

MICE CM28

Schedule & Risk Comment



- *Schedule reconstruction and management*
- *The 'straight to Step IV' discussion*
- *How a schedule meeting can work*
- *Risks (and how we can manage them)*

Andy Nichols, STFC 7th October 2010



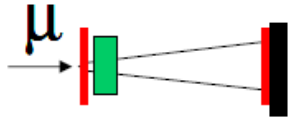
Slide from CM27 – nothing much has changed



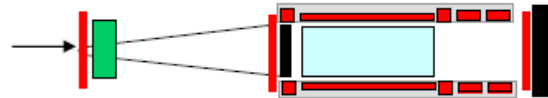
MICE Schedule as of March 2010

Run date:

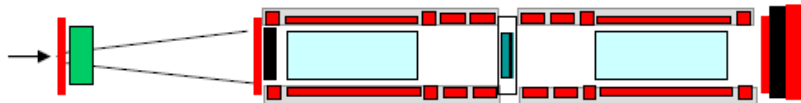
(running now)
-> Aug2010



STEP I



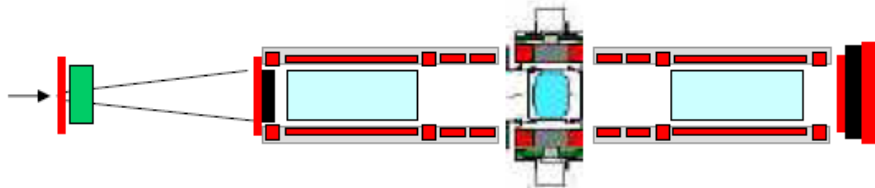
STEP II



STEP III/III.1

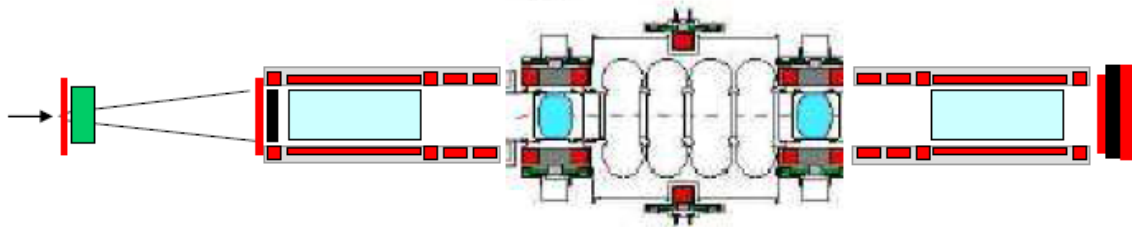
Entirely dependent on
s/sol recovery plan
Decision point Dec 2010

Schedule submitted to MPB 15th Dec



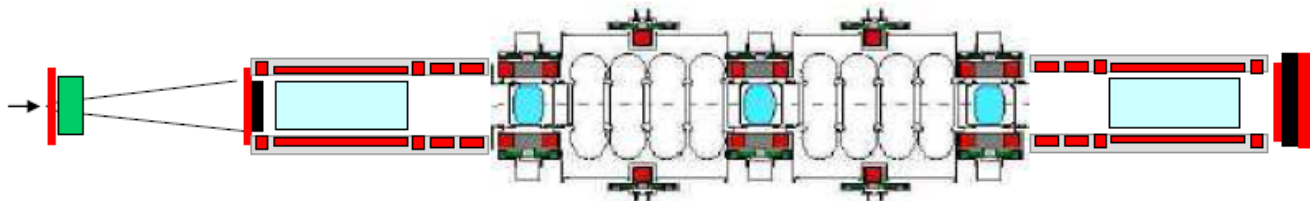
STEP IV

Q2 2012



STEP V

2013 3



STEP VI

≥2013



Schedule

- *Whatever we do, the schedule has to be reconstructed; the following major topics are the drivers:*
- *Understanding in detail the work needed to deliver the spectrometer solenoid(s) – I think good progress is being made here*
- *Re-configuring the MICE Step sequence, see later*
- *For the above, we must also consider for CY 2011 the AFC delivery, liquid hydrogen hardware and R&D programme, EMR, diffuser, solid absorber studies, magnetic measurements, substation upgrade and any experimental running priorities*
- *Tim, Matt, Roy & Andy are ready to start re-doing the plans, based on the outcome of this week*

