Minutes of the 9th FOM meeting held on 17.12.2013

Agenda:

- 1) Update on the start-up schedule (K. Foraz)
- 2) Schedule of the CO dry runs (C. Dehavay)
- 3) TN disconnection test (S. Lueders)
- 4) AOB
- 5) Next agenda

1 Follow-up of the last meeting

The minutes of the 8th FOM meeting were approved.

Pending actions:

There were no pending actions.

2 Update on the start-up schedule (K. Foraz)

K. Foraz presented an update of the start-up schedule. The slides are available at http://goo.gl/vj4hRY.

The global schedule from January to August 2014 was shown. Linac4 and IRRAD related activities are not included in the present schedule.

From week 7 to week 10, the new access system (PPS) will be commissioned in the different machines. A detailed table of all equipments needed for the PPS commissioning was shown.

An overall first check of the access system will be done in week 11. Week 12 and 13 will be dedicated to address possible non-conformities. During week 14 the final global access test will take place.

M. Gourber-Pace commented that from week 7 to 11 part of the equipment has to be controlled locally.

R. Steerenberg added that in week 14 there will be a DSO test for debugging but that the final DSO tests will take place at the end of the machine HW commissioning and before EN will hand over the responsibility to BE-OP. All equipments have to be ready for remote control on week 14.

K. Foraz reported that together with the coordination of the PPS commissioning, EN is in charge to coordinate the hardware commissioning in the different machines. For that purpose

bi-monthly meetings are taking place. K. Foraz underlined that each group involved in the HW commissioning has to be represented during those meetings.

K. Hanke asked if the present dates are confirmed and in agreement with the different groups. K. Foraz answered positively.

R. Scrivens pointed out that the only way for Linac2 to meet the deadlines is to start the HW commissioning in week 10 and that it would be beneficial for the coordination to explicitly mark it down on the schedule. The HW commissioning of Linac2 should start from week 10 and end in week 19. K. Foraz will add this information on the schedule.

K. Hanke showed the updated version of the Injector Schedule for the 2014 (V0.6), that includes Linac2 and Linac3 related dates as requested by D. Küchler. The new version of the schedule can be found at <u>http://goo.gl/vj4hRY</u>.

3 Schedule of the CO dry runs (C. Dehavay)

C. Dehavay presented the schedule of the CO dry runs. The slides are available at <u>http://goo.gl/vj4hRY</u>.

Pilot CO dry runs took place this year in Linac2, ADE and PSB. This was very beneficial to improve expertise, test the tools and plan the coordination.

A CO dry run lasts 5 working days and involves a team of 5-7 people.

From the start to mid 2014 several CO dry runs are foreseen. They can be divided in three phases:

- 1) Front-end tests during PPS commissioning by CO.
- 2) System tests during HW commissioning (coordinated by CO in close collaboration with OP and HW teams).
- 3) Beam tests during the cold check out (coordinated by OP in close collaboration with CO and HW teams).

N. Gilbert asked to clarify if during the HW commissioning parts of the control system will not be fully operational. C. Dehavay confirmed this and R. Steerenberg commented that all the equipment that cannot be remotely controlled will be commissioned in local mode. M. Gourber-Pace added that, discussions are ongoing with EPC and also with the other teams. She added that the next step in January 2014 is the proposal by C. Dehavay to OP, equipment experts and machine coordinators of a CO dry run planning to be refined and officially agreed.

N. Gilbert proposed to decouple the CO and HW commissioning activities. M. Gourber-Pace pointed out that some HW team in PSB could not accept to revise their already tight schedule. G. Métral and R. Steerenberg commented that for an optimized exploitation of the

available time it is better not to put rigid time barriers between the different activities but to promote as much as possible the coordination between them. This argument received general consensus.

D. Hay asked if the old PSB timing cables are still in place. C. Dehavay answered positively. They have still to be removed. CO will not remove them but will provide the complete list of the cables that are not needed anymore. K. Hanke commented that, as a general rule, the hardware responsible (CO for the front-ends in this case) should ensure not only the installation of the new cabling but also the removal of the old one.

R. Scrivens asked if the CO software layer is going to be tested before week 10 and specifically if it will be available during week 10 for Linac2. C. Dehavay answered that the software test will start before the CO dry runs and that the Linac2 CO dry run will be given priority.

B. Mikulec added that the presence of both the EPC and the magnet teams during the CO dry run is important. C. Dehavay agreed.

4 TN disconnection test (S. Lueders)

S. Lueders summarized the motivation and presented the modalities for the Technical Network disconnection test. The slides are available at <u>http://goo.gl/vj4hRY</u>.

At CERN there are two networks: the General Purpose Network (GPN) and the Technical Network (TN). The GPN is opened trough a firewall to the Internet. This is not the case for the TN. On the other hand the TN and the GPN are connected: there are ~1200 devices of the GPN connected to the TN and ~90 devices of the TN connected to the GPN.

The TN disconnection test consists in isolating the TN from the GPN in order to understand if and under which limits the TN can work without the GPN services. This is important to ensure the continuity of CERN operation in the case, for example, of a GPN cyber attack. A first disconnection test was already done on the 27 March 2013.

S. Lueders proposed to do a second TN disconnection test the 28 January 2014 starting gradually at 9h00 and ending at 14h00. All teams and especially OP are encouraged to test as much as possible the TN-GPN dependencies and to report/discuss the problems with the IT experts present in CCC. A second TN disconnection test will be proposed later next year.

R. Scrivens asked if the goal is to ensure the CERN operability without the GPN. S. Lueders answered that the goal is to establish the limits (and if possible to remove them) of the "pure TN" mode.

R. Steerenberg warned that, due to LS1, the OP activities on the 28 January 2014 would be very limited.

The proposed date was accepted by the FOM.

5 AOB

C. Mastrostefano asked if the piquet services for Linac2 will be in place over the Christmas break. The CV will be in place. K. Hanke will contact the responsibles to know if a vacuum piquet is planned¹. The EPC piquet will not be in place.²

P. Sollander asked for a list of the machine supervisors to contact during Christmas period if needed.

K. Hanke asked to the machine technical coordinators an update on the LS1 activities. It was reported that most activities are on schedule and there are no delays expected at the moment.

N. Gilbert suggested that all machines should be closed during the Christmas period. K. Foraz proposed to suspend all IMPACT access permission for the activities not scheduled during Christmas period. If special access is required TI could grant it from the CCC. N. Gilbert commented that not all machine access is managed trough IMPACT.

P. Sollander asked if a RP piquet is going to be organized during Christmas to monitor the accesses. J. Vollaire answered there will be a RP piquet over the holidays (contacted by the CCC via the fire brigade as it is always the case).

Minutes edited by G. Sterbini.

¹ After the FOM, P. Chiggiato informed that the vacuum piquet will not be available but a list of number has been provided to TI and vacuum level will be monitored on best-effort basis.

² After the FOM, C. Mugnier informed that all TE/EPC facilities are stopped and safe. Only BEF4 (stable filter) will remain switch-on. If a fault occurs on it, recommendations are given to CCC-TI to verify that there is no fire (almost null probability), and let it stopped until the end of the Christmas break.