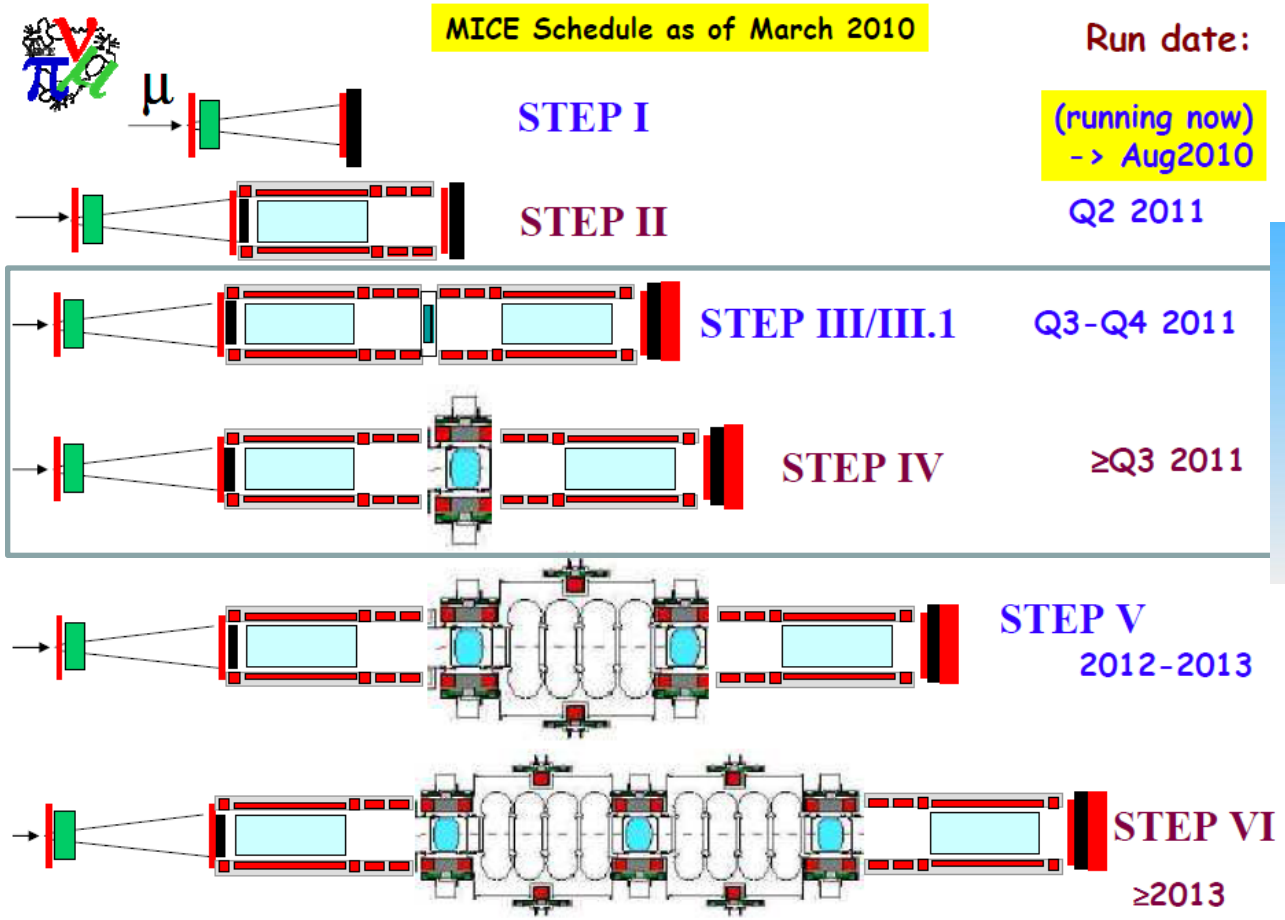
MICE CM28

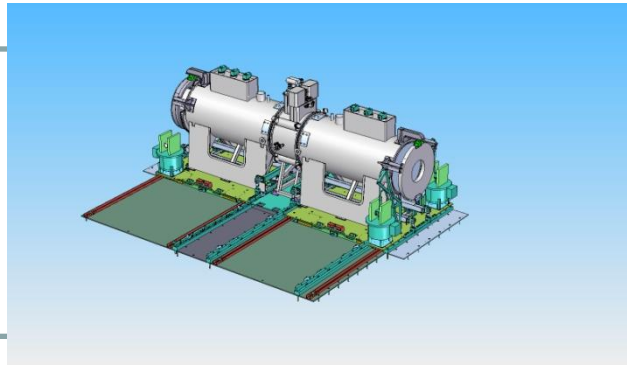
STEP III or STEP IV? – some practicalities

- *Considerations*
- *Step II*
