Minutes : **Common EGSE meeting #13**   **SPIRE-ESA-MOM-000809**

Present : PACS   Otto Bauer (Chairman)   OHB   ohb@mpe.mpg.de
                  Erich Wiezorrek   ERW   erw@mpe.mpg.de
         SPIRE   Ken King   KK   K.J.King@rl.ac.uk
                  Andy Matheson   AM   A.matheson@rl.ac.uk
         HIFI   Luc Dubbeldam (minuteman)   LD   L.Dubbeldam@sron.nl
         ESTeC   Bryan Melton   BM   bmelton@estec.esa.nl
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                  Pierre Estaria (item 3.3.1)   PE   pierre.estaria@esa.int,

Date : 2 August 2001
Place : ESTeC

Agenda:

1. Adoption of the agenda
2. Minutes and Action Items of last meeting
3. Progress reports including schedule
   - TEI
   - Router
   - SCOS 2000
   - Test Control
   - MIB Editor
   - OBSM (OBS-Management) (added item)
   - CDMS simulator
4. Review of CDMS I/F Test Requirements
5. Review of Acceptance Test Plans
   - CDMU simulator
   - ICU/DPU to CDMS interface
6. EGSE Integration Plan
7. IFSI status
8. Consequences of new PS-ICD
9. Summary of AIs and schedule
10. Next meetings
11. AOB

1. Adoption of agenda

OBS-Management is added to 3.

2. Minutes and Action Items of last meeting

No comments on the minutes.

AI	Status	Due date	Actionee	Description
EGSE#9-06	Open	Aug 9, 01	Otto	CDMS sim SOW
EGSE#9-07	Open	Aug 17, 01	Otto	Letter of understanding of EGSE WG
EGSE#9-09	Open	Aug 17,01	Erich	First draft SOW OBSM
EGSE#9-10	Open	Aug 17,01	Riccardo	First draft SOW OBS maintenance facility
EGSE#10-9	Closed	June 29	Ken	Acceptance test plan for CDMSsim
EGSE#11-6	Closed	June 29	Dave	send his comment on test-requirements doc to Luc
EGSE#11-7	Closed	July 20	Luc	update the test requirements document
EGSE#11-9	Closed	June 22	Luc	issue third draft EGSE integration plan
EGSE#11-12	Closed	June 14	Bryan	send a version of TTA manual to Erich with all Siemenses removed
EGSE#12-01	Closed	July 29, 01	All authors	Put all documents appearing on Luc's document list on the LiveLink EGSE directory.
EGSE#12-02	Closed	June 22, 01	Andy	send SPIRE LabView/TEI interface to Luc and Erich
EGSE#12-03	Open	Sept 14	Luc	update the router ICD concerning the bug report from Ken (see AI: 11-11) and also concerning warm start capabilities (see AI:10-4)
EGSE#12-04	Open	Sept 14 , 01	Luc (Albrecht)	Issue version 1.0 of the router
EGSE#12-05	Closed	June 22, 01	Bryan	Send hardware specification for the LINUX SCOS 2000 version to all of us.
EGSE#12-06	Closed	July 27, 01	Luc (Albrecht)	Send MIB editor bug reports (Windows 2000/ MS Access 2000) to ESOC
EGSE#12-07	Closed	June 18, 01	Rik	Include Sergio and Tatiana in the EGSE distribution list
EGSE#12-08	Closed	June 22, 01	Luc	Issue version 1.0 of the CDMS I/F test requirements
EGSE#12-09	Closed	July 27, 01	Sergio	Issue a test plan for the instrument IF.
EGSE#12-10	Closed	July 27, 01	Ken, Otto,Luc	Confirm (or otherwise) that asynchronous event slots are used in the CMDS IF
EGSE#12-11	open	July Aug 17	Renato	Detailed DPU test plan (for the DPU test at IFSI)
EGSE#12-12	Closed	June 22, 01	David	New issue for the naming convention
EGSE#12-13	Closed	June 14, 01	Frederick	Clarify with Stefan the procedure for updating the PS-ICD and whether a formal answer for CRRs is possible before end of June
EGSE#12-14	Open	June 29, 01	Luc	Acceptance test plan and test report for

EGSE#12-15	Open	Aug 17, 01	Erich	the router
EGSE#12-15	Open	Aug 17, 01	Erich	Acceptance test plan for the Test Control
EGSE#12-16	Open	Aug 17, 01	Ken, Luc	Come up with a proposal for the hardware and operating system setup for ILT
EGSE#12-17	Closed	June 18, 01	Otto	Send Stephane a PS-ICD CRR template
EGSE#12-18	Closed	June 26, 01	Otto	Issue version 1.0 of terms of reference

One action item is missing. Will be added to this meeting:

EGSE#13-1.   Otto and Stephane to issue a HCSS integration and acceptance test plan End Sept.

The review of action items results in the following new actions:
EGSE#13-2.   Otto to distribute Renato's input for maintenance facility
EGSE#13-3.   Otto to distribute the DPU/ICU test plan

3.   Progress reports

3.1.   TEI

PACS and SPIRE are still interested in progress made by HIFI in the field of TEI software. HIFI SW will be developed in C, PACS and SPIRE use Labview. PACS and SPIRE will investigate the possibility to cooperate on this issue.

