Minutes of the 5th FOM meeting held on 21.04.2009

Agenda:

1) Follow-up of the last meeting (K. Hanke)
2) Status of the machines (Supervisors)
3) Schedule (K. Hanke)
4) AOB
5) Special topics: ARCON-RAMSES bridge (M. Widorski)

1. Follow-up of the last meeting

The follow up from last FOM meetings were: a) new BSW commissioning. This task is in progress and a meeting about the status of the devices in the PS and PSB will be held next week; b) FESA servers limited number of subscription. A. Bland said that work is ongoing to try to find a solution. The first would be to upgrade the CPUs for some BI instruments, the second to install a PROXY server to read the information from the BI instruments; c) repair of the KFA71 PS kicker module: this has been done last Thursday; d) check the temperature sensor alarms installed in the PS central building. The integration of the alarms in the CV system will be done soon.

2. Status of the machines

Linac2 (G. BELLODI): Starting of Tuesday night, numerous Hazemeyer faults (RF) appeared with one fault every 1-3 hours. The remote reset was not working, so the operators had to do a manual reset. Some differential noise was observed on the trace of thetank3 threshold detector module triggering the Hazemeyer faults. In total all those problems caused 1.5 hour downtime. The problem with the remote reset was solved later in the week. A part of the source was replaced by its spare on Wednesday. The tests of the ventilation of the building are ongoing and the problem with the water cooling circuit has been solved, with the LINAC cooling being back to the chilled water.

PSB (B. MIKULEC): The PSB had a busy week. The most outstanding problem was related to the ISOLDE SEMGRID target run. On Tuesday the steering of the beam started but it was interrupted by the watchdog, which was not possible to reset. BI and CO worked to try to solve the problem. In the meanwhile, the watchdog, which was not possible to reset neither via the Java knob nor through Laser, was reset via the old X-Motif knobs. CO solved the Java knob problem the next day and E. Roux delivered a corrected Laser Watchdog control panel. Once the problem with the watchdog was solved, two bendings sending beam to ISOLDE or to the measurement line and to GPS or HRS were not following all required ppm settings. N. De Metz-Noblat solved the problem. Then large losses were observed in the transfer line. This was due to the fact that the BTY.QDE151 was not following the programmed current, even if the AQN was at the correct value. On Wednesday, the GPS SEMGRID run started. Again, the watchdog was triggering all the time due to a bad calibration of the BT.BCT. One of the BI experts came back from his holidays to fix the problem. The calibration is not yet correctly done, and this BCT is a fundamental instrument to run ISOLDE. BI will follow this issue. Renovation of the hardware is planned in the medium term future. Until then, the calibration has to be done as well as possible with the existing hardware. The HRS run continued after the PS realignment. On Friday, the ISOLDE proton integrator stopped the acquisition and, after the reset of the DSC, all the data were lost. This is an important issue, since

the data are used by the users to normalise their data plus the fact that, by the law, those data should be always available. An intervention done by CO and M. Ludwig solved the problem but not definitely. Apparently the problem is generated by an overload of the CPU, due to too many clients running on the DSC. A first cleaning of the application reduced the CPU load. A PROXY server has been installed for the OP display applications. This reduced the number of clients on the FEC but did not decrease the CPU load significantly. M. Ludwig implemented a SW to avoid data loss after a reboot. C. H. Sicard added that the CPU is too old and a new one is not available within CO to replace it. It is not even possible to buy a new one since the contractor has been changed and the new contractor platform is not yet validated. This will be done in a few months from now. In the meanwhile, BI will look for a suitable new CPU within CERN. For the future, the data should be stored in a database and not in the FEC. K. Hanke added that this will be possible but only on a longer time scale because it implies re-writing some of the OP applications. B. Mikulec added that some LHC clients are still running on the FEC and should be removed. C. H. Sicard added that the new platform will be ready not before six months, and it will be difficult to do an upgrade on such critical system during a run.

