Status of BLM System

B. Dehning
CERN BE/BI

Acquisition System

- Monitors to installed (about 500 have been dismounted and mounted again):
 - MB11: 8 monitors to be installation by Russian team
 - 2 monitors for vertical slice test: at location of BLMEI.4L2.B1E1_TCTH, BLMQI.4L2.B2I3_MQY
 - 4 monitors on the MKI magnets at L2, R8
 - several at the magnets: 11R6, 12R6, 34R6
 - several at the dispersion suppressor L1 (about 10 monitors)
- Rad source measurements:
 - 1-2 wk 36 (next week)
 - 2-3 wk 39
 - 3-4 wk 38+39
 - 4-5 wk 35 (this week)
 - 5-6 wk done
 - 6-7 wk 39 (new date required for measuring the reinstalled monitors)
 - 7-8 wk done
 - 8-1 wk 39 (not official yet)
- Repair actions:
 - 4-5: two cards left for repair (status today)

Software Status

- BLM Threshold Factor Editor:
 - Set factor OK, Roll-Back history: more testing needed, Requested some more buttons.
- BLM Fixed Display:
 - OK, Some small changes requested last week.
- BLM Management:
 - alpha version, GUI ready, missing code from CO/AP
- BLM Capture Data Display:
 - OK, New version that includes reading data from the PM system.
- BLM status Display:
 - alpha, Reading of data: OK, Decoding and display of some statuses done (DAC values, CRC errors ...)
- BLM expert Threshold application:
 - basic features implemented by next week
- BLM expert Internal Parameter application:
 - basic features implemented by next week
- Servers:
 - FESA FEC: OK, some changes need to be done
 - logging concentrator: OK, some more updates

MPP: 28.08.2009, B.Dehning

Schedule of BLM Tests

- Firmware:
 - Threshold comparator, Combiner: last changes up to end of September
- Installation test system IP2:
 - will be finished week 37
- Data base change tests: week 38
 - Estimate of time needed to make changes
- Finishing loading of threshold setting (Mariusz, Annika): week 37, 38
 - start-up with all monitors mask-able
 - check channels by recording of signal in over run bin, cross check with BIS recordings
- Check of threshold settings (Barbara): week 39, 40
- Tests of first BLM CIBU connection: week 37
- Check LHC sequencer initialisation of BLM tests: week 39
 - run online BLM test procedures
 - check setting consistencies (MCS)
- Finishing internal parameter test: week 38
 - comparisons of modulation results with thresholds

MPP: 28.08.2009, B.Dehning

Summary

- Hardware installation and source measurements will be finished in September (tight schedule)
- In parallel to installations and test repair of non-conformities
- Month October foreseen for undisturbed running of BLM System
- The support of BE/CO/DM has been stopped for database structural changes
 - Consequence:
 - some setting history features are not implemented (availability relevant)
 - some database protection features are not implanted (safety relevant)
 - nonconformities appearing during the test will be not corrected

MPP: 28.08.2009, B.Dehning