- *Step III*
- *Step IV*
- *Conclusions*

Andy Nichols/Tim Hayler, STFC 4th October 2010

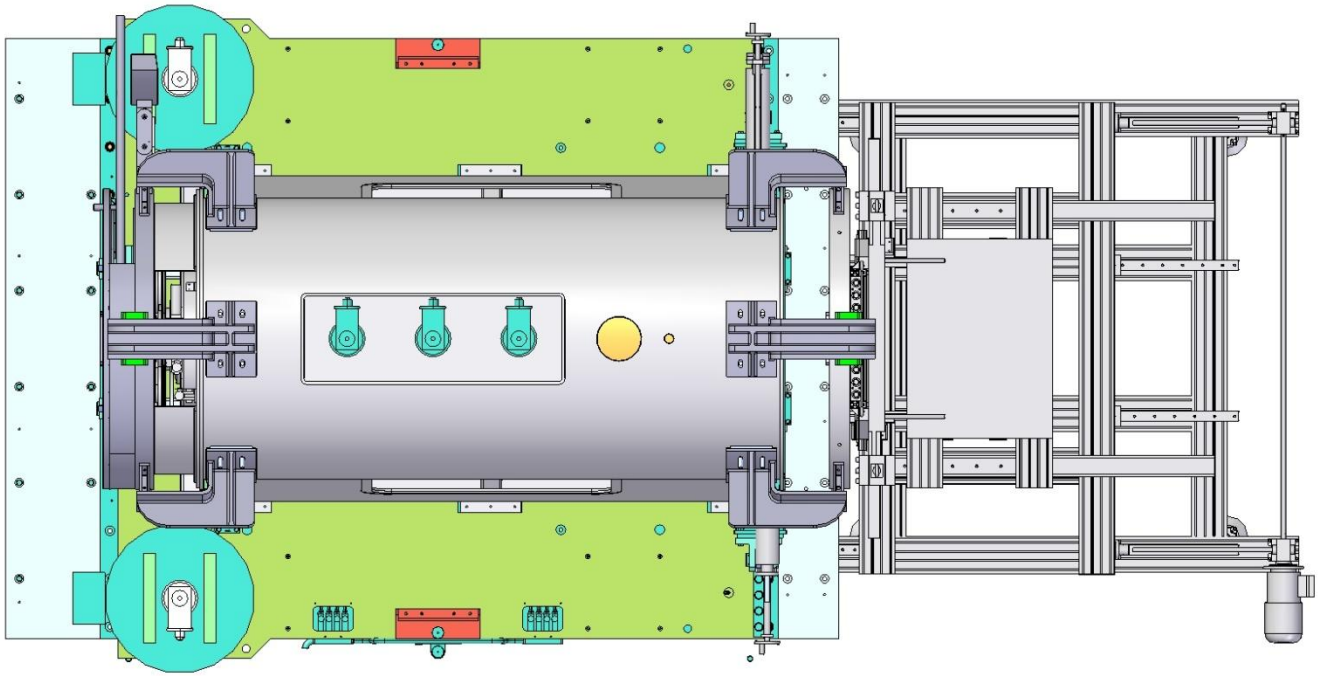
Our famous picture.....





