

Minutes of SPIRE Project Team Meeting #5 SPIRE-RAL-MOM-000571

RAL, 31 October 2000

Present: Trevor Dimbylow Matt Griffin Ken King
 Bruce Swinyard (Chair) Berend Winter

1. Agenda and minutes

The draft agenda and the minutes of the last meeting were agreed.

2. Review of outstanding actions from previous meetings (actions still open are in **RED**)

No. PT-01-xx	Actionee	Description	Priority	Need and Date	Status
02	JD	Review framework and format for Instrument Design Description and clarify and revise the top-level document tree.	High	For Systems Review.	Open. JD working on this. It's needed for the Systems Review. New deadline = 6 Nov.
03	MJG	Revise and tidy up Science Requirements Document	Med	For Systems Review	Open. New deadline = 7 Nov.
04	JD	Review current interface control scheme and consult with BMS/CRC on devising a more workable scheme	Urgent	Complete by 30/9/00	Closed. But doc. still needs to be reviewed. Is it compatible with CC's DRCU interface doc?
05	KJK	Produce revised Instrument Development Plan	High	For technical meeting Draft 30/9/00	Open. Needed as background documentation for Systems Design Review.
06	BMS/ MJG	Draft top level criticality analysis with emphasis on impact on scientific performance; OBS and degraded modes.	Med	For Systems Review Draft 30/9/00	Open. Conflate with FS philosophy analysis. BMS to visit QMW Friday 3 Nov.
07	BMS	Request sub-system level criticality analysis for input into system level criticality analysis	High	Send request by 8/9/00	Deferred. Not a high priority at present. BMS to ask for it and to indicate low current priority.
08	MJG	Raise parallel mode with Albrecht Poglitsch at November FST	Low	For Systems Review	Open. Needs to be addressed at the forthcoming FST meeting.
10	MJG/ BMS /KJK	Write formal response to ISVR board report	High	Technical Meeting	Closed.
14	MJG	Approach Albrecht Poglitsch; Thijs De Graauw and Thomas Passvogel about setting up another commonality meeting	Med	Information needed for Systems Review	Closed.

No. PT-02-xx	Actionee	Description	Priority	Deadline	Status
03	KJK	Ask Jerry Lilienthal to nominate parts proc. "user" at JPL	Med	Sept. 19	Closed. Dustin Crumb nominated.
04	KJK	Inform Technologica of SPIRE "users"	Med	Sept. 25	Closed

No. PT-03-xx	Actionee	Description	Priority	Deadline	Status
01	C Cara	Specify requirements on cryoharness needed for CEA detector electronics testing	High	31/10/2000	Open
02	BMS /MJG	Include Lionel Duband in systems review to give expert opinion to review board	Medium	Include in review plan	Closed
03	KJK	Arrange telecon between JLA and Jerry Lilienthal to discuss provision of GSFC BACUS to CEA	High	10/10/2000	Closed
04	BMS	Raise issue of two DRCU boxes with ESA	Urgent	At 11 Oct ESA meeting	Closed
05	JLA	Check whether 6 Litre cooler is compatible with PACS	High	16/10	Closed
06	BMS	Ask Lionel to specify requirements on electronics for temperature regulation using pump heater	High	6/10	Closed
07	BMS/JD	Identify ICDs or parts of ICDs to be reviewed at Systems Review	Urgent	As part of plan for review	Closed
08	BMS/JD/ CRC	Confer on system engineering responsibilities and draft short note to consortium	Urgent	6/10/2000	Closed
09	CRC	Include discussion of EMC modelling on agenda for EMC videocon	High	16/10/2000	Closed
10	LV	Ask Louis Rodriguez why temperature regulation using pump heating is not favoured	High	6/10/2000	Deleted. Pump heating has been agreed with Lionel Duband.
11	BMS	Write requirements document for the FPU simulator.	High	16/10/2000	Open
12	CRC	Ask LAM for estimate of the date by which the decision on which BSM option is needed	High	16/10/2000	Open - now urgent
No. PT-04-xx	Actionee	Description	Priority	Deadline	Status
01		Write WE test plan	High	?	Open
02		Write formal response to Reidinger letter	Low	?	Open TGD to send brief e-mail copied to MJG and KJK
03	KJK	Issue doc. detailing how configurable items will be dealt with after the review	High	15 Nov. 2000	Open. KJK has delegated to Dave Kelsh.
04		Revise plan for ICD review and re-issue	High	4 Nov. 2000	Open
05		Review and comment on the SIRD and send to TGD	High	4 Nov. 2000	Open

