

## Minutes of EGSE Meeting #8

**ESTEC, Room Aa107  
December 19, 9:30 - 17:30**

**Attendees:** Otto Bauer (MPE), Luc Dubbledam (SRON), Albrecht de Jong (SRON, Groningen), Ken King (RAL), Brian Melton (ESTEC), Jeff Payne (RAL), Johannes Riedinger (ESTEC), Frederick Wechsler, Eric Wiezorrek, Stephan Veillat (ESTEC)

### **1. Adoption of the agenda**

Adopted

### **2. Minutes of last meetings**

Not discussed

### **3. Review of Action Items**

EGSE#3-04: now obsolete

EGSE#4-10: Still open, now due 31<sup>st</sup> Jan 2001

EGSE#5-01: Closed

EGSE#5-02: Closed

EGSE#5-03: Closed

EGSE#5-04: Closed

EGSE#5-05: Closed

EGSE#5-06: Obsolete

- need to review status of documentation – discussed under section (7)

EGSE#5-07: Closed

### **FGSSE#9/EGSE#6 Meeting**

EGSE#6-01: Open - now due 31<sup>st</sup> Jan 2001

EGSE#6-02: Closed

- still need to investigate ways to do it, and how it may be developed in SCOS2000. This is now on-going work

EGSE#6-03: Closed - in FGSD v1.0

EGSE#6-04: Closed - in FGSD v1.0

EGSE#6-05: Closed

EGSE#6-06: Closed

EGSE#6-07: Closed - in Draft 2 of RTS URD (distributed 10 Oct 2000).

EGSE#6-08: Still open, now due 31<sup>st</sup> Jan 2001

### **FCSS-EGSE Co-ordination Meeting /EGSE#7 (30<sup>th</sup> Oct 2000)**

EGSE#7-01: Closed

EGSE#7-02: Closed

EGSE#7-03: Closed

EGSE#7-04: Closed

EGSE#7-05: Closed - issue still open to be discussed at other meetings

EGSE#7-06: Still open - use of Router is to be discussed at this meeting

### **4. FCSS Review: Summary**

Otto presented the draft board report:

**Summary:** technical aspects OK, management aspects (development plans, schedules, workpackages) - not yet adequate.

**Comments from board:**

- FP Project is the formal customer for the FCSS, however
  - for each FCSS delivery FP Project could delegate customer responsibilities to other groups for each delivery (e.g. for ILT delivery, the ESGE Managers are the customers)
  - The customer for each delivery should provide an Acceptance Test Plan and monitor its execution
- FP Project should provide sufficient resources to discharge their responsibilities
- Management:
  - Too complex - too many groups! Terms of reference not agreed
  - Little insight in progress against previous development plans
  - Should instigate a small group to act quickly and decisively, with sufficient resources to react to problems
- Documentation
  - SIPs should be available soon
  - Scenario document and FCSDD should be maintained
- PI Teams contribution
  - All engineers are working part time - this causes concern

**Action EGSE#8-01:** Johannes, to talk to Brian Taylor about distributing the FCSS Board Report to PIs and PMs by mid January.

## 5. EGSE WG Terms of Reference

There was discussion at length on the mission phases to be covered by the EGSE WG Terms of Reference. It was decided eventually to cover the phase to delivery of the ILT version of the EGSE but include a statement to the effect that the EGSE WG can extend the timescale over which it operates as it thinks necessary (i.e. to cover IST deliveries etc).

**Action EGSE #8-02:** Otto, to update EGSE WG Terms of Reference by 8<sup>th</sup> Jan 2001

## 6. Latest Developments

### 6.1. CDMU Simulator

Ken briefly outlined the Statement of work and the current status of the work

### 6.2. TEI

Albrecht reported:

HIFI will not provide a full TEI for all test equipment - the TEI will be generic and provide only a programmer's interface to TM/TC interface. HIFI will provide TEIs to address certain types of interface and if another group uses the same interface this will be available. If a group uses a different interface, then they will have to write their own TEI.

