SQuaRE
"Replan" status

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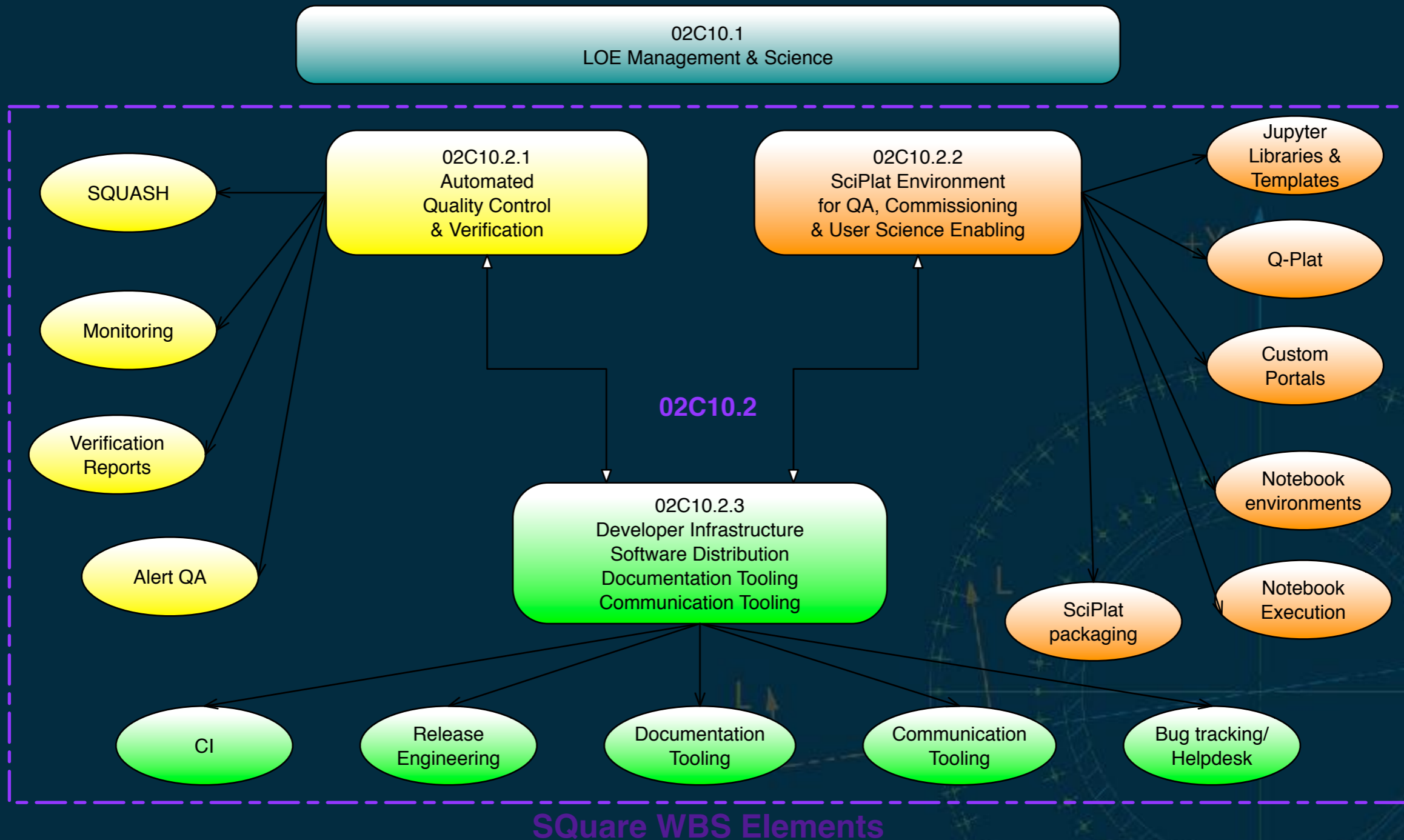
SQuARE's WBS

(not actually baselined yet)

Caveats I

Issues affecting cost and scope

Of the three major activities in the un-baselined WBS:

- The capabilities and requirements of QC were not defined in detail in LSE-63 (despite title, not a requirements doc). FE & MWV introduced a description of QC capabilities in LDM-151 this year but it has not been baselined yet

- Developer services are a dose-response: you can do more with more people or less with fewer people

