

Minutes of the 2nd FOM meeting held on 18.03.2014

Agenda:

- 1) Follow-up of the last meeting
- 2) Revised OP Injector Schedule v1.0 (K. Hanke)
- 3) ISOLDE start-up (R. Catherall)
- 4) East Hall and NA start-up (I. Efthymiopoulos)
- 5) n-TOF start-up (S. Montesano)
- 6) AD restart scenarios (T. Eriksson)
- 7) AOB (starting of weekly FOMs)

1 Follow-up of the last meeting

The minutes of the 1st FOM meeting were approved.

Pending actions:

There were no pending actions.

2 Revised OP Injector Schedule v1.0

K. Hanke presented the 2014 Injector Schedule (v1.0, https://espace.cern.ch/be-dep/BEDepartmentalDocuments/BE/Injector_Schedule_2014.pdf).

The main changes were related to the time slot for the SPS power tests: it was reduced from 8 to 7 weeks. D. McFarlane commented that the original request was of 13 weeks and the present allocated time (7 weeks) appears to be too short for the full re-commissioning of all subsystems. K. Cornelis and M. Lamont observed that the hard deadline to meet is the delivery of the beam to the North Area on the week 42. K. Cornelis added that there is no margin in the start-up planning. K. Cornelis will call for a separate meeting with D. McFarlane and the EPC group to discuss the details of the schedule and possible interleaved activities.

D. Manglunki asked if the SPS scrubbing weeks were fixed and if one could envisage having the Argon run in week 41. K. Cornelis answered that week 41 will be fully dedicated to the proton beam set-up for delivering it to the North Area on week 42. The scrubbing run will take place in week 39 and 40 but it may last less than the two allocated weeks. ¹

¹ After the FOM, D. Manglunki sent an email with the updated date for the Argon run. The

B. Mikulec presented a slide summarizing most important deadlines of the injector schedule. The slide is available at

<https://espace.cern.ch/be-dep/FOM/Presentations 2014/Forms/AllItems.aspx>

K. Hanke asked the machine superintendents if there are activities which overrun and impact the start-up planning. All machines are on schedule.

3 ISOLDE start-up (R. Catherall)

R. Catherall's presentation can be found at

<https://espace.cern.ch/be-dep/FOM/Presentations 2014/Forms/AllItems.aspx>

ISOLDE physics will start on the 21 July. The week before will be dedicated to the SEM-grid tests and the HT tests using the p-beam.

Before the commissioning with protons a lot of time will be dedicated to start-up and test the separators. In fact dedicated target units can be operated for the production of stable beam and will be used for testing purpose. In particular the RFQ cooler realignment and re-wiring has to be tested (~15 days), together with the new magnet control system. A campaign of RILIS measurements will be launched for testing of the ionization schemes with realistic efficiency measurements (~55 days). The new stepping motors of the separator magnet have to be tested and calibrated.

In order to commission the facility it is crucial to have all the services available. Cooling water and all power supplies should be available starting on the 10 April. The HT has to be available by the 22 April. Soon after all instrumentation and magnets have to be ready. At the end of May there will be one week stop for the HT maintenance. A. Bland remembered that the 22 and 23 of April, as indicated in the schedule, will be dedicated to control maintenance.

ISOLDE physics start was moved by one week with respect to the previous version of the schedule, in order to allow sufficient time to bring the beam to the targets and to do the setting up on the targets (SEM grid tests). M. Kowalska underlined that the experiments need beam on target to test and calibrate their setup before the actual start-up. K. Hanke asked if this delay could conflict with MEDICIS commissioning. R. Catherall answered that it should not impact negatively on MEDICIS schedule.

4 East Hall and NA start-up (I. Efthymiopoulos)

I. Efthymiopoulos presented the start-up schedule for the East and North area. The slides can

Linac3 source will be switched on the 16 June, and LEIR will receive the beam on the 30 June. There were the following changes to the schedule (v0.8): on the 28 August the beam will be sent to PS and SPS will receive it on the 13 October (week 42).

be found at

<https://espace.cern.ch/be-dep/FOM/Presentations 2014/Forms/AllItems.aspx>

Concerning the East Area, the installation of the lateral shielding walls for the new IRRAD facility is well under way. The infrastructure installation is starting but the ventilation will be available only in October. The delivery of the new control room is delayed by two weeks. The plan is to commission the facility at low intensity and with minimal number of cycles until the ventilation will be available.