Additional actions arising from the discussion:

**Action 01: BMS to discuss the ICD scheme with John Delderfield.
Deadline = 6 Nov.
High priority.**

**Action 02: KJK to emphasise urgent need for revised Development Plans in today's telecon.
Urgent input needed from JPL, ATC in particular.**

Deadline = 31 Oct.
High priority.

Action 03: MJG circulate formal response to ISVR report to KJK, BMS
Deadline = 1 Nov
Low priority

3. Reports from recent meetings

3.1 ICC meetings (TGD)

- **FCSSMG meeting at Edinburgh:**
 - 1 Oct. 2001 deadline for delivery of FCSS version 0.1 changed to 1 Apr. 2002 with preliminary versions to be delivered beforehand.
 - Next meeting 10 November at MPE.
- **ORAC DR demonstration:**
 - This went well, but no feedback yet from Otto or Pjotr. ORAC is written in PERL - would need to be converted to JAVA.
- **ICC Definition Team meeting at Edinburgh:**
 - JPYTHON could replace IDL
Discussion: BMS is not keen on eliminating IDL at this stage.
 - The meeting discussed the ATC programme for ICC development.
Discussion: ATC participation needs to be clarified. Their specific expertise is OOP and conversion of use-cases into S/W design, so their limited effort should be focussed on this.
 - Ambiguity over percentage effort from Giovanni Bisaglia - is it 100% or 30%.
 - Next IDT meeting planned for early December
- **FCSS/EGSE co-ordination meeting on Oct. 30**
 - Nothing special to report

Action 04: TGD/KJK to ask Paolo Saraceno for clarification on issue of level of effort available from Giovanni Bisaglia.
Deadline: 6 Nov.

Action 05: TGD to contact Otto Bauer and Pjotr Roelfsma to get their views on ORAC DR.
Deadline: 6 Nov.

3.2 Warm Electronics summit (RAL 18-20 Oct.)

- Agreement between IFSI and CEA on interfaces is close. Christophe Cara is producing new interface document for which BMS/JD are to provide some relevant information
- Requirements on WE from individual subsystems were discussed and actions defined:
Detectors - next week
MCU - being revised
Calibrators and BSM - are still outstanding

3.3 EMC Videocon (19 Oct.)

- New suggested grounding scheme proposed by John Delderfield, who has an action to document it. The plan is to approve it at next week's meeting in Pasadena. FTS and photometer will be separate. Grounding can be at warm end or via 2-K strap at the cold end. Need to have ability to isolate at 2-K strap.
- RF filters were discussed. They should be included explicitly in the final grounding scheme

4. Forthcoming meetings

<u>Meeting</u>	<u>Date</u>	<u>Attendance</u>
Detector summit, Pasadena	9, 10 Nov.	UK: Bruce Swinyard, Peter Hargrave, Berend Winter, John Coker?, John Delderfield, Matt Griffin (10 Nov. only), Ken King JPL: Jerry Lilienthal, Jamie Bock, Viktor Hristov, Hien Nguyen, Terry Cafferty, others? CEA: Frederic Pinsard

Aims: - Sign off all systems issues associated with the detectors
- Clarify the Development Plan and the STM program
- Agenda: to be defined (BMS has issued draft list of topics for comment)
Splinters/parallel sessions on Dev. Plan.(10th) and QMW/JPL programme (Peter Hargrave travelling out early to discuss with Hien)

CNES review of FIRST TBD (in early 01?)

