

## MICE Experiment Management Office

5<sup>th</sup> August 2014; 14:00 BST

**Present:** V. Blackmore, S. Boyd, A. Bross, P.M. Hanlet, K. Long, R. Preece, C. Rogers

**Apologies:** D. Adams, A. Nichols

### Notes

#### 1. Introduction: KL

#### 2. Minutes and actions: All Acctpeted.

- **MOM:** draft short MICE Note on results of June 2014 run;  
**Done.** Its a restricted MICE Note. Agreed to get the restrictions limited.
- **KL:** Chase preparation of June 2014 run summary (R. Bayes);  
**Done.**
- **KL:** Take forward negotiations for additional support for the computing infrastructure;  
**Ongoing:** Continued discussions with D. Wark. Ask debbie for meeting ...
- **KL:** Add MEMO agenda item on C&M meeting configuration;  
**Done.**
- **CR:** Document the SLA required for the C&M servers including those supporting the FC activity in R9;  
**Done.** Documentation can be found at:

#### 3. Report/actions from MIPO: PMH

Delivery dates for StepIV items were discussed, in particularly the PRY. Also, initial contact with the CERN regarding options for the integration of the CC was discussed.

The RFCC concept has been modified; it has been split into three modules. The advantages are simplification of construction, logistical advantages including in assembly, shipping, commissioning and test. In addition, the tooling developed for the SCTS can be used. Disadvantage is that the length of the module is around 382 mm longer. This results in a reduction in the transmission to 91% from 97% for a 10 mm beam. It is possible that retuning can recover some of the lost transmission.

**Action: VB:** continue to evaluate (and attempt to mitigate) delaterious effect of the longer RFCC.

#### 4. Status of preparation for DOE review of MAP/MICE: All

KL thanked all for excellent contributions to the documentation. Outstanding issue is the re-estimation of the precision with which emittance can be measured. It was agreed that VB and the physics team will try and complete the necessary analysis in time for KL's presentation in BNL.

#### 5. S/w&C schedule summary and status of integration with consruction plan: CR/RP

No update since last time. Getting update asap. Interlinks (dependencies) are being worked on. S/w&C progress against milestones will become an agenda item for the MEMO.

**Action: KL:** Add S/w&C progress against milestones as an agenda item for the MEMO.

#### 6. C&M weekly meeting configuration: PMH

Weekly meeting (Mondays) established. First one this week. Noted:

Status of racks: one instrumentation rack and one p/s rack available at DL. Expect to have components from CA delivered to DL this month. This will allow racks to be completed.

RR2 now contains the FC instrumentation and controls racks. Need to instal the SS racks; possible when

racks populated. In addition, need the SS/FC controls rack which is complete at DL. Holding items are the SS PS/absorbers which will be tested when they are received from Wang. Installation is scheduled for the end of October. QP racks; no work at the moment. Compressor racks are done but no wiring in place at present. Wiring the racks is scheduled for the end of October. Diffuser: discussed issues related to its testing and installation. It was agreed that a schedule would be agreed via the MIPO.

**Action: RP:** Tell us the schedule for the diffuser installation at the next meeting;

Controls in general: frozen first release of the controls s/w. Need to install on all machines. Developing state machines with C. Heidt. Run control coming too. Want to get network connectivity to RR2 so that can start communication with crates. Agreed that progress against milestones would be an agenda item in future.

**Action: KL:** Add C&M progress against milestones as an agenda item for the MEMO.

Interface with DAQ, Tracker, etc. for the development of the necessary controls software: PMH wants to have information on what D. Adey (for tracker) wants to do when he is over here in September so that PMH can prepare. We discussed the need to spread the load on the sub-system controls and monitoring implementation.

#### 7. Status of Step I publications: VB

- Pion-contamination paper:

No significant progress since last time. KL modelling being improved. Need to lower production threshold in KL. But, there are issues in G4. Issues being addressed by CR.

**Action: KL VB** to set up pion-contamination review meeting late September;

- EMR beam-test paper:

EMR has split paper into two: detector and physics paper. Francois has physics paper.

**Action: KL VB** to set up EMR beam-test review meeting late September;

#### 8. Status of Step IV/V analysis: VB

Step IV analysis has a feature that magnet positions are slightly wrong. Need to position the as-built modules in the as-installed positions. Calculated forces will be affected (reduced) between modules as they are too close due to the bug. We discussed issue of monitoring the displacements between modules introduced by the magnetic forces.

**Action: RP:** Consider measurement of position or stress on measurement;

Flip mode analysis available; no solenoid mode yet. Goal for MC is 1 event per second per processor. Now at 10s per event per processor. Rogers has goal to get speed up; it is (safe) in R. Bayes hands. Agreed to do a "Physics block challenge" for next reviews or CM40 whichever comes first. **Action: VB:** Specify, then initiate "Physics block challenge".

#### 9. DONM: Tuesday 19<sup>th</sup> August 2014; 14:00 BST

Agreed.

#### 10. AoB

None.

### Summary of actions

- **KL:** Take forward negotiations for additional support for the computing infrastructure;
- **VB:** continue to evaluate (and attempt to mitigate) deleterious effect of the longer RFCC.
- **KL:** Add S/w&C progress against milestones as an agenda item for the MEMO.
- **RP:** Tell us the schedule for the diffuser installation at the next meeting;
- **KL:** Add C&M progress against milestones as an agenda item for the MEMO.

- **KL VB** to set up pion-contamination review meeting late September;
- **KL VB** to set up EMR beam-test review meeting late September;
- **RP:** Consider measurement of position or stress on measurement;
- **VB:** Specify, then initiate “Physics block challenge”.