The HIFI EGSE configuration for TEI will consist of 7 PC104, RT Linux and modules written in C. One TEI is operational, the second will follow in sept-dec and the whole configuration is finished early 2002.

3.2.   Router

Luc presents a sheet taken from the router test report. This report has not been distributed yet as an error popped up in one of the gateways.
The sheet shows that during a period of two days:
- The router can register 19 clients. 16 of those stay alive a few minites and register again.
- Incoming datarate is 4*150kbps. Outgoing rate 4*4*150 kbps.
- During the whole test the data traffic was checked. No errors or exceptions occurred.

An error was detected in the connection between SCOS-2000 and the router. The final bytes of a TC packet disappear and a few packets are added to the TM packet. This is an error in the SCOS GW or the EGSE GW. This needs to be properly reported to Bryan

EGSE#13-4.   Albrecht to report this issue to Bryan

Erich has also detected an anomaly: The behaviour of the GW_ALL is different from the (GW_TC, GW_TM) combination.
EGSE#13-5.   Erich to report this problem to Bryan.

We wuld like to have this problem solved at the end of the month. This may be hindered by the vacation of Serge.

Johannes drops in and asks who will sign the Router ICD. We decide that the three EGSE managers and the three ICC managers will sign for the instruments. Johannes will also sign. Johannes will contact Albrecht for signatures-sheet.

3.3. SCOS 2000

3.3.1. Alcatel

Pierre Estaria joins the meeting for this point and reports from a meeting with Alcatel. This was a good and productive meeting, visited by Serge and Stephane.

Herschel setup:

Stephane presented the Herschel EGSE setup for ILT, IST and operations. The note Understanding the interface CCS & Herschel EGSE in ILT was presented and taken seriously into account by industry. Reaction of industry is that there is no reason to ask for changes in this design. Documentation is input for ITT mid Sept.

The situation for Planck is less defined. Alcatel may copy the Herschel ideas to Planck.

SCOS-2000 presentation

It was emphasized that the three instruments will use SCOS 2000 during ILT and ESA will use SCOS-2000 for operations. What system will be used by Alcatel during IST? As preparation of this meeting industry took a list of generic requirements from earlier missions and cross-checked this with SCOS_capabilities. Alenia and Alcatel investigated to option to use SCOS-2000. There is not enough material and eperience at this moment to make a decision. Alcatel will compile the input generated by these industrial partners and generate an evaluation report by the end of the month.

This goes without recommmendation into ITT.

An argument against using SCOS-2000 might be unfair competition.

Otto asks if it is clear to Alcatel that whatever system they decide to use that instruments only provides SCOS-2000 data?

Frederick: Yes that is clearly stated in the contract. Conversion shall be done by Alcatel.

3.3.2. Next SCOS version (linux)

Bryan reports that the Linus version of SCOS-2000 is available to everyone interested. The exact status of the implementation of TTA-adaption is unknown (holiday reasons) but "it seems to be going".

When do we need to switch to the next SCOS-version.

PACS de not want to switch before their IST phase. SPIRE hopes to skip the Solaris version. HIFI starts using the Solaris version for ILT. The second setup may use the Linux version and depending on that experience a switch may be considered.

3.3.3. Telemetry Receiver

Albrecht has reported a Non-conformance in the TM packet header as expected by the TMR. The TMR complies with an old version of the PUS.

EGSE#13-6.   Bryan will solve this problem.

Luc asked a solution in how to derive SPID from (APID, TYPE, Subtype, SID, Etc) Erich proposes to use the MIB table PID for this purpose. This has been subject to lot of discussion but the status is unknown.

EGSE#13-7.   Bryan will investigate this and make a proposal

The current TMR does not support variable packets. Do we use variable packets? SPIRE and HIFI: no, at least not packets that should be interpreted by SCOS-2000. PACS: yes, to distinguish 4 different event packets.

EGSE#13-8.   Erich will investigate if the variable packet can not be dropped for PACS.

3.3.4.   Configuration files.

The MIB is stored in the HCSS database. However, this does not contain completely the SCOS-2000 configuration. (For example MISCconfig, ..., ... are missing). A complete set off all relevant files must be defined. It is too early to do that now, we will do that later based on our experience.

Reports.
All users should report troubles or suggestions for improvement (both documentation and SW) to Serge.

3.4.   Test Control

Erich has compiled the requirements-matrix for Test-Control and cross-checked it with TOPE.

EGSE#13-9.   Distribute the matrix again.
EGSE#13-10. Instruments: to comment on this. (Sept 14)

3.5.   MIB editor

The problem with ACCESS-2000 have been spotted and solved. The next issue is on its way.
(The problem is that upon export the routine want to write into *.txt files. When an attempt is made to write into *.dat files an unadequate error message is generated.)

