

## End Week 37 (September 16th 2012) – Status of Accelerators

### Statistics

nTOF: <https://espace.cern.ch/be-dep/OP/PS/default.aspx>

CNGS: [https://accstat.web.cern.ch/accstat/statistics/charts/2012/SPS/CNGS\\_Target\\_Cumul2012.jpeg](https://accstat.web.cern.ch/accstat/statistics/charts/2012/SPS/CNGS_Target_Cumul2012.jpeg)

LHC: <http://lhc-statistics.web.cern.ch/LHC-Statistics/index.php>

### TI (Peter Sollander)

Rather quiet week for TI.

<http://wikis/display/TIOP/2012/09/17/TI+summary%2C+week+37+2012>

day	events
Thursday, September 13	<ul style="list-style-type: none"><li>13:53 -- SMB10 (18kV cable to BA4) trips again. After investigations it turns out that it is another phase (T) that has a short circuit. An EDF intervention to repair the cable was organised on Friday morning stopping the SPS for another couple of hours.</li></ul>
Saturday, September 15	<ul style="list-style-type: none"><li>22:01 -- SPS compensators (BEQ2 and BEQ3) trip and stop the SPS for an hour and a half. The origin of the problem was a CPU board on a PLC and it seems that the trip was due to an intervention to try to repair the PLC (major event report pending information from EPC and EN/EL)</li></ul>

### ISOLDE (Didier Voulot)

On GPS we delivered beams of Fr and Po to GLM and LA1 with a new type of laser ion source/trap (LIST) target which showed very promising performances. The run ended on Thursday.

On HRS+REX we have a Po run for Miniball which started on Thursday and will finish on Wed morning (they will run on long-lived Po the last 24h). The set-up was quite nightmarish with a water leak in the RFQ amplifier, a leak on HRS separator and controls problem on the EBIS. As always in this case we got plenty of support from everybody (RF, CV, the main workshop, CO...) for which we are very grateful. The run started on time on Thursday and seems to be going well.

An intervention will be necessary to fix the vacuum leak on the HRS separator. The paper work is in preparation and some slots have been ear-marked for the intervention

### LEIR (Django Manglunki)

A pretty good week for LEIR, delivering beam for LHC MDs on Monday, Wednesday and Friday.

In order to increase the intensity on the single bunch beam, a double injection has been set up on the MDEARLY user, but the situation really improved after a new stripper was installed at the exit of LINAC3.

An acquisition miscalibration was fixed on the extraction kickers.

On Friday, a lot of time was spent to track 1553 RTI errors on ER.SMH11, with the help of CO and PO piquets, as well as TE/EPC specialists; the CO 1553 expert is coming back from holidays this Monday.

## **Booster (Giovanni Rumolo)**

... nothing to report for the PSB this week.

## **PS (Jakub Wozniak)**

Very good week for the PS with almost no major problems.

During the week we had issues with quads in TT2 F16.QFO215,217 which caused 2h30min downtime. Currently it is being looked at by the PIPO but the reason for the moment is not clearly understood.

On Friday morning ZT7.BHZ01 caused 2h of downtime due to a power supply ventilator problem since pique was already in AD. Later in the afternoon the septum SMH57 was on fault for around 30 minutes due to too many EAST cycles in the super cycle. Same evening we also lost additional hour of beam when we couldn't reach pique for the external fault on the PFW. The weekend went without any issues and today the high intensity beams (CNGS, SFTPRO and TOF) have been stopped in preparation for the Technical Stop.

## **SPS (Edda Gschwendtner)**

On Monday there was a 2hrs stop due to PS quad issues in TT2.

On Tuesday a scheduled stop to put SMD10 back in service was successful. A 2hr stop was scheduled for an issue with a power supply where a circuit breaker (MBIV1003) was changed. There was a rephasing issue between SPS and LHC. The stability of the extraction to LHC was tested.

There were some issues with the orbit at extraction of CNGS resulting in restearing of the CNGS extraction on Wednesday. pPb MD took place on Wednesday.

The SMD10 cable failed again on Thursday and on Friday the failure was detected after 2hr intervention. SPS page 1 was frozen and will be further followed-up by the OASIS team. The pPB MD was delayed to the evening/night due to RF issues in the LHC.

On Saturday, the SMD10 cable was repaired and was switched back from SMD12 to SMD10. The Q20 extraction tests happened during the morning, with some issues with the BQM. Due to a PLC fault of the SPS compensator there was a 2hr stop.

Sunday was quiet with physics to North Area and CNGS, intermittent by several LHC fills.

## **LHC**

Busy week: pPb – first collisions; 1000 m beta\*; wire scanner out; problems with a Klystron; plus some physics. Technical stop from 06:00 Monday 17<sup>th</sup>.

<http://lhc-commissioning.web.cern.ch/lhc-commissioning/>