4 AOB

A. Bland informed that after the Easter break there will be two “CO red days” (21 and 22 April). D. Küchler commented that they would have an impact on the Linac2 schedule. A. Bland confirmed that they have to be considered as a Technical Stop.

A. Bland remember that OP passwords have to be changed after Easter break.

A. Bland reported that the technical network disconnection test (28 January) revealed several weaknesses to be addressed. Another test has to be scheduled in future.

T. Hakulinen reported on the behalf of D. Manglunki that during week 33 and 34 the test of the new interlock for Fixed Target Primary Ion Beams in the North Area would take place. This test will not require beam and it should be transparent for the rest of the injector Complex. K. Hanke commented that this will be scheduled in due time.

5 Next agenda

K. Hanke informed that the preliminary dates of the next FOM's are 11 March and 8 April. After the Easter break, the FOM will resume its weekly pace.

The agenda of the next meeting (2nd FOM) will follow.

Minutes edited by G. Sterbini.