
Minutes : Common EGSE meeting #10

SPIRE-PAC-MOM-000778

Present	:	PACS	Otto Bauer (Chairman)	OHB	ohb@mpe.mpg.de
		SPIRE	Ken King	KK	K.J.King@rl.ac.uk
			Jeff Payne	JP	J.Payne@rl.ac.uk
			Andy Matheson	AM	A.matheson@rl.ac.uk
		HIFI	Luc Dubbeldam (minuteman)	LD	L.Dubbeldam@sron.nl
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Date : 4 April 2001

Place : RAL

Agenda:

1. Announcements
2. Minutes and Action Items of last meeting
3. Progress reports including schedule
 - TEI
 - Router
 - SCOS 2000
 - Test Control
 - MIB Editor
 - CDMS simulator
4. Acceptance Test Plan for CDMU simulator
5. Integration Plan
6. Statement of work
 - CDMU simulator
 - TEI
 - Router
 - Test Control
7. Letter of Understanding
8. Update of PS-ICD
9. Summary of AIs and schedule
10. Next meetings
11. AOB

1. Announcements

Otto has invited Alcatel to attend the meetings of this WG. For today's meeting Alcatel had no one available.

2. Minutes and Action Items of last meeting

No comments on the minutes.

Status action items, refer to the minutes of Jan 31, 2001 sections "review of action items" and "Action Items".

AI	Status	Due date	Actionee	Description
EGSE#4-10	Obsolete	Feb 28,2001	Pjotr	Provide ...
EGSE#6-01	Open	Feb 28,2001	Pjotr	Comment on the FIRST documentation tree as in appendix 03 and send your comments to PE, JRR This was especially for the EGSE-ILT documentation under responsibility of the ICCs.
EGSE#6-08	Open	Feb 28,2001	Pjotr	Assemble OBSM (maintenance) URD from existing documentation
EGSE#8-07	Closed		Albrecht	To assess impact of the MIB editor on SCOS2000 and the reverse.
EGSE#8-08	Obsolete	Feb 28,2001	Albrecht	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.
EGSE#9-01	Open	April 27, 01	Otto	Update terms of Reference
EGSE#9-02	Closed		Luc	First draft SOW for the Router
EGSE#9-03	Open	April 27,01	Luc	First draft router ICD for TEI
EGSE#9-04	Closed		Bryan	SCOS-2000 – router ICD
EGSE#9-05	Closed		Otto	Clarify ...MIB editor
EGSE#9-06	Open	April 27, 01	Otto	CDMS sim SOW
EGSE#9-07	Open	April 27, 01	Otto	Letter of understanding of EGSE WG
EGSE#9-08	Open	April 27, 01	Luc	First draft SOW TEI
EGSE#9-09	Open	April 27,01	Erich	First draft SOW OBSM
EGSE#9-10	Open	April 27,01	Riccardo	First draft SOW OBS maintenance facility
EGSE#9-11	Closed		Otto	MIB naming conventions
EGSE#9-12	Closed			Next version of integration plan

Notes with reference to the Action Item status.

1. Luc will ask Pjotr to react on his open Action Items
2. The original background of **EGSE#8-08** is unclear at the moment. There might have been a worry that HIFI's contribution to the EGSE-WG is not in balance with PACS's and SPIRE's contribution. At this moment, however, the router and TEI workpackage appears not to be trivial.

Luc offers to make an overview of all HIFI's activities beneficial for the other teams (CDMS IF test req. doc, CDMS-sim spec, chasing ESOC for the COTS-arrangement, MIB-editor evaluation, **etc**). This, however is not necessary.

3. **EGSE#9-01:** The TOR will be extended:
 - The Working Group will accept responsibilities for the ISL
 - The Working Group will accept responsibilities for the development of the CDMS-sim. (This to reflect the current situation where the CDMS-sim workpackage moved from the CDMS-Common Working Group to this working group)
4. **EGSE#9-07:** This action item waits for information about OBSM (see EGSE#9-9)
5. **EGSE#9-9:** Erich is working on an overview of the complete link for the on-board software: Source file > Image file > Differential Image file > Telecommands. There are two problems in this field:
 - Virtuoso must produce image files in such a way that differential images are substantially smaller than the image itself. This issue seems to be solved by CSL or at least solvable.
 - SCOS-2000 must be configured to digest this Virtuoso images, or differential images and to translate them into TC-packets.The second issue should be tackled in close cooperation with an ESA OSBM-expert. EGSE#10-1 Bryan will nominate one and bring him/her in contact with Erich.
6. Not everybody around the table is equally happy with the naming conventions as proposed by ESA. The several ideas are:
 - Esa proposes to identify parameters and commands with a 6-character code, that consists of an instrument-identifier, a 4-digit number and a parameter identifier. Further each parameter and command has a description of 16 or 24 characters.
 - Otto wants to use mnemonics, rather than this naming structure. Where SCOS-2000 allows to use 8 characters for a parameter-identification it is unclear why we are restricted to six characters without no obvious meaning.
 - If the first character already indicates the instrument, then why is the numerical range also restricted per instrument?
 - The use of underscores in description field should not be forbidden.
 - Luc thinks that 8 characters is too short for a reasonable mnemonic and 16 (24 respectively) is too short for a reasonable description of a parameter. He would be happy to use the identifiers as proposed by Esa in conjunction with the description-field that will take over the role of the mnemonic. Notice that in all monitoring functions of SCOS-2000 the identifier and the description are displayed together. This can also be maintained in all hardcopy output.
 - One interface that works with identifiers only is TOPE-S2K. It might be feasible to introduce a change here so that the test procedures can use the description-fields rather than the identifiers.
 - EGSE#10-2 We decide to discuss this item with Alcatel and with each other and to come up with a proposal.

