

MICE Experiment Management Office

9th August 2016; 14:00 BST

Present: CW, PMH, CR, KL, SB, DR

Verbatim notes

1. Introduction: KL

As discussed at the collaboration meeting, it is time to change the emphasis of the organisation of the experiment to focus on making data taking and analysis more efficient. In discussions since the CM, it's been agreed to do this by collecting and maintaining prioritised lists of tasks in the Hall, controls and operations areas. The lists would be prioritised "centrally"; i.e. through discussion at MIPO/MEMO and with conflicting priorities addressed by KL and CW. The individual tasks will be followed through the MIPO/MEMO for controls, the Hall/Ops meeting of the operations tasks and the MIPO for the Hall tasks.

2. Minutes and actions: All

- **PHodgson:** Remind system experts to complete and return the spreadsheets needed to implement the CDB entries for the state-machines.
 - No progress. A list had been received from J. Cobb with a list of tasks for the FC.
 - **Agreed** that this action is now **Superceded** by the list-driven activity above; i.e. the activity captured in this action will be covered in the controls-task list.
- **MOM(RB) and PMH:** propose schedule for the implementation of the transition to "SSH lockout" during data taking.
 - **Agreed** that this action is now **Superceded** by the list-driven activity above; i.e. the activity captured in this action will be covered in the controls-task list.
- **CW:** bring network reconfiguration proposal to MIPO for decision on next steps.
 - **Done.** MIPO agreed to what has been defined by the w/g.

3. Review of shutdown task list: KL, CW

See: http://micewww.pp.rl.ac.uk/projects/operations/wiki/_summary_step4_readiness

Task list edited on line. Additional points noted:

- **Agreed** to pension off spreadsheet for next run:
 - CDB protocol will be to read-back from CDB each time a CDB-write is done. Flag error if read-back does not return what was written.
 - Testing of new system can be done during the shutdown.
- The issue of spares needs to be revisited.

4. Physics Coordinators report: CR

The demo-specification paper has been circulated for comment. So far comments have been received from D. Kaplan and C. Booth. CR will send a reminder of the comment deadline (tomorrow)

Good progress was made on the preparation of results that will eventually appear in the emittance paper. These results were made public for ICHEP. There is a MICE Note documenting the work and an ICHEP poster.

Good progress also on the scattering paper. As for the emittance paper, the results were made public for ICHEP. There is a MICE Note documenting the work.

Analysis of the data from Cycle 2016/02:

- CR is pursuing the S. Middleton analysis on the transfer-matrix method to derive the magnetic alignment of the FC;
- A. Liu is analysing the SSU+FC+SSD data. He reports that the track reconstruction reports “nan” in some events. This needs to be investigated;
- F. Drielsma is carrying out an emittance analysis, in particular how scraping biases the measurement, for example when data is taken without match coils. He finds a bias and is trying to develop a quantitative understanding;
- S. Wilbur is pursuing an energy loss analysis in data with magnetic field trackers on;
- A. Young & R. Bayes are developing a scattering analysis;

CR/KL need to discuss analysis manpower.

The initial Run plan for 2016/03 starts with the tasks that were not completed in 2016/02.

5. S/w&C (and MAUS): DR

- **MAUS:**
 - The tracker s/w has two issues: “nan” appearing in the output and the apparent mis-reconstruction of the track charge. Both issues are being investigated;
 - The comparison of the track reconstruction and the TOF reconstruction of the beam at TOF1 has raised some differences in momentum and position. These are being investigated.
 - The global reconstruction is slow because of an issue in “tref” handling in root. Now that A. Dobbs is back from holiday, this issue will be addressed.
 - The unpacking of the Hall-probe data has been completed. Remaining issue is with Hall-probe PVs not existing when a probe fails. This must be addressed.
- **Alignment corrections:**
 - F. Drielsma has created alignment corrections. DR wants these to be implemented as corrections to the reference geometry stored in the data base. This needs minor modifications to be made in the geometry handling. R. Bayes is testing this. Timetable is expected to be short.

- The efficiency and clarity of plots from OnMon and OnRec is being improved. CR and DR will discuss the Physics Devil.
- **MC:**
 - There is an issue in the existing G4BeamLine libraries which do not appear to allow a good simulation of the present dat. F. Drielsma is taking over the G4BeamLine library generation from J. Nugent. It is hoped that he will soon provide new libraries. To make the generation more efficient, the handover point from G4BeamLine to MAUS will be TOF0. A consistency check in the simulation of the beamline upstream of TOF0 (and downstream of the decay solenoid) must be made.
- **Agreed: DR:** will make a task list for S/w&C (excluding controls) in the same spirit as those described above.

6. CAM status: PMH

- Archiver data integrity check
- PMH worked with A. Kurup last week. A list of improvements to the EMR controls as agreed. A. Kurup will begin to implement the things on the list. Some changes are being made to the FC controls code by J. Wilson (DL). A. Kurup can not work on the data logging from the FC before J Wilson has made his modifications.

7. Commissioning and operations: SB

Little to say above what has already been discussed. The holding item for Ops is the magnet-commissioning plan. It had been agreed that 16 hours per day shift cover will be sought from the start of the next User Cycle.

8. DONM

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9. AoB

None.

Summary of actions:

- **DR:** make a task list for S/w&C (excluding controls) in the same spirit as those being developed for controls, the Hall and operations.
- **KL/CR:** Discuss analysis manpower.