5. Websites

- The RAL project website will be slightly revised to reflect the change to Livelink
- QMW will establish a public/scientific site

Action 06: MJG to co-ordinate establishment of SPIRE web site at QMW

Deadline: Site should open by mid-December

Priority: Low (but work will continue)

6. Livelink

- SPIRE will use it
- All our DMS documents are being copied onto Livelink
- A folder hierarchy will be set up, which should reflect the SPIRE documentation tree
- A key-word system may be useful to specify which folders/directories documents should be associated with

7. Systems Design Co-ordination Team Organisation

- Bruce's document, although it refers to the "System Team" concerns the "System Design Co-ordination Team" - this will effectively act as a Configuration Control Board for the project. The System Team in its old form no longer exists
- Scientific input/consultation can be through the PI or *ad-hoc* participation by the Project Scientists

Action 07: MJG, KJK, BW, CRC, JD, to review the document and comment to BMS.

Deadline: 6 Nov.

8. Instrument schedule and Development Plan

- Critical items are the Structure, Detectors and Mechanisms (largely driven by BSM)
- A detailed Structure development plan exists and nature of problem is well understood
- This is not necessarily true of the Detectors and BSM
 - Detectors: should be clarified at or shortly after Nov. 9/10 meeting
 - BSM: A progress review should be held before the end of the year. The decision on commercial mechanism or in-house option needed soon (depends on whether LAM can do warm electronics)

Action 08: BMS/KJK to organise BSM progress review in early December.

8.1 Structure Development Plan Review

- The Structure is on the critical path as currently defined. A meeting is planned for 20 Nov. (TBC) at MSSL to review the Structure Development Plan. The aims are:
 - (i) to identify, if possible, mechanisms for getting the Structure off the critical path;
 - (ii) to examine the resource and planning implications (including assessment of risk);
 - (iii) to set in motion whatever actions are deemed necessary.
- Envisaged participants: Ray Carvell, Matt Griffin, Ken King, Alan Smith, Bruce Swinyard, Berend Winter, an external expert TBD
- Draft agenda:

09.00	SPIRE UK programme/budget	MJG	20 min
09.20	Instrument Development Plan	KJK	20 min
09.45	STM/AIV programme	BMS	30 min
10.15	MSSL Structure workpackage	BW	60 min
	- Design		
	- Workpackage description		
	- Schedule and development plan		
	- Risk and margins		
11.15	Discussion, centred on the aims as noted above		90 min
12.45	Conclusions and actions		30 min

9. Preparation for November Reviews

- Systems review now scheduled for 30 November with Interface Review on 28, 29 Nov.
- It's apparent that time and resources are not adequate to cover everything properly as we would like to do.
- KJK, BMS, MJG will have telecon on Wed. 1 Nov. to prioritise review objectives and preparatory activities.

Action 09: KJK to invite Otto Bauer formally to be on the Systems Design Review Board

Action 10: BMS to issue formally the agenda for the Systems Review

10. AOB

None

11. Next meeting date

November 13 at RAL (MJG will not attend as the FST meeting is on 13, 14 November)

12. Summary of actions

No. PT-04-xx	Actionee	Description	Priority	Need and Date	Status
01	BMS	Discuss ICD documentation and control scheme with John Delderfield	High	6 Nov.	Open
02	KJK	Emphasise to PMs the urgent need for revised Development Plans Urgent input needed from JPL, ATC in particular.	High	31 Oct. (telecon)	Open
03	MJG	Circulate formal response to ISVR report to KJK, BMS, JAL	Low	1 Nov.	Open
04	TGD/ KJK	Ask Paolo Saraceno for clarification on issue of level of effort available from Giovanni Bisaglia.	Low	6 Nov.	Open
05	TGD	Contact Otto Bauer and Pjotr Roelfsma to get their views on ORAC DR.	Med	6 Nov.	Open
06	MJG	Organise establishment of SPIRE web site at QMW	Low	15 Dec.	Open
07	All core PT members	Review the Systems Design Co-ordination Team organisation document and comment to BMS.	High	6 Nov.	Open
08	BMS/ KJK	Organise BSM progress review in early December	Med	15 Nov.	Open
09	KJK	Formally invite Otto Bauer to Systems Design Review	High	2 Nov.	Open
10	BMS	Formally issue Systems Review agenda	High	2 Nov.	Open