

Minutes of the 1st FOM meeting held on 17.03.2009

Agenda:

- 1) Status of the shutdown work (V. Chohan)
- 2) Start-up planning for the machines (supervisors)
- 3) Schedule (K. Hanke)
- 4) AOB

K. Hanke introduced the Facilities Operations Meeting (FOM):

The FOM is responsible for overseeing the operation of the non-LHC accelerator complex and associated experimental areas. Specific responsibilities include:

- Establish and maintain short-term and long-term accelerator schedules
- Planning and coordination of cold check-outs, accelerator start-ups and all periods of beam operation
- Review regularly the performance of all operational beams, in order to ensure optimum performance and the best possible conditions for all users
- Implement developments to improve the performance of operational beams
- Report major technical problems, which affect operation, to the IEFEC
- Regularly report to the BEMB

The web page of the meeting is available at <https://espace.cern.ch/be-dep/FOM/default.aspx>

1. Status of Shutdown work

V. Chohan presented the activities in the complex during the last shut-down. The different activities were lead by the machine superintendents, i.e. C. Mastrostefano for Linac2, F. Chapuis for the PSB (pending the nomination of a new superintendent), R. Brown for the PS, N. Gilbert for the SPS. The list of the activities can be read in the [slides](#).

For the Linac, all the activities planned were done, with some delays due to the need of extra-shielding for the Linac4 civil engineering work. The new PVSS vacuum control system has been installed also for the PSB. The PS is the last machine with the old control system.

K. Hanke asked if the water leak in the PSB, which appeared during the end of the run last year could be found. S. Delaval replied that the source of the leak was not found, but the leak is no more present. After the meeting it was confirmed that the leak was probably due to a throttle in a power supply. The water station is now working since several weeks without any abnormal consumption being observed.

All activities are on schedule, even if during the HV tests the electric circuit of the reference magnet needed to be repaired.

For the PS, the magnet renovation campaign has been finished with the refurbishment of the last 9 magnets. The other main activity of the shutdown was the re-cabling of the new power converters.

For the SPS, the renovation of the water cooling manifolds of the LINTOTT magnets has been finished. During the change of the BA2 power cables, broken cables were discovered and needed to be exchanged. This will require accesses beyond the end of the programmed shutdown period and might cause a delay in the start-up.

For the AD, the main activity was the horn and target changing, in the view of improving last years low pbar intensity.

V. Chohan introduced also the responsibilities in the new EN department of the MEF group. The group is in charge of the coordination of the shutdowns activities for all accelerators and experimental facilities, secondary beams design and integration. The group provides also the integrated layouts of the machines, including the optimisation of the layout of the regions around the LHC experiments, in particular carrying about background issues. In the ABA section, 3 machine superintendents are responsible for the shutdown activities.

K. Hanke asked about the status of the humidifier of the PS reference magnet room, which recently broke down. The PS will start without the humidifier, however FOM recommend that should be repaired and ready in case of need. R. Steerenberg will follow this.

K. Cornelis commented about the delay of the shut-down end of the SPS. The shutdown will be considered finished on schedule, and all the SPS will be closed, except for LSS2 and LSS5, LSS2 for the cabling and LSS5 for a delay of the UA9 experiment installation. The HW commissioning will start for the rest of the machine on schedule, with the goal of having the first injected beam on schedule the 23rd of April.

S. Hancock asked which version of the schedule is the current one. K. Hanke replied that is the V 3.3, available from:

<https://espace.cern.ch/be-dep/BEDepartmentalDocuments/BE/Schedule2009.pdf>

The schedule linked to the old ABOC web page is no more valid. Only the links and the information in the FOM web page <https://espace.cern.ch/be-dep/FOM/default.aspx> can be considered up-to-date.

2. Start-up planning for the machines

Linac2 (R. SCRIVENS): The source has already been running for the last three weeks, with increasing intensity. The beam quality should be checked once the Linac will start. The patrol was done during the meeting. The beam will be delivered to the PSB on Monday the 30th. A new access procedure has been put in place due to the work ongoing for the Linac4. The access will generally be more complicated, as the supervisor must be present during any access. The CCC and the Fire Brigades must be informed before the access. The detailed procedure is available here ([link](#)). A new radiation monitor has been put in place to protect the Linac4 civil engineering work. In case of radiation beyond the threshold, the monitor will trip the entire Linac. A special procedure to check the reason of the high radiation level before rearming the safety chain will be transmitted to OP. The general access to the Linac buildings will be more difficult due to the civil work for the Linac4. In particular, R. Morton (civil engineer responsible for the works), has to be informed or present during an access.

During tests, a fault to the transformer appeared. CO is working on this to correct the interface GM to FESA. It is not clear if the watchdog is also affected. K. Hanke stressed that the watchdog has to be properly tested.

R. Scrivens asked if the network intervention of Thursday will affect also the Linac. K. Sigerud will follow-up the issue. After the meeting it was confirmed that there will be disruptions between 6:00 and 8:00 that day, but they should not be affected for the rest of the day.

Regarding the issue of the watchdog, CO will wait for Richard to get back to them on his continued investigations before pursuing it further.

B. Mikulec asked about the alignment of the tank3. R. Scrivens replied that everything seems to be OK, and the bump in vacuum pressure observed recently was probably due to the civil works around the Linac.