Frederich asked about the possibility of instruments providing all the EGSE necessary to test their instrument in the cryo tests (including CDMU simulators). The three instrument groups stated that they had assumed that they would only provide SCOS2000 and expected an interface to the CCS to provide TM. This is the same configuration as for IST.

### 6.3. Router

Albrecht reported:

HIFI did not intend to use the ESA Router as it stands - it doesn't handle all the requirements at the moment.

The SCOS2000 extension (TM receiver and TC dispatcher) is not identified as part of the TM/TC interface, but will be included in the HIFI statement of work.

Albrecht is limited in time available after February - so he will start work on the TM/TC interface immediately, concurrent with providing documentation (requirements specification, statement of work, interface control document, etc.).

#### **6.4. SCOS2000**

Version 2.1 of SCOS2000 (from ESOC) is available, but

Version 2.0 has been adopted for EGSE work, as it contains the updated interfaces required for this. This will be delivered to ESTEC on 11-12<sup>th</sup> January. The two versions will eventually be combined.

**Action EGSE#8-03:** Brian to investigate the process for delivery of a version of SCOS (probably v2.1) to the EGSE groups for modification for use with Herschel, due 15<sup>th</sup> January 2001.

PACS have received 2 Sun Ultra60 + 3 flat-panel displays - SCOS2000 has not yet been installed  
HIFI have SCOS2000 installed and running  
SPIRE have an Sun Ultra10 but have not yet installed SCOS2000

Contacts at ESOC:

Pierre Maigne for commercial licences

Fabricio Colein for s/w contracts

#### **6.5. Test Control**

Suppliers of PROBA version are willing to allow ESA to modify PROBA Test Control to work with SCOS2000 but any changes to the PROBA version to work for Herschel will cost the instruments.

A new system, to be delivered by Siemens in early January, uses Tcl and provides test control functionality. It includes a CORBA interface to SCOS2000 and an interface to the MIB plus editors, debuggers, executers. The code is in the public domain and products are written in Tcl.

**Action EGSE #8-04:** Brian to provide documentation (requirements) for the new Test Control system to the instrument groups, 15<sup>th</sup> January 2001

This delivery is a starting point for the development of the Herschel Test Control to be provided by PACS - this work includes assessment of the Test Control system and development of interfaces to the FCSS and the MIB.

#### **6.6. MIB/Editor**

ESA have had an Oracle MIB delivered which will be used for testing of the Test Control system. Another delivery is due mid January.

It generates the SCOS2000 interface files but cannot import directly these files.

After discussion it was decided that there was no requirement for extra information to be included in the MIB database over and above the standard SCOS2000 information. Therefore any of the available editors could be used to generate the MIB.

**Conclusion:** Luc will redistribute his requirements on the MIB editor and assess the Integral MIB editor against these requirements. If everything is OK the Integral Editor will be used by the instrument groups. In addition, Albrecht will assess whether there are any impacts on SCOS2000 from the MIB editor requirements (e.g. the new version of SCOS2000 uses different APID values for test equipment from those used for the S/C. There is a table that defines where the commands to different units are sent. This table may need to be changed for our use).

## 6.7. OBS Maintenance

There is an open action to provide requirements on this.

It was pointed out that the acronym OBSM meant two things:

1. OBS Management: the handling of the conversion from an OBS image into commands to patch the OBS memory and to check the memory contents
2. OBS Maintenance: the facility to develop and test new/updated OBS routines.

In future OBS Maintenance will be called OBSDM (OBS Development Maintenance) and this will be implemented by IFSI

**Agreed:** PACS will implement the OBSM function (the translation to command packets and the checking functions for SCOS2000), but each instrument group will be responsible for its own maintenance of this.

## 7. Development Plans for items under (6).

### 7.1. Confirmation of distribution of work

[Action EGSE#8-08](#): Albrecht, to provide an indication of the amount of work to be carried out by HIFI for the EGSE WG.