- *Considerations:*
  - *Delivery of spectrometer solenoid (s) now the major driver of the top-level schedule*
  - *We might be able to get (almost) back on track by omitting Steps II & III*
  - *Go straight to STEP IV, sometime in early 2012....?*
  - *Am only attempting to discuss technical/schedule constraints here*
  - *Will cover the traditional route – STEPS II & III*
  - *Against straight to STEP IV*
  - *Important to decide this week as we need to set a course of action in the MICE Hall for the next FY*
  - *Assembly/disassembly times taken from Tim & Matt's schedules*
  - *Have uploaded the MS Project file with these slides for detail enthusiasts*

Step II

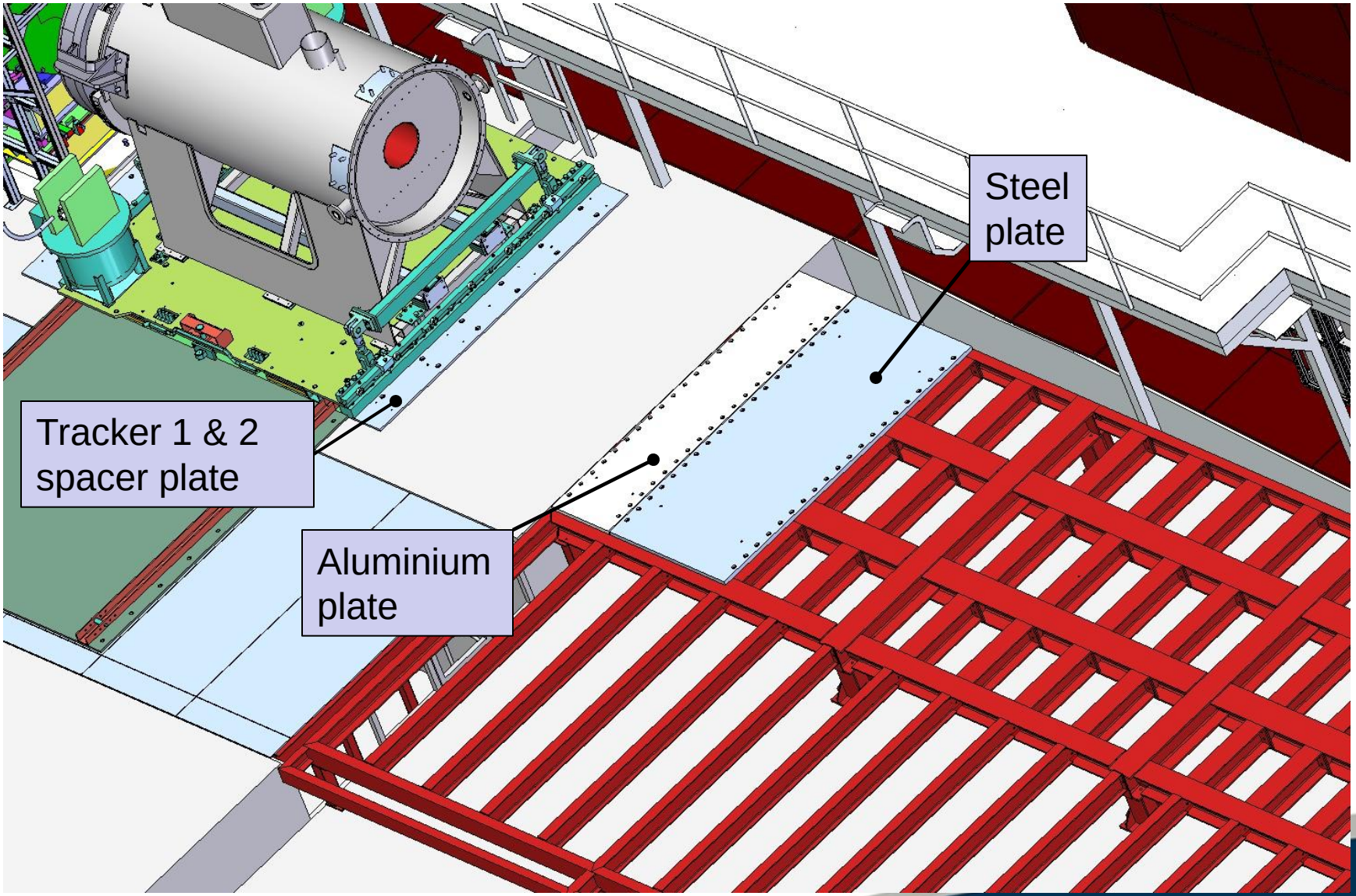


Time to install Step II complete – 168 days (about six months)
Step II data-taking period – need some help here
Dismantle KL & downstream & re-position – 20 days

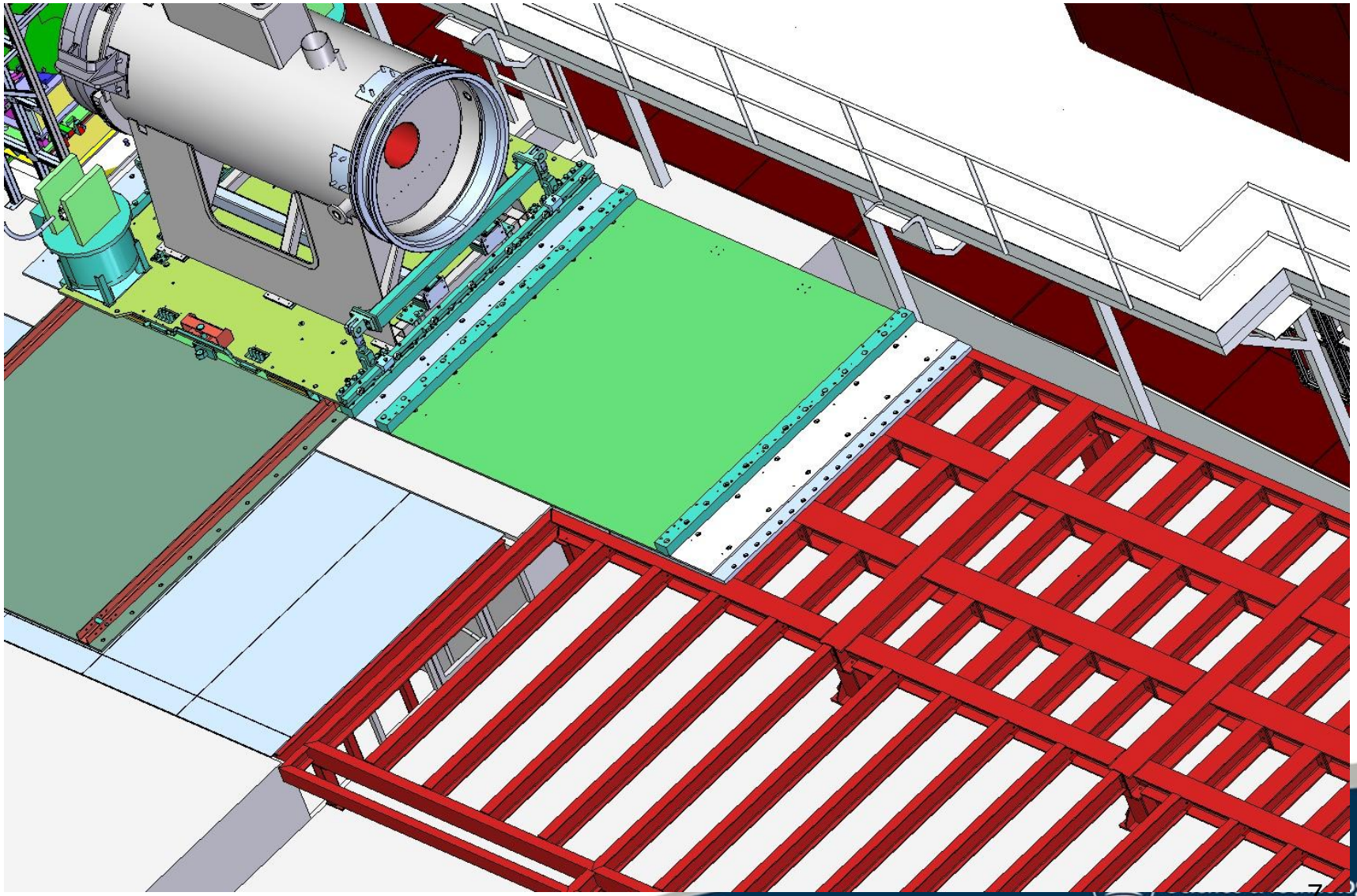
Important point here.....