PSB (B. MIKULEC, [slides](#)): During the shutdown, the vacuum control of the PSB was migrated to PVSS. A new cabling of the correctors and of the orbit pickups was done. The machine cold checkout will start in week 13. K. Hanke added that beam is foreseen by Monday 30th. S. Gilardoni reminded that the signature of RP has been added to the authorisation form to be filled before granting injection.

ISOLDE (D. VOULOT, [slides](#)): The HW interventions are finished. Now vacuum is going to be re-established in the different lines. There is still a good amount of work to be done for REX, in particular for the Linac RF. For the 14th of April, beam is foreseen for setting up with protons. This, however, might interfere with the PS access for the PS magnet re-alignment scheduled for 16 April. K. Hanke asked if there will be enough time to do all the setting up in the time available. E. Siesling replied that this should be the case and some margin is available (1 day + week end).

ISOLDE users (D. VOULOT): The schedule is still in preparation. K. Hanke stressed that the run should not start with REX.

PS (R. STEERENBERG, [slides](#)): The cold check-out will start the 30th of March. For the 1st of April, INCA tests are foreseen. First beam is scheduled for the 8th of April, but the machine will be ready as from the 3rd for possible early beam delivery. The patrol in the PS foreseen for Friday the 30th March has been rescheduled to avoid a possible interference with beam in the PSB. All magnetic cycles will be re-programmed due to the new MPS regulation. The start-up might be difficult due to the 2 long week-ends. The machine re-alignment after orbit measurements could interfere with the ISOLDE start-up, and it might be advanced if possible. In particular, the INCA MD schedule might be changed to accommodate the alignment intervention.

The first beam prepared will be a CT with about $2 \cdot 10^{12}$. Then there will be the setting up of the LHC beams, with the first type to be agreed with the SPS. The next beam will be EAST with parasitic TOF. K. Hanke pointed out that the PS alignment could be advanced but not postponed. V. Vlachoudis asked if access to the primary TOF zone will be granted during the first technical stop the 26th of May. K. Hanke answered that all accesses during the technical stop will be scheduled by the FOM 2-3 weeks before the stop.

East Area (L. GATIGNON): A lot of work was done in the primary zone. The T7 camera has been repaired. All the activities are on schedule.

East Area Users (H. BREUKER): The new physics coordinator presented himself. No particular news from the users.

AD (P. BELOCHITSKII): The shutdown is progressing well. The bake-out of sector 2 has started. A minor change to the shutdown schedule has been done since it was necessary to postpone the work on the cooling circuit by one week.

AD users (H. BREUKER): No particular news.

SPS (K. CORNELIS): The SPS will close on Friday, even if work will continue on the LSS2 and LSS5 during week 13th. Beam is still foreseen on schedule. This means that the work on the RF and Kickers has to be completed as foreseen.

CNGS: No news.

SPS North Area (L. GATIGNON): No news.

North Area User (H. BREUKER): No news

LINAC3: No news.

LEIR (C. CARLI): The start-up of the machine is foreseen for the 6th of July. First tests started on the LSA based applications.

CTF3 (F. TECKER): The shutdown work has been completed. On the 2nd of March the Linac was closed. The overload of several DSCs and timing problems have lead to some delay and should be fixed by CO. A first beam in the PHIN photoinjector was achieved. The CLEX area has been closed and besides the control problems everything is going well.

TI (E. LIENARD): Nothing special to add.

3. Schedule / Supercycle / MD planning

The 2009 schedule (V3.3) is available at:

<https://espace.cern.ch/be-dep/BEDepartmentalDocuments/BE/Schedule2009.pdf>

The complex will run as from the end of November for LHC injection only. All the other beams will be stopped.

4. AOB – Special topics

Pierre Charrue presented a series of proposed changes for the control system ([slides](#)).

FESA will migrate from V2.9 to 2.10. The versions for CMW are 3.0 and RDA 2.8 to fix a RBAC related bug. There are code changes and additional API but backwards compatibility is guaranteed. JAVA application should be released with the new versions of the dependant library. During week 12, tests and dry runs are done in collaboration with BI for the FESA device, with operation not affected. On Monday 23, a mail to the CO users will be sent to inform what should be done to update the SW to the new CO SW versions. This change could affect operation.

The link to the WIKI pages can be found in the slides.

A memory error has been found on one of the NFS server and one of the memory banks should be changed at the first occasion. A proposal could be the 19th of March at 6:30. This will block the accounts shown in the slides by about 20 minutes.

V. Vlachoudis asked if there is a package that can be downloaded to install efficiently all the libraries. P. Charrue will follow-up this.

P. Charrue added that in case of problems, it will be always possible to go back to the old version. The changes will be visible only when an explicit FESA synchronisation will be done.

R. Steerenberg added that currently there is a mix of workstations in the CCC, some running SLC4, other SLC5. This will be followed by P. Charrue. Moreover R. Steerenberg requested to install PVSS on all the Linux workstations. He asked also about the replacement of the broken printers.

P. Charrue replied that there are no printers available in the store. R. Steerenberg asked to install at least a temporary replacement.

5. Next meeting

The next meeting will be held on Tuesday, 31st March at 10:00 in 874-1-011.

Preliminary Agenda:

- Follow-up of the last meeting
- Status of the machines
- Schedule