

**Minutes of SPIRE Project Team Meeting 10** SPIRE-QMW-MOM-000682  
**QMW 30 April 2001**

**Present:** Matt Griffin, Ken King, Bruce Swinyard

**Agenda:**

1. Review of actions
2. IIDR outcome
3. DDR planning
4. Project management/Systems Engineering/PA
5. CEA-JPL MOU comments
6. Preparation for AIV meeting June

**1. Review of outstanding actions from previous meetings**

Open actions from previous meetings were reviewed - see Annex A for a summary

**2. IIDR outcome**

An informal note by has been distributed to all Co-investigators and managers and will be used to help set priorities in the coming weeks and months. Important issues that need action are:

- **Documentation - getting it out on time in future**
  - The IBDR is likely to be in late November.
  - Documents should be released at least one month beforehand (20 working days is what the IID-A requires)
  - So the documentation needs to be ready 5 weeks beforehand - call it mid-Oct. latest
- **PA:** See item 4
- **FMECA:**
  - We should try to do the FME part for the IBDR
  - FMECA for cooler is being done under contract
  - The MCU Design Description document takes BMS's analysis one stage further.
  - All subsystem providers should provide an FME as part of their DDR documentation
  - BMS also needs to do one at system level.

**Action 1: BMS to issue guideline for FME which should be included as part of subsystem DDR documentation**

**Thermal modelling**

- This is an urgent technical/system issue
- BMS will issue a technical note tomorrow which will expand on the summary already given in the IIDR report, and list the key questions and actions on various team members

**Scientific optimisation**

- The decision on FTS bands is needed soon
- A note/proposal from Jason Glenn came in today

**Action 2: BMS and MJG review what Jason proposes, do necessary modelling and tradeoff, consult with Jean-Paul, and decide by writing a formal design note before 25 May (when BMS goes on holiday)**

**IID-B update:**

**Action 3: JD to provide list of items in the IID-B for which SPIRE needs information from Alcatel side to define. Mid May.**

## **Optical encoder straylight**

**Action 4: MJG to get QMW to evaluate filter suppression. Discuss with LAM (Guy Michel) possibility of getting a device to test or information on what's coming out. End May.**

### **3. DDR Schedule**

Much consortium attention must now focus on the DDRs for the subsystems. Subsystem groups will need to deploy the necessary effort to work on detailed design and documentation for the DDR.

**Action 5: KJK to revise and reissue the DDR plan note circulated previously. It will make clear the requirements and documentation for the DDRs and request each manager to propose a date.**

### **4. Project Management Issues**

Based on the useful discussions at the IIDR, and the fact that we are now entering the detailed design and fabrication phase, it will be important now to adopt a somewhat more formal approach to project management, systems engineering and general communication. The new Instrument Development Manager, Eric Sawyer, will be joining the project in May. Important elements will be

- **Weekly Telecons**
  - Attendance by local PMs or their alternates is essential
  - There should be an agenda circulated beforehand and a quick report afterwards
  - The focus will be on
    - Quick review of actions
    - Identifying and emphasising Project team and subsystem priorities
    - Planning dedicated telecons as required
- **Monthly reports**
  - These will be absolutely mandatory from now on - the absence of monthly reports from participating institutes will be interpreted as an indication of internal resource problems
- **Action list**
  - Current action list will be reviewed
- **Project Team organisation**
  - Eric Sawyer will join the Project Team in the near future, with responsibility for implementation of the hardware programme
  - Central project management must become firmer and more active
  - Likewise, subsystem institutes will need to adhere stringently to project management requirements
- **Systems Engineering and design changes and decisions**
  - A more formalised approach to Systems Engineering and communication with institutes is needed
  - A system will be implemented whereby system design issues are dealt with through RIDs on documents
  - Systems Engineering, now centralised at RAL, requires close contact and good two-way communication with participating institutes, particularly CEA and JPL.  
It is expected that subsystem institutes will provide rapid response to queries or requests for information from the Systems Engineering team at RAL
  - To make progress on the immediate issues of the DCU design, grounding scheme and detector readout and control issues, it will be appropriate to hold dedicated telecons as appropriate between the RAL team and the engineers at CEA and JPL.
- **Product Assurance**

**Action 6: KJK to write list of what RAL PA person should be doing at this stage**

**Action 7: KJK to speak informally to Pierre Olivier about what ESA think is appropriate**

## 5. Draft CEA-JPL MOU

A draft provided by CEA has been reviewed by MJG and KJK. Some clarifications are needed concerning deliverables, responsibilities, etc.

