Collaboration Board at CM43
-- Summary --

Alain Blondel

Collaboration board meeting 43

Friday 30 October 2015 RAL

Room 13 Rutherford Appleton Laboratory, 17:30-19:00

(same VIDYO connection as collaboration meeting)

DRAFT AGENDA

1. Presence and proxys — 22 present (incl 5 proxys) quorum OK
2. Actions and minutes from previous collaboration meeting
3. Matters arising and Adoption of agenda — lots of things arising! agenda approved
4. Address from PPD – Prof. Dave Wark (10 min plus discussion)
5. Spokesperson and Executive board report -- Ken Long (10 min)
6. Project Manager's report – C. Whyte (10 min)
7. Data taking and shift plan -- S. Boyd (5 min)
8. Report on the update of the MICE constitution -- C. Booth 10 min + discussion
9. Election of the next Collaboration chair -- A. Blondel (10 minutes)
10. Common fund status -- Soler/Ricciardi (5 min)
11. Funding updates:
    UK: Soler, US: DOE (Bross, Palmer)/NSF(Kaplan), INFN: Bonesini , Switzerland: Blondel
12. Future CM dates and organization (5 min)
13. AoB

PPD address: Dave Wark had a 20' discussion with us.

main points raised:

-- MICE could use better connection with accelerator centers in UK
JAI, Cockroft

-- Some ISIS FTEs available

-- Request for additional *Duty Coordinators* can be discussed
(4 are needed if we are commissioning 24/7)

-- software support is very much in demand -- will keep doing the best

-- RAL-PPD is supporting MICE within its abilities

-- dont expect miracles (e.g. a new solenoid for Xmas).

Recovery of SSD functionality:

- Principal issue for CB advice, so proposal:
- Step IV:
  - Proceed with Step IV programme;
    - Recognising risk of failure of M2 (for example in a future quench);
  - Minimise risk of further damage
    - E.g. by minimising quench modes;
  - Optimise run plan in the absense of M1
  - Refit of PS and QP systems
- Cooling demo:
  - Proceed with review process to determine optimum programme to recover full lattice functionality
  - Is there a preferred scenario? E.g.:
    - New coldmass/refit in existing cryostat
      - Or new "FC"
        - » If we are convinced that risk of loss of M2 is sufficiently low
    - Advantages:
      - Parallelise cold mass (new magnet preparation) with Step IV operation
      - Parallelise installation in cryostat with cooling-demo refit

Milestones – Flat cash

Id	Milestone	Baseline Nov 2014	Nov 2015	Comment	Flat Cash To Completion (provisional)
Demonstration of Ionisation Cooling					
10	PRY materials arrive	10.05.16	16.05.16	Material procured, en-route to vendor. Drawings in final iteration.	No Change
11	RF Cavities Arrive at RAL	18.05.16	16.06.15	Design	No Change
12	Step IV De-commissioning compete	22.07.16	08.07.16		No Change
13	RF Amplifier #1 delivered	31.08.15	08.08.16		No Change
14	RF Amplifier #1 ready for commissioning	06.08.16	16.09.16	Delay due to contingency for iteration in commissioning of TH116.	No Change
15	RF Amplifier #2 delivered to RAL	07.11.16	10.02.17	Delay due to 14 and Step IV	01.08.17
16	Installation of south PRY starts	14.12.16	30.11.16	Earlier if, we stop after 2016/01	No Change
17	Installation of RF modules starts	19.01.17	25.01.17		No Change
18	Installation of North PRY starts	01.02.17	02.02.17		No Change
19	Cooling Demo construction complete	24.03.17	31.07.17	Delay due to 14,15 & completion of PRY	01.02.18
20	Cooling Demo commissioning complete	02.05.17	06.09.17		01.03.18
21	End of Data taking in cooling demo configuration	31.03.18			No Change

Notes:

Estimates of dates for Flat Cash to Completion assume full utilisation of currently unassigned ISIS FTEs, also US manpower contribution and increased university staff allocation through cost to completion review.