- The Science Platform capabilities are only generally described and there is still some confusion as to who does what exactly
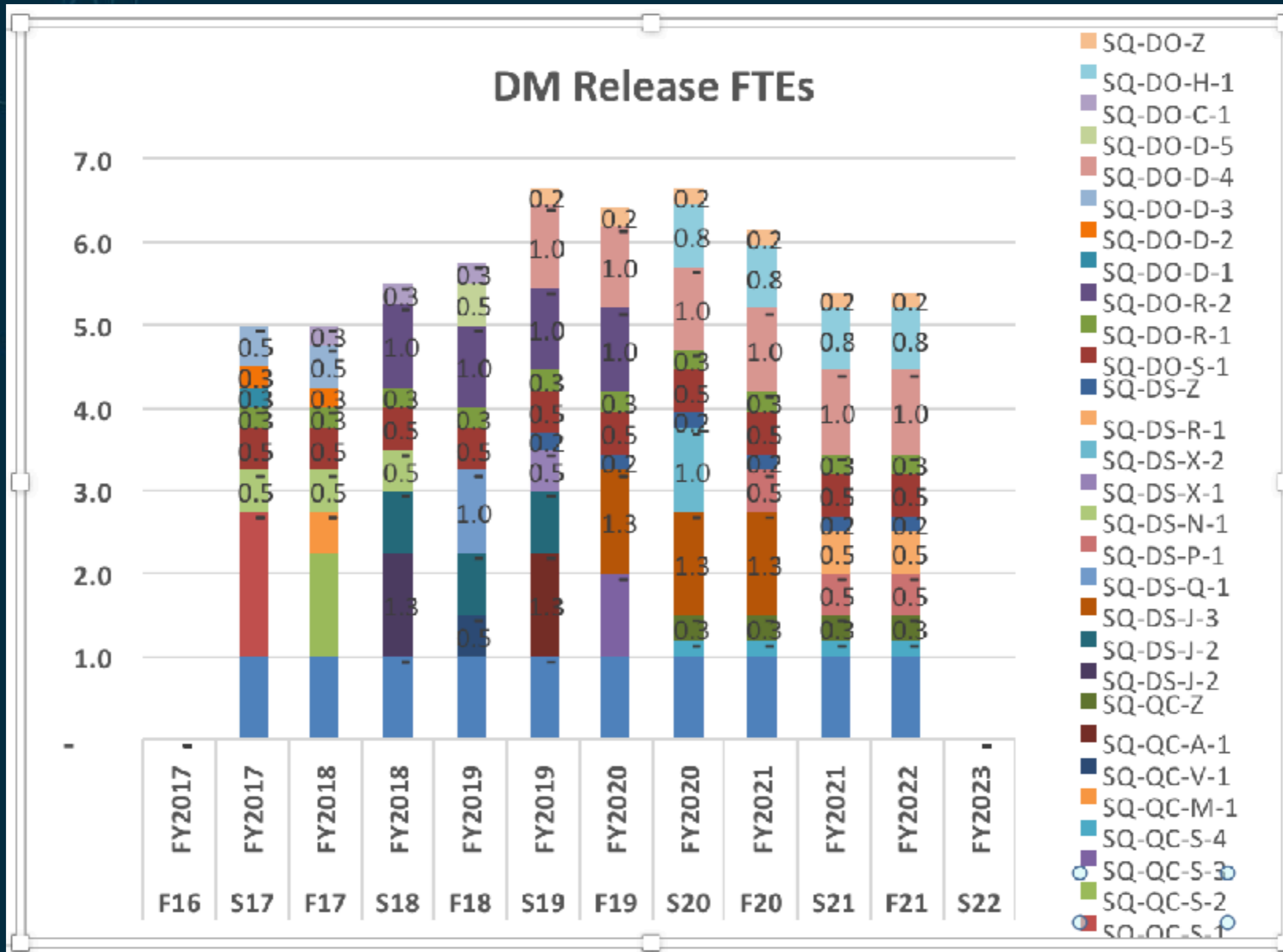
Somewhat building on sand…

Caveats II

Dealing with the uncertainty

➡️In re-planning I have made some educated guesses, namely that:

- LDM-151 will be baselined with no surprises;

- development support will not peak until into commissioning (while some services will mature on one hand, demands for stable releases and documentation will be more frequent, etc)

- and SciPlat as a user-facing service of great flexibility will generate a lot of user support load in areas pertinent to SQuaRE (eg. tutorials, environment capabilities etc)

- Money won't rain from the sky (and even if it does, turning money into people is not trivial), so assume more or less current complement

- Had to shim a lot to meet schedule; un-shimming is not free

Draft Plan

cf Dec 2016 FTEs: 4.5 EVM (5.4 total) across 7 humans

Cost I

Of the first draft

- Cost of replan: $5.8M from FY2017
- "My" WBSes were estimated at $6.5M from FY15 but:
  - Already spent $1.4M (slow start but with shift of focus to eng work staff costs became more expensive)
  - $385K was in 02C09, not clear whether I can still tap it for SQuaRE staff
  - Not clear what overall DM cost will be as work was removed from SQuaRE WBS that required fractional effort in SQuaRE but we don't know what it would require elsewhere
  - About ~$1M over budget with this plan

Cost II

Descope options

While we work with EVM, a lot of the scope of our work is service-level;

- Obvious descope is to cap effort for users (devs now, SciPlat users later)

- Or, to severely restrict SciPlat support (eg. to just the commissioning team)

- Would not slip the QC infrastructure, as it will be very important in commissioning

- Alternatively, could increase "income" by taking on work well aligned with our tech stack that can be done cheaper by SQuaRE than its home subsystem (eg. SysEng, T&S, Sims), potentially saving the project money

Milestone Dependencies I

Needed from SQuaRE

- Major hard deadlines for QC associated with ComCam and DRP's prep for ComCam

- Grey area for developer productivity services: no hard deadlines but clearly the sooner we get the devs something the sooner they can reap the efficiency of having it

Milestone Dependencies II

Needed by SQuaRE

- SuperTask, SuperTask, SuperTask

- Interfaces of QC to SUI, DAX

- Production level OpenStack service

- Commissioning cluster?

- SciPlat architecture

- KPMs (or a decision to give up on them)

Please Obi-Wan

What can management do to help

- Too many degrees of freedom: not worth doing bottoms-up planning if the answer is "have to stick to the budgeted cost". Would help to call it.

- Control messaging to community to avoid disappointing expectations

- Limit changes in direction that affect baseline (eg. while SciPlat is not more work than L3 was, it is now a more critical system than it was)

- Help in situations where cross-team dependencies create inconsistent priorities

- Encourage documented internal interfaces to decouple team inter-dependencies