OHB showed a viewgraph of the previously agreed work distribution. (see annex)

#### **Agreed changes:**

- SPIRE will provide CDMU simulator.
- MIB editor evaluation will be handled by HIFI.
- Additional work for PACS to provide OBS configuration of SCOS2000 was added.
- Rename OBSM to OBS Development Maintenance facility (the OBSM is the OBS Management facility - i.e. configuration of SCOS2000 to handle OBS updates)

### 7.2. Statements of work

Otto showed CDMU simulator statement of work (see annex)

**Agreed:** that other statements of work should follow the same form (although some deliveries - e.g. documents, or project management plans - may not be necessary in some cases)

**Agreed:** to use the same meeting dates for EGSE progress meetings

**Action EGSE#8-09:** EGSE managers to provide statements of work, specs and milestones by 26<sup>th</sup> January.

### **7.3. Requirements**

To be written as part of Statement of work

### **7.4. Documentation**

To be included as part of Statement of Work

### **7.5. Schedule and Milestones**

Otto showed the milestones for deliveries for the IFSI testing (see annex). After discussion it was clear that there needs to be an overall development plan for the EGSE, and an Integration and Test plan.

**Action EGSE#8-10:** Erich and Luc will generate an Integration Plan to include in the first instance the work up to delivery to of EGSE to IFSI. Due 26<sup>th</sup> January.  
It should include the integration sequence, workpackages, schedule

### **7.6. Assignment of personnel**

Included in previous discussion

### **7.7. Reporting**

Included in previous discussion

### **7.8. Test Plan**

Included in previous discussion

## **8. Letter of Understanding**

This will be essentially a signed-off page referencing the Statements of Work. Otto will produce a first version

## **9. Next meetings**

EGSE#9: 30-31<sup>st</sup> January 2001, at MPE, Garching

EGSE#10: 15<sup>th</sup> March 2001, at RAL

EGSE#11: 1<sup>st</sup> May, at RAL

## **10.AOB**

## Actions outstanding at end of meeting

Action	Actionee	Description	Due Date
EGSE#4-10			31 <sup>st</sup> January 2001
EGSE#6-01			31 <sup>st</sup> January 2001
EGSE#6-08			31 <sup>st</sup> January 2001
EGSE#8-01	Riedinger	to talk to Brian Taylor about distributing the FCSS Board Report to PIs and PMs. <a href="#">This action was completed on the 19<sup>th</sup> December - the Board Report will be circulated</a>	15 <sup>th</sup> January 2001
EGSE#8-02	Bauer	to update EGSE WG Terms of Reference.	8 <sup>th</sup> January 2001
EGSE#8-03	Melton	to investigate the process for delivery of a version of SCOS (probably v2.1) to the EGSE groups for modification for use with Herschel.	15 <sup>th</sup> January 2001
EGSE#8-04	Melton	to provide documentation (requirements) for the new Test Control system to the instrument groups.	15 <sup>th</sup> January 2001
EGSE#8-05	Dubbedam	to redistribute his requirements on the MIB Editor	21st December 2000
EGSE#8-06	Dubbedam	to assess the Integral MIB Editor against the MIB requirements	30 <sup>th</sup> January 2001
EGSE#8-07	de Jonge	to assess impact of the MIB editor on SCOS2000 and the reverse.	30 <sup>th</sup> January 2001
EGSE#8-08	de Jonge	to provide an indication of the amount of work to be carried out by HIFI for TEI and TC/TM interface in relation to the total work of the EGSE group	19 <sup>th</sup> January 2001
EGSE#8-09	Wiezorrek Dubbedam	to provide statements of work, specifications and milestones for their areas of work	19 <sup>th</sup> January 2001
EGSE#8-10	Wiezorrek Dubbedam	to generate an Integration Plan to include, in the first instance, the delivery to IFSI	26 <sup>th</sup> January 2001