About other operational issues, on Sunday night the safety chain tripped due to the PSB lift because the Fire Brigade has opened the door D36 during a patrol. After the reset of the safety chain, the MPS could not be restarted and the piquet PO had to intervene. K. Hanke added that the Fire Brigade has been informed that during the patrol they should take care of not going in interlocked area where radiation might be present.

The BSW application is being debugged. The first transverse profile has been measured on Monday but the emittance is still not correct for the horizontal plane. There are also problems with the HW under investigation. K. Hanke stressed the fact that the BSW are fundamental for the setting up of the LHC beams, both in the PSB as in the PS. U. Raich added that BI is giving the maximum priority to the problem.

The issue of last week with the archives has been solved.

ISOLDE (E. PISELLI): The week has been devoted to SEMGRID target measurements both for HRS as for GPS. On GPS, after the tests, beam was provided to the users since Monday. Beam was found at a certain point being sent to the target rather than on the converter. This will be avoided when the new interlock, already active on HRS, will be activated. On HRS, stable beam has been provided. For REX, the work on the RF room cooling has been finished and stable beam is being provided to EBIS.

ISOLDE users (A. HERLERT): Users are satisfied. The reduced intensity delivered when beam was sent on the GPS target and not to the neutron converter was not an issue.

PS (S. GILARDONI for A. GRUDIEV): During the week RF experts from the Central Building worked on TSTLHC25. Good progress has been made. Setting up of EASTA, EASTB and low intensity SFTPRO has been done. EASTA and EASTB are ready for users.

No major faults during the week. Some smaller ones to be mentioned: 1) CODD vertical PU20 shows always +20 mm and is under investigation by the expert; 2) PE.BSW57 (CT extraction bump) had the wrong polarity. It has been exchanged during the magnet realignment access and verified afterwards; 3) a number of issues with BFAs for CT extraction, still to be investigated by the expert who will be back from holiday this week; 4) during the Thursday access, one of the DVTs in the F61 line has been found with a water leak. Since the replacement would take about 5 days of machine stop to remove the concrete shielding around it, the line will be re-steered to compensate for this missing magnet. Finally, beam based realignment of the PS main dipoles went very well. The results summarized: Horizontal improved from 3.68 mm rms to 1.84 mm rms where

we expected 1.75 mm rms; vertical improved from 0.79 mm rms to 0.58 mm rms where we expected 0.58 mm rms.

S. Hancock added that the EAST and SFTPRO users could not be set-up properly, due to the limitation on the maximum intensity which can be injected. This limitation is still present due to the civil work ongoing for POPS in the central PS area. R. Steerenberg will investigate for how long this limitation will be necessary.

East Area (L. GATIGNON): No particular news apart the issue with the leaking magnet.

East Area Users (H. BREUKER): The first user meeting took place with reduced attendance. Only the responsible for the irradiation facility and the nTOF representative were present. From now on, regular meetings will be held every Thursday at 11.00 in 874-1-011.

AD (B. DUPUY): On Monday, the patrol in the ring has been done. On Wednesday the patrol of the target area will take place. Everything is on schedule.

AD users (H. BREUKER): No users yet.

SPS (K. CORNELIS): Problems with the electrical network are still present. A number of emergency stops appeared erratically on the compensator. F. Tarita added that all of them were not real emergency stops but were triggered by an unclear reason. Two old emergency buttons have been replaced, and further investigations are in progress to identify the cause. A supervision system has been put in place. In addition, the problem mentioned at the last FOM with the compressed air of one of the compensator switches reappeared. The source could not be found, but it could be related to a flow or a pressure problem. It has been decided to run with the standard configuration for the compensators. Until the alarms are not corresponding to a real major fault, the block of the compensator cannot influence the EDF network. There is however the risk of perturbing EDF in case of a real fault, which can potentially lead to a general EDF power cut.

During the cold checkout, for many ring equipments control problems related to FESA appeared, in particular for the control of the ZDS and the RF. The solution investigated is to step back to the old system. The DSO tests have been concluded and signatures are collected to allow beam injection.