The East Area is on track for restart in mid July (with ventilation restrictions for IRRAD). The beam setup and the physics will start respectively on the 10 and on the 15 July.

Concerning the North Area, works on TAX repairs, the primary target and BI renovation, the maintenance of secondary beam vacuum systems are progressing as expected. In week 38 and 39 the magnet patrol will take place and the TCC2 works will be finalized. In week 40 the DSO control and the magnet patrol in TCC2/TDC2 will take place. The North Area proton run will start in week 42.

5 n-TOF start-up (S. Montesano)

S. Montesano reported the start-up schedule for n-TOF. The slides can be found at

<https://espace.cern.ch/be-dep/FOM/Presentations 2014/Forms/AllItems.aspx>

Civil engineering is completed and the installation of services is on going.

Concerning the primary test area, the access system test and DSO test will be done in weeks 14 and 21.

Concerning the target test area, several systems are being installed. DSO tests could be envisaged in week 27.

Concerning the services, the cable installations for the target cooling is on going, vacuum valves in EAR1 and EAR2 will be installed in weeks 20 and 27.

The PS time signal has to be configured. A. Bland will communicate the contact person for it.

BCT468-NTOF needs to be calibrated. L. Soby informed that with the new BI system the BCT calibration is automatically done every three cycles.

6 AD restart scenarios (T. Eriksson)

T. Eriksson reported the AD restart scenarios. The slides can be found at

<https://espace.cern.ch/be-dep/FOM/Presentations 2014/Forms/AllItems.aspx>

During an inspection in the AD primary target area, a contact on the high voltage stripline of the magnet horn was observed, probably due to a bad closure of the clamp causing a hot point between the conductor contacts.

In this area the radiation level is very high and the intervention is difficult but in this condition the horn cannot be operated and AD cannot run without horn. Two scenarios are under considerations to solve the problem:

- 1) Replace damaged parts, install the present horn on spare chariot and install/test it directly in target area. The physics would be delayed by two weeks (from 28 July to 19 August).
- 2) Build a temporary test bench in B195, install in target area after testing the whole assembly. The physics would be delayed by three months (from 28 July to 17 October).

N. Gilbert asked to relax by two weeks the LS1 deadlines for AD. K. Hanke observed that the minimum delay for the AD physics is two weeks and the proposal was accepted.

7 AOB

D. Kuchler reported the concern of the Linac supervisors about the lack of the CO piquet. M. Gourber-Pace replied that training sessions are planned. During these sessions, the list of specialists of the different sub-systems will be presented. Moreover first line service will be still available.

A. Bland commented that technical stops are not included in the present injector schedule. R. Steerenberg explained that they are not strictly needed in the 2014 run because the PS will use POPS and not the rotating machine (the only injector system that needs short term periodic maintenance). B. Mikulec warned that a lot of specialists are implicitly assuming TS to finalize and/or check their installation. D. Kuchler added that at least 2 h of stop is needed for the H bottle refill. K. Hanke commented that this kind of short interruptions can be scheduled during the FOM. A. Bland commented that for CO and IT (ORACLE database) maintenance and patches one needs general technical stops. D. Kuchler asked if the water station needs short-term maintenance. S. Deval answered that the station can run 6 months with no maintenance and marginal risk increase. He also added that in the past for all technical stops they had a long list of problems to fix on every kind of CV equipment (ventilation, cooling, pumps,...). Those problems if not solved could become accelerator stops. For CV point of view, it would be needed to have at least 8 h of stop in the 6 months of the run.

B. Mikulec reported that P. Ninin explicitly asked to make all EIS available for the Access Test on week 14. The test on week 11 was cancelled due to unavailability of some EIS.

8 Next agenda

K. Hanke informed that the FOM will be on bi-weekly basis until the 6 May. Then the meeting will take place once per week.

Minutes edited by G. Sterbini.