Minutes of the 28th FOM meeting held on 27.07.2010

Agenda:

1) Follow-up of the last meeting (K. Hanke)
2) Status of the machines (Supervisors)
3) Schedule (K. Hanke)
4) AOB
5) Next agenda

1. Follow-up of the last meeting

The minutes of the 27th FOM meeting were approved.

Follow-up from the last FOM:

a) Status of the PS B-field fluctuations.
   G. Metral reported that an MD took place to investigate whether the problems are related to the PFW. Preliminary findings show that the PFW are not the cause of these fluctuations. The cause of the problem could not be identified during the MD. The problem remains open.

b) Check Status of PS-BLM DSC.
   K. Kostro reported that the machine was upgraded thanks to BI, work is still ongoing but the problem will be solved.

c) ISOLDE watchdog status.
   L. Jensen said that after a new calibration of the transformers the situation was now stable and that the system did not trigger erratically any more. The problem is closed for the moment but they will keep monitoring the equipment.

   Complement of information from G. Rumolo after the meeting:
   Last Thursday, F. Lenardon recalibrated the BT.BCT, which was giving apparently too high values and caused the watchdog to trigger although there was no real beam loss. Since then, the ISOLDE watchdog has not been triggered any more -except one single time on Sunday morning. Therefore, the action could be considered closed. However, after the recalibration of the BT.BCT, there appears to be ~10% loss in the PSB between the accelerated and the ejected beam. This should be checked to be real before considering the issue fully understood and solved.

d) Status of AD bunch length.
   L. Bojtar said that the case was still open. An MD will be required to understand the cause of this problem. An 8h MD is allocated for next Monday. Some problems have been identified already and they are confident that the problem can be solved during this MD.

e) Status of beam references in INCA.
S. Deghaye reported that the system is operational but the reference settings need to be recreated. G. Metral said that the equipments are accessible but the properties are not yet taken into account. The problem needs to be followed-up.

The weekly statistics of the operational beams is presented in the following table:

20 June - 27 June			
	CPS		SPS
	rel	abs	abs
NORMGPS			
NORMHRS	91.25	51.05	
AD			
TOF	85.00	82.21	
EAST N	83.58	83.58	
EAST T7			
EAST T8	83.93	83.93	
SFTPRO	98.40	68.15	
CNGS	97.69	68.70	68.70

The NORMHRS low statistics was due to the presence of the cycle in the supercycle during stable beam set up i.e. when no protons were requested.

2. Status of the machines

Linac2 (M. O'NEIL):
The RFQ tripped following a vacuum problem on Tuesday. An ion pump was changed and the RFQ is now running at a nominal power for physics cycles and reduced power on Zero cycles to avoid sparks. The broken pump needs to be removed and repaired. There is no installed spare ion pump for the moment but if needed the RFQ can run with three pumps only.

PSB (G. RUMOLO):
The PSB had a good week. The follow up of the ISOLDE watchdog problem has been discussed earlier (see follow ups). During the technical stop (Monday last week) the 4 PMs of the wire scanners were exchanged. It was found on Wednesday that the WS did not work on rings 3 and 4, and an electronic card had to be exchanged to put them back into operation. On Thursday a new ejection trajectory monitoring system has been deployed. Yesterday A. Findlay did some work on the AD beam to eliminate a longitudinal quadrupole oscillation at extraction and bring it back to spec in the 4 rings.
Work is ongoing on the broken MPS. The QFO power converter was to be repaired by the end of last week, so that it could be swapped with its spare (which is currently in use in the PSB). EPC commented that this has not been done yet. To be followed up in the next FOM.

After the meeting C. Mugnier communicated the following information concerning the status of the MPS:
- The QF which had the failure last week has been repaired and tested, everything works perfectly. The QF is currently running on a load for thermal test.

- The Trims are being tested. A few small problems remain to be fixed.
- PFW: J.L. Gomez-Costa was informed of the shift reported by G. Metral. He will come to the CCC to investigate the problem on Wednesday.

ISOLDE (E. SIESLING):
GPS: The set-up was successful. A problem occurred with the GPS magnet regulation. The BH15 control unit was changed. The GLM deflection plates in the GPS switchyard were blocked and collided with the GPS.FC490 Faraday cup. A pinion in the driving mechanism of the movable plate was found broken. Spare parts have been ordered and the problem should be fixed this afternoon. Several accesses in the separator area were necessary to diagnose and fix the problem. The procedure for emergency access was followed and the accesses were done under supervision of RP and safety. A more thorough consolidation will be needed for the GPS switchyard in the future.

HRS: Radioactive Ar beam was delivered to ISOLTRAP during the weekend and set-up is ongoing for a REX run for Miniball starting tonight.

L. Bruno said that the interventions in GPS had been well prepared and the time spent in the area was minimal.

ISOLDE Users (A. HERLERT):
Some shifts were lost for physics on GLM due to the intervention on GPS. Some important runs will be rescheduled if possible, maybe running in parallel with REX setting-up.