3.6.   OBSM

The idea to store the image on board of the CDMS was an old one and has already been rejected by Project. Ken doubts if this would have solved any patching problem.
At this moment we are facing two uncertainties:
• Nobody has proved until now that Virtuoso can be patched.
• We have no insight in what should be done to get the SCOS-2000 OBSM module running.
Erich has not contacted the ESOC expert (Silvie Haag) yet.
Although the use of the OBSM module can be avoided a long time, Otto wants to use it this autumn.
It is Erich's ongoing work to close the link between Virtuoso output, OBSM ad the final on-board image.

Note: This subject must also be discussed with Stefan Thuerey.

3.7. CDMS sim

Andy reports:

A Pre-Delivery version of the simulator was due to be released for evaluation at the end of July. This was not achieved due to a problem with the DDC card software itself. The problem has now been solved but there are still a few days work to do. The pre-delivery release will now be available from August 17th. Hardware (PC + DDC card) will also be sent to PACS on this date.

As reported at the last meeting there are 5 main areas of the simulator yet to be completed for the final release in September. The status of these is as follows:

- RT 'Instrument Simulator' for the DDC card.   Will be present in basic form in the 17 August release.
- Simulator Error handling   Implemented but not tested.
- Synchronous buslist change   In progress.
- TM Playback mode   In progress.
- Remote control of Simulator   In progress.

4. Test requirements

We need comments to three documents:
1. test requirements
2. CDMS sim test plan
3. DPU ICU test plan

The test requirements are at version 1. We would like Project to approve this document.
EGSE#13-11. Frederick will find out who will approve for Project.

EGSE#13-12. Ken, Otto, Luc, Frederick, Stefan to comment on the CDMSsim test plan
These comments should be distributed and at least copied to Jeff Payne.

EGSE#13-13. Planck instrument teams to also comment on test requirements and test plan
This action-request will be highlighted when the minutes are sent to Jean-Luc and Chris.

EGSE#13-14. Ken, Otto, Luc, Frederick, Stefan to comment on the DPU/ICU test plan
These comments should be distributed and at least copied to Sergio Molinaro.

5. EGSE integration plan

This plan is in Draft 4, and ready to be issued as issue 1.

EGSE#13-15. All teams to make final comments
EGSE#13-16. Luc to issue version 1.
Again: who is signing for Project?

6. IFSI

The IFSI status is shortly discussed. No resulting actions

7. PS-ICD

The changes in the PS-ICD have caused a lot of extra work for PACS and Cresa.
At this moment it is still not 100% clear how all options should be implemented.

Note: This should be clarified urgently.

We discussed several options: Should we have a separate meeting to discuss, and get approval for, the instrument's implementation of the PS-ICD. Problem is that all five instruments have different implementeations.
We decide to specify, in whatever document, how each instrument implements the PS-ICD. This documents will be collected by Otto. Otto will send the whole set to Stefan with the request to approve the implementations. Than we can decide for a meeting, telcon or whatever is appropriate.

EGSE#13-17. All Five Instruments: to specify the implementation of the PS-ICD and send this to Otto.

8. Action Items:

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EGSE#9-06	Aug 9, 01	Otto	CDMS sim SOW
EGSE#9-07	Aug 17, 01	Otto	Letter of understanding of EGSE WG
EGSE#9-09	Aug 17,01	Erich	First draft SOW OBSM
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EGSE#12-11	Aug 17	Renato	Detailed DPU test plan (for the DPU test at IFSI)
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EGSE#12-16	Aug 17, 01	Ken, Luc	Come up with a proposal for the hardware and operating system setup for ILT
EGSE#13-1.	end Sept	Otto and Stephane	issue a HCSS integration and acceptance test plan End Sept.
EGSE#13-2.	Aug 17	Otto	to distribute Renato's input for maintenance facility
EGSE#13-3.	Aug 17	Otto	to distribute the DPU/ICU test plan
EGSE#13-4.	Aug 17	Albrecht	to report this issue to Bryan
EGSE#13-5.	Aug 10	Erich	to report this problem to Bryan.
EGSE#13-6.	end Aug	Bryan	to solve this problem.
EGSE#13-7.	end Aug	Bryan	to investigate this and make a proposal
EGSE#13-8.	Sept 7	Erich	to investigate if the variable packet can not

			be dropped for PACS.
EGSE#13-9.	Aug 10	Erich	Distribute the matrix again.
EGSE#13-10.	Sept 14	3 Instruments	to comment on this.
EGSE#13-11.	end Aug	Frederick	to find out who will approve for Project.
EGSE#13-12.	Sept 14	Ken, Otto, Luc, Frederick, Stefan	to comment on the CDMSsim test plan
EGSE#13-13.	Sept 14	LFI HFI	Planck instrument teams to also comment on test requirements and test plan
EGSE#13-14.	Sept 14	Ken, Otto, Luc, Frederick, Stefan	to comment on the DPU/ICU test plan
EGSE#13-15.	Sept 14	3 instruments	to make final comments on EGSE integration plan
EGSE#13-16.	Sept 14		Luc to issue version 1 EGSE integration plan
EGSE#13-17.	Sept 14	Five Instruments	to specify the implementation of the PS-ICD and send this to Otto.

9. Next meetings:

Unchanged:
EGSE # 14 Sept 26/27 at RAL
EGSE # 15 Oct 15, 16, 17 at MPE