

Minutes of the 6th FOM meeting held on 06.05.2014

Agenda:

- 1) Schedule Updates
- 2) Status of the Machines
- 3) AOB

1 Follow-up of the last meeting

The minutes of the 5th FOM meeting were approved.

Pending actions:

There were no pending actions.

2 Schedule Updates

K. Hanke presented the new version of the schedule (v1.2)

https://espace.cern.ch/be-dep/BEDepartmentalDocuments/BE/Injector_Schedule_2014.pdf

With respect to version v1.1, the dates for AD and LEIR were updated, and the dates for the DSO test of SPS, the Technical Stop and the Technical Network disconnection test were added/modified.

3 Status of the Machines

Linac2 (D. Kuchler)

On Monday, the RF dry-run started. Concerning the RF control, the CCV values could be set correctly whilst the AQN read-back was updated only after an important delay (about 600 ms).

This problem occurs if one subscribes to all machine elements and it is probably due to a PLC problem. There will be more information by the end of today (6 May). At the moment the problem is not stopping the beam commissioning but there is the risk of an intervention if the PLC card has to be replaced. Linac3 could potentially suffer from the same problem.

On Tuesday and Wednesday the tests with the BCTs and the BPMs took place. The hardware was working as expected. There are still minor problems on the software application.

On Tuesday morning, the safety chain test with BHZ20 took place.

PSB (J.-L. Sanchez Alvarez)

On Monday morning there was a patrol. An emergency exit door was blocked and it took 10 minutes to force it. The door had recently been painted and closed before having dried. F.

Pirotte informed that all recently painted emergency exit will be checked.

There was a problem of flash over in the distributor.

Concerning the CO software, there were issues with the working sets and the FGC notification.

A. Findlay reported that the RF dry run was successful.

J.-L. Sanchez Alvarez informed that the cavity FESA class is not yet available. A. Findlay commented that the specialists are currently solving the problem.

K. Hanke informed that the EPC piquet will start on the 12 May (one week of delay with respect the previously announced date). Until then day-time support will be available.

PS (G. Métral and S. Mataguez)

The PS HW commissioning is progressing well thanks the CO team support.

Concerning the timing, the main signals are working properly and the information of the connected signals is available.

Concerning the database, from CCDB it is possible again to check the timings and interrupts of the machine devices.

All GFAs were tested and, in INCA, the relations between the virtual and real GFAs were reintroduced.

Most of the power supplies were tested in Remote Mode (the septa and the PR.DHZ18-OC are still to be tested).

The PS power supplies will be 'consigned' from the 7 to the 16 May (put in place of covers).

The TT2 power supplies will be 'consigned' from the 12 to the 16 May ((put in place of covers).

M. Gourber-Pace added that there are problems with the working set refresh. G. Kruk is on the problem. To help debugging the problem the OP team should contact the Inca support (daytime hours) when the issue appears.

SPS ()

No news.

ISOLDE (E. Siesling)

E. Siesling presented the problem of the vacuum leak in ISOLDE. The presentation can be found at

<https://espace.cern.ch/be-dep/FOM/Presentations%202014/Forms/AllItems.aspx>

A vacuum leak was observed in the proximity of the HRS20 sector. The precise detection by the leak is very difficult (large leak and contamination issue). After an accurate analysis by the vacuum team, the most likely position of the leak would correspond to a special insertion of the vacuum chamber of MAG90 where the window used for the RELIS laser is positioned. The situation is complicated by the presence of a shutter (presently not used).

In order to spot with higher precision the leak location, a local leak test is foreseen for Wednesday (7 May). If the test confirms that the leak is on the window/chamber connection, the intervention is likely to consist of the following steps:

1. Launch fabrication of a simplified replacement for the laser-shutter box and the laser-window flange, based on the available drawings.
2. Measure the MAG90 position.
3. Remove the MAG90 and the pole-face windings (hopefully the magnet table motor is working).
4. Do a precise leak test with the MAG90 vacuum chamber exposed (contamination risk).
5. Fix or replace the laser shutter box (contamination risk).
6. Reinstall MAG90 and the pole-face windings.
7. Check alignment.

K. Hanke asked about the potential impact of the intervention on the schedule. E. Siesling answered that he expects one-week delay. The delay should be absorbed in the cold check-out therefore no impact on the physics schedule is expected so far.

In addition to the vacuum problem in HRS there was a leak on the RFQ, a problem on the door of the Faraday cage and with the acquisition the Faraday cup.

[AD \(\)](#)

No news.

[nToF \(\)](#)

No news.

[East Area \(A. Fabich\)](#)

On schedule.

[TI \(P. Sollander\)](#)

P. Sollander reported about the electrical power test. Today morning (6 May) the regular power network was switched off. The UPS units took over and afterwards the Diesel Auxiliary unit took over the UPS. Finally the regular power network was re-activated.

The test was successful and completely transparent for the users.

4 AOB

C. Mastrostefano has discovered that after the LS1 recabling of the LT.BHZ20, LT.BHZ30 and LT.BHZ40 power convertors, the spare convertors were left missing some cabling, which will lead to additional downtime if one of the convertors fails. In order to rectify this situation, he proposed if a wiring of the spares could be scheduled from the 12 May (morning) to 13 May (afternoon). The BHZ20 is an EIS device so during all the intervention there cannot be beam in Linac2. The source can continue to pulse and the RF can be left on. K. Hanke asked if it has been confirmed that BHZ20 needs to be 'consigned'. C. Mastrostefano answered positively. D. Küchler commented that if the commissioning of Linac2 will continue at the present pace, this stop appears possible. The FOM approved the intervention to correct the situation.

K. Hanke informed that the specialist call-out list is available. The list can be found at the following (direct) link:

https://apex.cern.ch/pls/htmldb_edmsdb/f?p=145:61:3808397529498::::P61_SYS_ID,P61_SDC:15,5

This list can also be accessed through the BE-OP web piquet page

<http://abop-piquets.web.cern.ch/ABOP-piquets/>

by selecting the complex concerned followed by clicking on the link "BE-CO Specialists".

M. Brice and J. Hernandez presented some tools for making a virtual tour along an accelerator. The PSB case was presented. These tools can be useful to document the machine hardware and, up to some extent, to plan intervention in the machine without accessing it. At the moment the tools are not available on the web. One possibility to make them accessible is to setup a web site and to link it to the OP web page. K. Hanke commented that the FOM is not the body to give advice on the technical choice for sharing the tools.

With the same technique the PS also will be documented. D. Manglunki and M. Kowalska showed interest to use similar tools in other machines (some sections of the SPS and ISOLDE).

F. Pirotte informed that the PSB beam permit is not yet signed even if the PSB DSO test has been done. This due to the fact that the switchyard region has not been DSO tested yet. Once its DSO will be passed (22-23 May), the PSB beam permit will be signed too.

The next FOM meeting will be held on 13 May. The agenda will be communicated in due time.

Minutes edited by G. Sterbini.