PS (G. METRAL):
The PS had a pretty good week.
The technical stop was followed by various MDs. Saturday the MDs ended and the beam was back for physics.
Several problems occurred during the week. There was a problem on a cavity. The beam for nTOF was stopped on Saturday following a cooling problem on the target. There were also some problems with the kickers, the spill control program for the slow extraction and with the orbit correction system.
L. Bruno asked about the cause of the problem on n-TOF target.
G. Metral mentioned that the access system did not work properly; some people had to wait 45 minutes inside the tunnels to get out while the video system was blocked.
The problem was caused by a cable disconnected by mistake which brought down the TIM system. L. Bruno stressed that this was not due to a failure of the security system but a human error.

PS USERS (H. BREUKER):
H. Breuker expressed the congratulations of the physics community to all people involved in the injector complex as the integrated luminosity is increasing steadily and first major results start to be gathered.
CMS announced on Sunday the first observation of a top-antitop pair.

EAST AREA (H. BREUKER):
The experiment is running fine.

TOF (H. BREUKER):
Everything is fine.

AD (L. BOJTAR):
AD had a good week.

On Monday an interlock tripped the water cooling for the target area. This could be reset.
There were several problems with dipole power supplies which needed capacitors to be changed.
In the previous weeks many similar cases occurred. The possibility to pulse these elements only a short time before injection is being investigated. If this works the lifetime of the capacitors would be increased and power consumption would be reduced by a factor 8.

On Thursday (22 July) DE1.DHZ65 went off and could not be reset. The specialist was called by the CCC. The problem was caused by a faulty connector.

On Friday (23 July) the deceleration efficiency between 3.5 and 2 GeV/c was only 90%. It looked like the problem was due to the stochastic cooling pickup cryo. It was not clear who was responsible for this equipment. J. Hansen has been contacted.

AD Users (H. BREUKER):
ALPHA: No news.
ASACUSA: The experiment is starting a third run, trying to capture anti-hydrogen. They are having problems with antiproton deflection.
L. Bruno asked what was the cause of the problem with the cooling of the AD target.
L. Bojtar replied that it was a problem of temperature and that this problem did not occur often. K. Hanke will contact T. Eriksson for more details.

SPS (E. METRAL):
The SPS had a difficult week.
Three magnets had to be changed during the week. Two electron cloud monitors were installed. The MD started on Wednesday and went well. Some problems occurred due to outgassing during high intensity studies. There were some cooling problems with the CNGS horn. During the weekend a problem appeared with the transverse dampers. The problem is not yet fully solved. Work is now ongoing with the multi bunch injection into the LHC.

North Area (H. BREUKER):
H2: NA61 started physics run.
H4: ECAL is going nicely.
H6: Physics has started.
The major activity is taking place on H8 with beam set-up for AMS. The detector will be installed in the beamline on the 9th of August. There is a huge program for this run.
ATLAS users are not ready. DREAM wishes to go back in the beamline.
K. Hanke asked what beams were requested for AMS.
E. Metral replied that they will take a normal SFTPRO at 400 GeV. The SPS is ready to deliver this beam.

CNGS (H. BREUKER):
The users are happy.

CTF3:
No report.

LINAC3 (M. O'NEIL):
Linac3 is running and ready to deliver beam to LEIR as from next week.

LEIR (C. CARLI):
LEIR is preparing for the run.
There was a problem with cooling water. The water flow had to be reduced.

TI (J. NIELSEN):
There was a problem with LASER due to a large number of test alarms being generated which eventually brought down the system. Some work is being done so that these tests are not taken into account by the system.

LHC interface with injectors (M. LAMONT):
The restart of the LHC after the technical stop on Monday was difficult. The LHC is now going to physics mode.

3. Schedule / Supercycle / MD planning

The current version of the 2010 official schedule (V1.7) is available at:
https://espace.cern.ch/be-dep/BEDepartmentalDocuments/BE/2010-injector-schedule_v1.7.pdf
Long runs are needed in the LHC. The MD in week 32 is floating and maybe postponed, as the underlying LHC stop has been cancelled.
An MD of 8h on Monday (2 August) is scheduled for AD to investigate ongoing problems with the bunch length.
All planned interventions for the injector complex are available via the on-line agenda:
https://espace.cern.ch/be-dep/FOM/Lists/Agenda/calendar.aspx

4. AOB

L. Bruno asked about the conclusions of the investigations on the hot spot problem in TT10.
E. Metral replied that the electrodes of the suspicious pick-up were confirmed to be in the right position. It was not possible to install a BLM at this position. Instead a high level dosimeter was installed. This should show whether or not an obstacle is present in the beamline. If yes an intervention will be needed.
Time should be allocated for a one hour access to remove this dosimeter. RP should request the access via the FOM.

5. Next meeting

The next meeting will be held on Tuesday, 3 August at 10:00 in 874-1-011.

Preliminary Agenda:

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Minutes edited by D. Voulot