#### **DRCU** schedule meeting.

#### SPIRE-RAL-MOM-001085

18/1/02

Present: Laurent Vigroux, Jean-Louis Augueres, Matt Griffin, Bruce Swinyard, Ken King, Eric Sawyer.

## QM1

Proposed delivery is now March 03.

This uses all margin and is on the critical path.

This is consistent with a delivery to ESA in August/September, but not the official required date of July 03.

A review of the schedule is being carried out by ESA covering the whole programme. Margins will be required, both real margin and margins that involve some descope, eg. reduced testing.

All subsystems should identify these types of margin.

QM1 has already been descope to the minimum functionality.

## QM1 units. (4 units)

DCU not form and fit, RF tight but not equivalent to the FM.

Power supply, power bench.

SCU, separate box.

MCU, separate box from LAM TBC.

QM1 will not be able to fully support the spacecraft level testing.

A new layout has been proposed for the power distribution which uses fewer supplies, this may improve the schedule.

A note to describe the QM build standard will be prepared by CEA. Also a description of the MCU from LAM is required, CEA to discuss with LAM. Notes to be produced by 25/1/02.

## QM2

Flight standard except power supply with the following exceptions:

Mil spec components.

Power supply will consist of power bench, as for QM1.

An STM is used to allow qualification, heaters will be fitted to allow thermal tests.

If the EM PSU was form and fit compliant then EMC testing can be done at unit level, SAP to consider this option.

Flight spare cards will be made in the same batch as flight model.

FS test programme may involve the QM and as such may put extra requirements on the QM.

## QM1 schedule.

Regularly reviewed, contact at JPL is Jerry Lilianthal.

Brief report to Eric after each review.

Slightly behind schedule presented at the meeting.

Schedule is resource driven, particularly Frederick. Some work around can be foreseen if Frederick becomes unavailable.

SAP to investigate ways of ensuring some work takes place at JPL during Frederick's holiday in May.

DCU is the critical item.

The time allowed for integration (task 114) includes an allowance for Christmas holidays.

There is significant technical risk in the detector readout system. There is a major milestone in June/July when the LIA boards are tested. Agreed delivery is 1/3/03

# QM2 schedule.

Current delivery projection is March 2004.

Layout modifications will be required as component footprints are different. The system team proposed that this process could be started earlier assuming QM1 is ok and then make minor changes later.

Room has been allowed on the QM1 boards to allow for the FM components. QM2 re-design can be run in parallel with some of the manufacture. (tasks 136 and 139 and 140).

Early delivery of the FCU to RAL would allow testing of the FCU with the CQM instrument and the DPU. The FCU would then be returned to SAP for integration and test with the DCU. This could reduce risk.

There may be a problem (PA) with delivery of a non-qualified unit.

To not effect the FM schedule a delivery in Jan 2004.

Agreed delivery is 2/1/04

## FM programme.

Current DRCU schedule shows delivery on 25/9/04. this leads to an FM delivery to ESA in Feb 05.

If the QM2 programme is shortened by 2 months (see above), the FM programme could be started 2 months earlier leading to a delivery in December 04. SAP are prepared to accept a delivery of 1/8/04.

SAP to supply an updated schedule for all models by 25/1/02

## Support during Instrument AIV and calibration.

SAP to identify staff who will be available for integration and calibration. RAL to specify dates when support is require for the CQM programme.

## Mass.

CEA to supply a case for the mass increase so that RAL can discuss with ESA.