On Monday, the ZDS5 had intermittent sparking. It has been decided to change it.

H. Vincke announced that during the run the air filter of the 898 building, on top of the NA splitter, should be exchanged regularly requiring a beam stop for about 1 h. This will be scheduled during the FOM one week in advance.

CNGS: M. Lamont reported about the delay to the CNGS start-up due to the recent earthquake in the Abruzzo region in Italy. Whereas the detector seemed not to suffer from the earthquake, many people in the collaboration suffered a lot from this tragedy and manning detector shifts is an issue. A delay for the CNGS start-up is expected, to be confirmed in about two weeks.

SPS North Area (L. GATIGNON): The DSO tests will start next week.

North area users (H. BREUKER): No news.

LINAC3: LINAC3 is in shutdown; LINAC3 matters will be followed up regularly during the run.

LEIR: LEIR is in shutdown; LEIR matters will be followed up regularly during the run.

CTF3 (D. MANGLUNKI): After Easter, the PETS run continued. The intervention on the MKS03 has been done on Wednesday. Originally ten days of machine stop had been scheduled, whereas only three days were sufficient, thanks to the good collaboration of all the colleagues intervened. There was a problem with the MKS05 amplifier, which broke down. There is no spare available and experts were not on site. The line was rescaled to operate at a different energy without the kicker. Then, during the polarity checks for the magnets of the delay loop, some correctors and quadrupoles

were found not correctly cabled. For some quadrupoles, the naming in the CO system was not coherent with the label in the tunnel and their optical function. BI intervened in the ring to change the movement of the MTVs. The commissioning of the delay loop has restarted. There was a 1.2 h stop on Monday due to the trip of the water station. S. Deleval added that this was due to a too low flow, but the source of the problem could not be found and it is therefore not excluded that the fault could reappears in the future.

TI (P. SOLLANDER): An intervention on the telephone network is foreseen for the 9th of May, see mail from R. Moral: " [...] Je souhaite vous informer que le group CS envisage d'effectuer une maintenance des centraux téléphoniques du CERN le samedi 9 Mai 2009 entre 8:30 et 17:30. Le but de cette intervention est le renouvellement de l'équipement réseau relié au système téléphone et sa connexion au nouveau câblage structuré. Les implications de cette maintenance sont les suivantes: Bien que la partie audio des téléphones rouges (LHC inclus) doive être garantie par la redondance du système, elle pourrait être interrompue pendant environ 30 minutes. Les services de téléphonie fixe « généraux » seront affectés pendant la durée de l'intervention. Il est à noter toutefois que : La partie alarme niveau 3 des téléphones rouges ne sera pas affectée (les pompiers pourront recevoir cette alarme). Le centre d'appel des pompiers sera joignable à tout moment. La CCC sera joignable à tout moment. Les services GSM ne seront pas affectés (notamment pour joindre les pompiers ou effectuer des appels externes CERN). "

3. Schedule / Supercycle / MD planning

The 2009 schedule (v3.3) is available at:

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

The SPS will start with beam on Thursday.

4. AOB

K. Hanke stressed the fact that the piquet list should be updated by the relevant equipment group responsible. The group secretaries of the different groups should make sure that the information for their group is entered and up to date. S. Dubourg can help with technical problems.

5. Special topics

M. Widorski presented the bridge between the ARCON and the RAMSES system implementation. The slides can be found here. The goal is to dismantle the ARCON HP servers as soon as possible to renovate the system. After the installation of the bridge, ARCON information will be sent also to the REMSES. Then, in about week 21, the real swap between the two systems will be done for the environmental alarms, without affecting machine operation. Once the system will be validated, all the ARCON will go through the bride servers. Then all the system will be on RAMSES, after probably week 25. The two systems will run in parallel until the validation will be concluded. After that, CO will dismantle the old HP servers.

6. Next meeting

The next meeting will be held on Tuesday, April 28 at 10:00 in 874-1-011.

Preliminary Agenda:

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

Minutes edited by S. Gilardoni