

Minutes of Collimation Remote Commissioning Meeting 28th of September 2014

Participants: O.Aberle (OA), M. Gasior (MG), D. Jacquet (DJ), J.Olexa (JO), S.Redaeli (SR), B.Salvachua (BS) and G.Valentino (GV).

Agenda:

- Summary of SPS MD on BPMs
- Define of commissioning tests for new LHCCollimator FESA class
- To do list

Summary of SPS MD on BPMs

GV presents the results from the MD at the SPS. BI (G. Baud) developed the BPMCOL FESA class which gets the BPM signals and calculates the beam position, while GV developed the LHCCollAlign class which performs the alignment.

Link to the presentation:

<http://lhc-collimation-project.web.cern.ch/lhc-collimation-project/LS1/2014-commissioning/material/2014-11-28-GV-BPM.pptx>

Comments:

- SR requests a display of the raw signal from each button in the final application as expert plots.
- MG requests the logging of this data for the SPS MD that they will have in the next days. (GV will do).
- SR, GV, MG would like another MD at the SPS to continue the tests (4-6 hours) before end of January.
- MG comments that with gaps of about 1-2 mm (~20% of an LHC pilot intensity) the BPM readings were still good. He is confident that we can align with pilots at the LHC.

Define of commissioning tests fro new LHCCollimator FESA class

- 1-2 ramp cycles per day on the available collimators
- Try of different profiles:
 - 2 points profile like the initial case of the TCL5
 - Long profile about 1-2 hours
- Test commands: re-launch, stop and resume profile

AM asks about stoping only one jaw when a position interlock is reached. SR answers that operationally is complicated and it is not necessary.

To do list

See file in:

<http://lhc-collimation-project.web.cern.ch/lhc-collimation-project/LS1/2014-commissioning/material/2014-HWC-TODO.htm>

- Import of top parameters functions: this was tested (R.Bruce, D.Jacquet, G.Valentino and B.Salvachua). It worked for the LHC collimators, the functions were the same within few decimals.
DJ reports that there was an issue on the Transfer Line collimators, the procedure did not work and she had to modify the make rules.
SR will follow these changes and help on reviewing the make rules. In particular the 2-in-1 collimators.
Next step is to prepare a sequence with the ramp and squeeze. BS and DJ will follow this with M.Solfaroli.
- Logging: GV has to finish the request of the new expert variables. The old variables are on the logging DB except for the TCDQ that is not publishing data yet. AM reports that there are missing values on the hierarchy in Timber. BS replies that the data is logged, so it is just a problem of displaying the variables in the Timber application. BS and GV will follow this.
- RBAC: AM provided with the Access Maps and BS and V.Kain has re-declare the critical parameters. Yesterday we generated the signatures for the TCTPs and the whole procedure will work.
The next step is to test the RBAC for all the collimators. BS will follow this next week.
- GV will repeat the controls stress tests by sending commands to the collimators at 50 Hz.
- MPP: GV and BS tried the MP sequences, they were updated and now the sequences do not crash. However we still need to check the generation of the interlock signal. AM comments that currently IP2 and IP8 are connected to the BIC. Next step is to try the sequences with this 2 IPs.
- Temperature sensors: AM will launch the MP tests in January. SR asks for the updated list of sensors, more than 600 now.
- PRS function blocking: SR asks if it is possible not to block the PRS function when the energy limit is reached as we are currently doing with the MDC. AM says that technically is possible but he would like a formal specification change.