

**Work Package:** Structure

**SPIRE-MSS-REP-001206**

**1. Subsystem Progress Since Project Inception**

Several concepts evaluated for the structure. Base line design decided upon in June 2000. Working on the system implications and implementation since first half of 2001. Continuing to close interfaces with the various subsystems. Started with production drawings in February 2001. The concept of the suspension has been analysed and decided on implementation. Hardware produced and tested, meets specifications.

**2. Subsystem Progress This Month**

Continuing design of the photometer 2K box. Closed out more subsystem interfaces, only thermal busbar, thermistors RF filters and SMEC open. Detailed design for MGSE nearly completed. DDR documents have been issued for DDR by the end of November. Reworked schedule due to latest shift in activities. MSSL design for thermal busbar has finished testing. Harness routings in progress. Receiving quotes for the manufacture of certain parts. Detail drawings of mirror mounts completed.

**3. Problem Areas**

-Difficult to close interface definitions, lagging behind about 6 months now.  
 Also other subsystems have problems with them.  
 - Thermal busbar suspension has strong non-linear responses  
 STM delivery scheduled for delivery early September 2002, which includes a margin of 1 month.

**Remedial Action**

-Most interfaces are closed. The outstanding ones include the RF filters, JFETS and the SMEC.  
 - Development team has been set up to redefine design. Concept designs have been chosen and vibration testing has been completed on MSSL low tension design.  
 Revaluating work packages for suppliers to manufacture parts to reduce time scales.

**4. Engineering Activities**

Nothing special

**5. Design Changes**

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**6. PA/QA Activities**

DDR held on 29 & 30 November.

**7. Subsystem Management Issues**

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**8. Actions Requiring Immediate Attention**

Analyse the manufacturing timescales

**9. Status of Previous Actions**

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**10. Activities Yet to be Achieved**

Close the I/F with JPL for the RF filters only. Close out interface with SMEC. Define harness routing. Detail design drawings.

**11. Milestones**

|               |                                 |
|---------------|---------------------------------|
| February 2001 | Interfaces defined and reported |
| 13-09-2002    | STM delivery to RAL             |
| 01-02-2002    | CQM FTB enclosure to RAL        |
| 10-06-2003    | PFM delivery to RAL             |
| 01-10-2002    | PFM FTB enclosure to RAL        |
| 6-01-2004     | FS delivery to RAL              |

**Status**

|                            |
|----------------------------|
| On going                   |
| On schedule/1 month margin |
| On schedule                |
| On schedule                |
| On schedule                |

**13. Schedule Changes**

Due to the closure of interfaces, we are lagging 1.5 months behind on orginial schedule.