Also from CM27 – again still valid I think

- *Presently both spectrometer magnets are dismantled*
- *Technical appraisal report being written (is complete)*
- *Current lead failure being diagnosed (is done)*

- *September 2010 – current lead diagnosis complete (yes)*
- *December 2010 – recovery plan written and agreed by MICE – (pre)view scheduled very soon, formal review later, report by 15th December, 2010)*
- *It should include:*
 - *A resource-loaded project plan - yes*
 - *Risks specifically identified - yes*
 - *Float specifically identified - yes*
- *Then we can decide how long it takes and make a believable top-level schedule - stands*

Schedule construction

- *The PM needs to believe what he's told before committing to delivery dates*
- *Puts me in a very difficult position sometimes (well nearly always)*
- *I have to get 'under the skin' of a frequently scanty single page .mpp slide or similar*
- *Need to find out what's driving (or not) the milestones and help to understand them with the schedule owner*
- *Hope the way that we're dealing with the spectrometer solenoid repair plan is step in right direction*
- *Until now, other things have taken nearly all my time....*
- *Am prepared, with help of Roy Preece, to visit collaborators more often – help and support with understanding the problems*

Managing the schedule



- *Clear message from the inaugural MPB (MICE Project Board):*
- *AB, MZ & AN need to work out a better way of managing the MICE schedule – have started to talk this week*
- *Traditionally the milestones have been set and tracked by the MICO meeting (every Monday)*
- *But engagement has been generally patchy – mostly due to timing*
- *Prepared to reschedule MICO to 16:30 UK time and/or change the day – can I canvass opinion here?*
- *AN has to re-state the large milestones*
- *Still not sure the MICO is ideal, would like to try and re-model along lines of existing schedule meeting, where difficulties and risks are more readily discussed and participation is better*
- *Also needs permanent secretary – MOM too pre-occupied usually, also needs a uniform format*



Straight to Step IV discussion



Straight to Step IV discussion



How a schedule meeting can work

- *Led by the PM, starting with the WBS, work-package managers for sub-work packages are identified*
- *They take ownership and responsibility for schedule (Gantt chart), risk register, spend against allocation (financial data probably impossible in international context though)*
- *All WP Managers engage in a weekly (short) review meeting*
- *Missed milestones and sticking points can then be identified and discussed between the engineers and vendors outside*
- *Documentation is reviewed as necessary*
- *The PM then reports to the relevant Oversight Body, via MICE management*
- *This is not original; it's a well proven technique and is in regular use*

How a schedule meeting can work

*Now the difficult bit,
it only works if:*

- *The PM has authority to set and control major milestones*
- *Engagement is efficient*
- *The objectives and delivery dates are achievable*

I suppose that's my problem.....!

Risks and how we manage them



- *Roughly three main types of risk:*
- *Technical/safety* – easiest to deal with, as MICE is largely in control of them
- *Financial* – often beyond our control
- *‘Other’* – again often beyond our control

- *For MICE a real worry is in the last category:*
- *Shortage of the staff that we need to complete the project – seems to apply across most disciplines and collaborating institutes – set against financial constraints, recruitment bans, etc*
- *Finding sufficient staff of the right type is a good way of mitigating the technical risks!*
- *Delegating the risk responsibility to a vendor sometimes inevitable, but not ideal – a good working relationship is essential – delivery schedule should allow for this type of risk*



Risks and how we manage them

- *Work-package Managers are encouraged to create and take ownership of a risk register for their activity*
- *Risks are described and quantified in the conventional way*
- *Everything is then collected in a risk document owned by the PM*
- *The critical point is that the risk registers are reviewed and updated weekly*
- *Suggest we use the MICO meeting for this also*
- *This and the MICO schedule information is then fed to the MPB by the PM*