Estimates are provisional, DL head of electrical resource is not available to contribute.

Science & Technology Facilities Council

Spokesperson report

-- Discussion on recovery of SSD functionality

CB encouraged EB to come up with scenario that

-- executes Step IV to the make the best of the available hardware

-- proceed to SSD repair as much as possible in parallel with the STEP IV running (favors cold mass rebuild) to allow successful achievement of MICE objectives.

next big milestones: reviews end-November and December will specify

-- if SS magnets can be energized for step IV running and under which conditions (controls, PS and QP)

-- recommend rebuilt process

Broad-brush run plan

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Cycle 2015/03 (Nov 2015 – Dec 2015) : Expected to be largely focussed on magnet commissioning with some running possible towards the end of the cycle.

Need to understand this period **eg discussion on straight tracks running**

Cycle 2015/04 (Feb 2016 – Mar 2016) : Production data-taking with Hydrogen absorber. Detailed run plan is in preparation.

Cycle 2016/01 (Apr 2016 – May 2016) : Production data-taking with LiH absorber.

Cycle 2016/02 (Jun 2016 – July 2016) : Possible contingency run period, but delays the start of construction for the next phase of the experiment.

Revision of MICE constitution

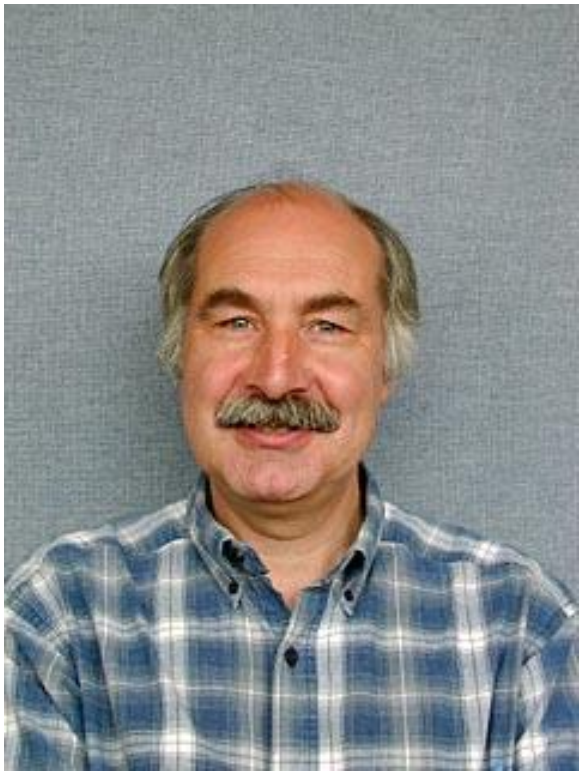
C. Booth, D. Kaplan, R. Tsenov were charged with coming up with revised constitution taking into account al changes that have happened over the years. (inlcuding MIPO, MEMO etc.)

First proposal exists, needs iteration.
Aim at first edition presented to EB in one month
then distribution to CB and vote at CM44 CB

Election of CB chair

after due call for nominations ..

we elected C. Booth a new collaboration chair.



Congratulations!

C. Booth enters in function at the next CB meeting in February 2016.

Future collaboration meetings:

2016:

- CM44 15th to 19th February 2016 (FNAL?)
- CM45 20th to 24th June 2016
- CM46 03rd to 07th October 2016

2017:

- CM47 13th to 15th February 2017
- CM48 26th to 28th June 2017
- CM49 2nd to 4th October 2017

EB will come up with a revised proposal
(foreseen date in February is right at restart of beam)

Final remarks:

-- it is not particularly a surprise that StepIV commissionning is not easy, but great progress continues to be be made.

There is a lot to do in a limited frame of space, time and resources.

Ingenuity, competence and hard work are demonstrated at all levels of the project.

As previously stated and repeated,
our order of **priority and conditionality** is

1. **safety**
2. **quality** (= carefulness and precision)
3. **on schedule**