- *Intermediate floor plates for Step III need to be considered at this stage*
- *Step III encroaches on the steel false floor*
- *Need to build the plates up, then dismantle them and re-install for Step IV*
- *Complicated, will let Tim explain!*
- *But we will save time by only laying them once, that is for Step IV*

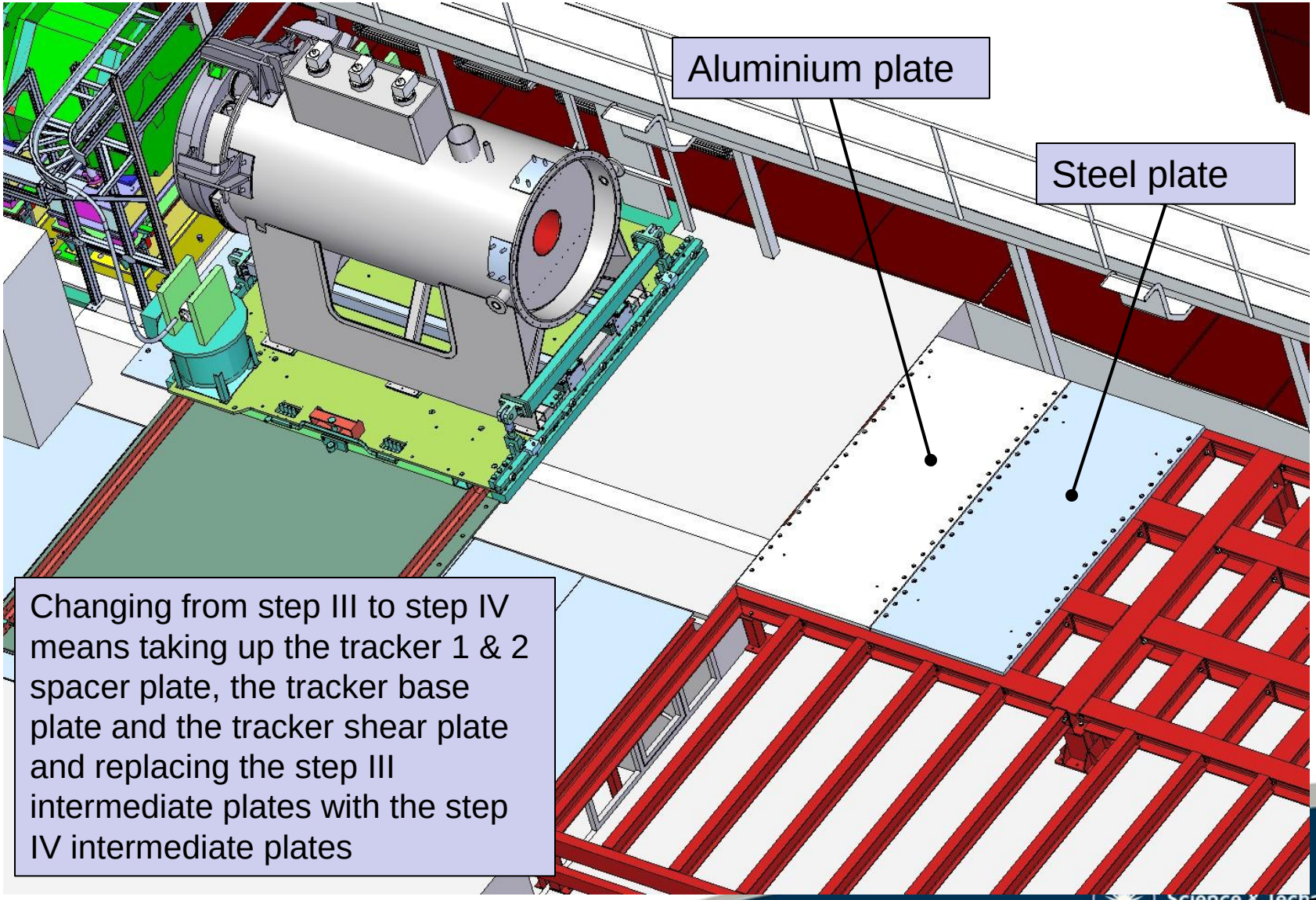
Step III Intermediate plates presently installed on the false floor