**Action 8: KJK to send detailed comments to SAP and JPL**

## 6. Preparation for AIV meeting in June

The SPIRE position, as outlined in the IIDR report, is that a fundamental reassessment of the overall AIT programme for Herschel may be needed to address the payload schedule problems without affecting the launch date.

**Action 9: BMS to write a short note outlining our ideas on this subject for internal review**

## 7. Summary of new actions from this meeting

No. PT-10-xx	Actionee	Description	Priority	Deadline	Status
01	BMS	Issue guideline for FME which should be included as part of subsystem DDR documentation	Medium	May 18	
02	BMS MJG	Review Jason Glenn's proposal for FTS feedhorns, do necessary modelling and tradeoff, consult with Jean-Paul, and decide by writing a formal design note.	High	May 25	
03	JD	Provide list of items in the IID-B for which SPIRE needs information from Alcatel side to define.	Medium	May 18	
04	MJG	Arrange for QMW to evaluate filter suppression. Discuss with LAM (Guy Michel) possibility of getting a device to test or information on what's coming out.	Medium	May 31	
05	KJK	Revise and reissue the DDR plan note circulated previously. It will make clear the requirements and documentation for the DDRs and request each manager to propose a date.	High	May 11	
06	KJK	Write list of what RAL PA person should be doing at this stage	Medium	May 31	
07	KJK	Speak informally to Pierre Olivier about what ESA think is appropriate for PA	Medium	May 31	
08	KJK	Send comments on CEA-JPL MOU to SAP and JPL	High	May 11	
09	BMS	Write short note on SPIRE ideas for revised spacecraft AIT programme	Medium	May 18	

**Annex A: Review of open Actions from previous PT meetings**

No. PT-01-xx	Actionee	Description	Priority	Need and Date	Status
08	MJG	Raise parallel mode with Albrecht Poglitsch at November FST	Low	22 May for OBS meeting	<b>Deleted. New action on Sunil to write technical note for review by MJG and BMS</b>

No. PT-03-xx	Actionee	Description	Priority	Deadline	Status
11	BMS	Write requirements document for the FPU simulator.	Low	16/10/2000	<b>Closed. JLA has done it. BMS commented. Was part of IIDR. Needs to be updated. Now part of CEA DDR preparation</b>

No. PT-04-xx	Actionee	Description	Priority	Deadline	Status
01	KJK	Write WE test plan	High	Oct. 2001	<b>Open. Needed for IBDR.</b>
03	KJK	Issue doc. detailing how configurable items will be dealt with after the review	High	15 Nov. 2000	<b>Closed.</b>
05		Review and comment on the SIRD	High	4 Nov. 2000 <b>Defer to Dec. 5.</b>	<b>Closed</b>

No. PT-06-xx	Actionee	Description	Priority	Need and Date	Status
03	JD	Identify what connectors needed for FPU so that this information can be fed into the CPP programme in time for the 12/13 Dec. meeting	High	May 15	<b>Still open. Now very urgent. MUST be done within two weeks.</b>

No. PT-09-xx	Actionee	Description	Priority	Need and Date	Status
01	MJG	Devise operating temperature specification for the Shutter	High	For IIDR	<b>Closed. Spec is detailed in DDD. MathCad model has been given to GKG to send to Gary Davis.</b>
02	BMS	Ask DKG to write first draft of Thermal Straps SSSD		May 15	<b>Superseded. Will be written by BMS and DKG for inclusion in the Structure SSSD</b>
03	BMS	Review draft Calibrators software requirements document		For IIDR	<b>Closed.</b>