Step III tracker base and shear plates with floor beams installed on top of the concrete and false floor intermediate plates

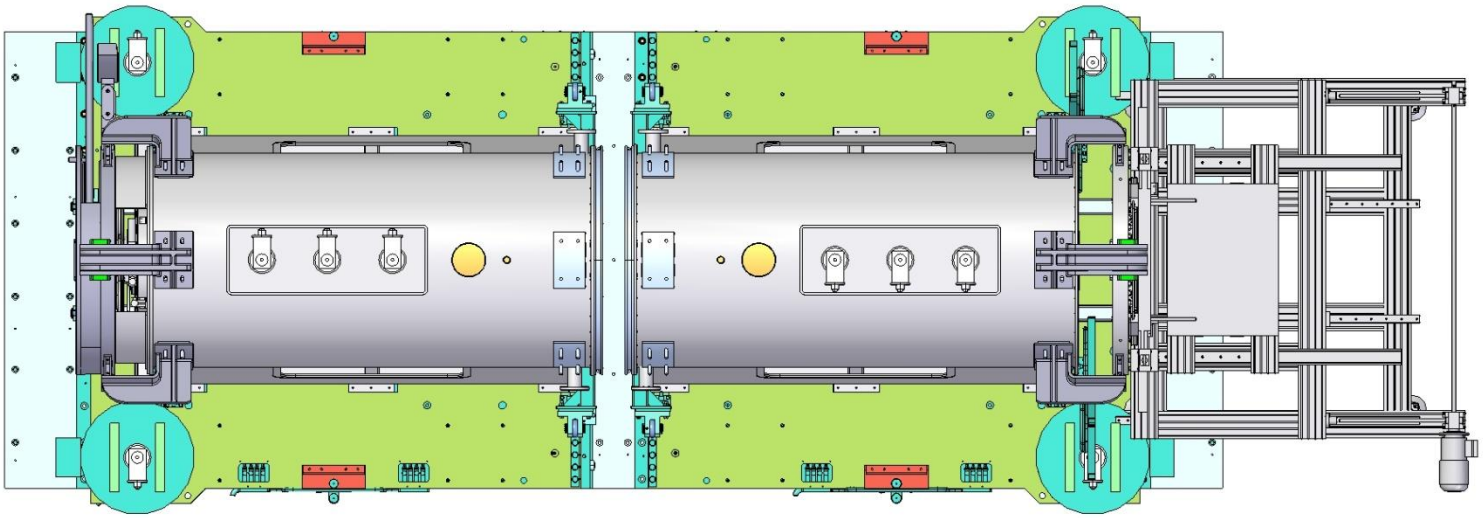


Step IV intermediate plates



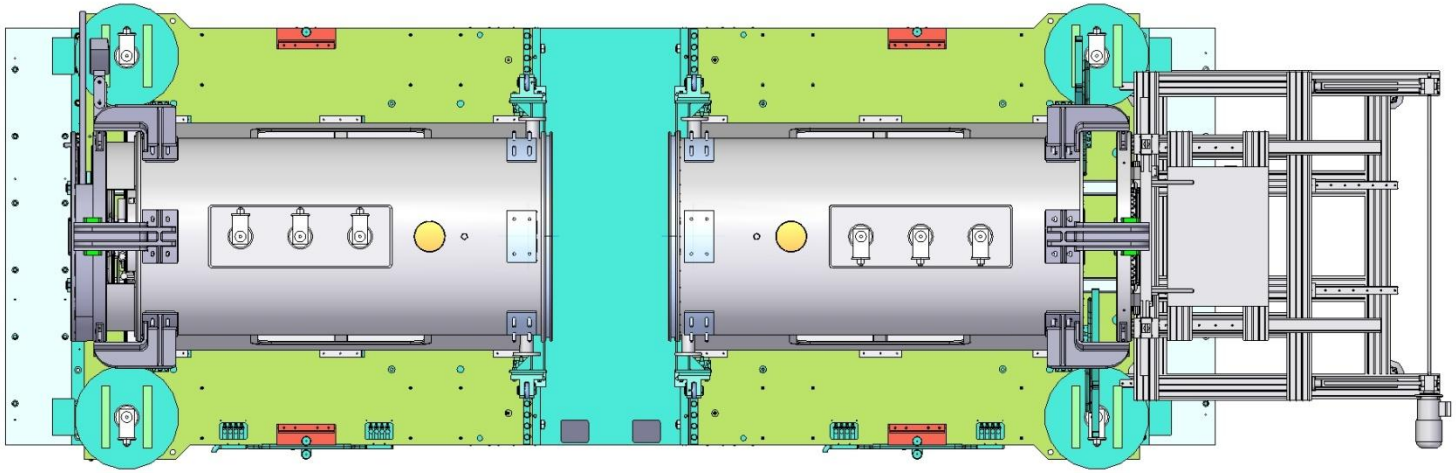
Changing from step III to step IV means taking up the tracker 1 & 2 spacer plate, the tracker base plate and the tracker shear plate and replacing the step III intermediate plates with the step IV intermediate plates

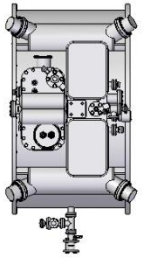
Step III.1



Time to install solid absorber/spool – 2 days
Install solenoid #2 – 92 days (about three months)
Reposition KL & downstream – 10 days
Step III running period - ????
Reposition solenoid #2, KL & downstream –20 days

Step IV





Time to install Step IV – 168 days (about six months)
Step IV running time – xxx days
Time to substitute solid absorber in FC – 8 days

Important assumptions at this stage:

- *AFC module is ready and tested*
- *LH2 infrastructure in MICE Hall is ready*

Conclusions

- *With what ever we decide to do, the clock starts ticking when the spectrometer solenoids arrive*
- *We could save a lot of playing about, especially with the floor, by moving straight to Step IV*
- *We need to watch the delivery of LH2 system and the AFC*
- *Probably realistic to believe we could have Step IV running about six months after solenoid/AFC delivery*
- *We could also reduce the amount of parallel activity, risk of damage to fragile equipment with unnecessary moving*
- *Some input on experiment running times would be helpful*
- *Would like to be invited to make the new Step IV project plan.....*