3. Progress reports

Router and TEI

Albrecht and a Software Engineer are working on both the router and the TEI. Albrecht fails to produce clear reports or status overviews. This means that even for Luc it is unclear what the current status is.

The suggestion of the HIFI management is that this may be clarified with direct contact between Otto and Willem Luinge (SRON). Phone call during the meeting (Otto-Willem) resulted in the arrangement that Willem will report the current situation to Otto on April 9. (EGSE#10-3)

Albrecht will be urged to be present at the next meeting.

Bryan suggests to include a warm start capability of the Router in the Router requirements. Experience shows that it may be a problem to recover if the Router Crashes.
EGSE#10-4 Luc will ask Albrecht to include this in the Router requirements.

SCOS-2000

Bryan present the SCOS-2000 development schedule. See annex.

Test Control

TOPE and TUBA have been installed at MPE and SRON. MPE works on the connection of TOPE with HCSS. Suggestions for new requirements will be sent to Bryan. (EGSE#10-5)

Erich will write a proposal of how Test Control will work, with possible add-ons. After the first issue he needs input of other users. Therefore a user meeting will be organized. (EGSE#10-6)

MIB editor

Version 2.0 of the S2K MIB editor has been distributed. There are many improvements with respect to the previous version. The new editor has an import function, a consistency checker and the user manual doubled in size.

The corresponding databases have several non-conformances with the MIB-import ICD.
EGSE#10-7 Luc will issue an evaluation report of this editor.

EGSE#10-8 Otto will forward the MIB editor to IFSI.

CDMS sim

Andy reports some problems encountered with the Systran card. Some essential functions of the card are not working properly and no support is given by Systran that can solve this. Seen attached sheets.

RAL tries to go around the Systran problems and considers to use the DDC card. RAL needs another week to conclude if this is feasible. It has several implications: DDC uses C instead of Labview, the card is more expensive.

The new schedule will be discussed during a telecon on April 20. 1400 Central Europe Daylight Saving Time.

There is contact between Satellite Services and RAL. SatServ is interested in cooperation and have a schedule to develop a front-end (target Oct 2001).

4. Acceptance Test Plan for CDMU simulator

Refer to e-mail from Stephan Thuerey dated March 29, 2001, or Annex.

We need an acceptance test plan for the CDMS-sim and for the DPU/ICU. The test-requirements are in test-spec. SRON-U/HIFI-SP-2000-5. If there are remarks concerning this document, these may be directed to Luc.

EGSE#10-9 RAL will draft an acceptance test plan for the CDMS sim.

EGSE#10-10 Otto will ask IFSI to write a test-plan for the ICU/DPU to CDMS interface.

EGSE#10-11 Otto will invite HFI/LFI to cooperate with the acceptance test-plan.

Luc will send current version of test-spec to FW

5. Integration Plan

Luc has distributed the second draft with input from Erich. Modern technology fails to clearly indicate the difference between fat and thin lines. Luc will re-distribute. ([EGSE#10-12](#)) Bryan makes the comment that Esa may be responsible for the delivery of some blocks but the text suggests that Esa is also responsible for integration with other blocks. This will be rephrased.

Bryan makes the following remark:

An acceptance test should start with an empty computer. Continue with recompilation of all the software on site. Etcetera. An acceptance test with *an old and therefore unknown* configuration would be unacceptable for him.

We may take this into account when specifying the test-procedures. (Taking into account does not imply that we do it that way)

6. Statement of work

skipped

7. Letter of Understanding

skipped

8. Update of PS-ICD

The PS-ICD will be maintained following a procedure. This procedure is described in the Herschel/Planck Configuration Management Plan.

[EGSE#10-13](#) Action for all: to comment on this plan. Due April 12.

[EGSE#10-14](#) All: to fill out change requests concerning PS-ICD. These should be directed to Project. Otto wants to have copy. PS-ICD will be discussed on the next meeting.

9. Summary of AIs and schedule

Action items

AI	Status	Due date	Actionee	Description
EGSE#6-01	Open	Feb 28,2001	Pjotr	Comment on the FIRST documentation tree as in appendix 03 and send your comments to PE, JRR This was especially for the EGSE-ILT documentation under responsibility of the ICCs.
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EGSE#9-08	open	April 27, 01	Luc	First draft SOW TEI
EGSE#9-09	open	April 27,01	Erich	First draft SOW OBSM
EGSE#9-10	open	April 27,01	Riccardo	First draft SOW OBS maintenance facility
New:				
EGSE#10-1		April 27	Bryan	Bryan will nominate OBSM technical point of contact and bring him/her in contact with Erich.
EGSE#10-2		April 27	All	Make proposal for naming conventions. Input for Alcatel meeting
EGSE#10-3		April 9		Willem Luinge to inform Otto
EGSE#10-4		April 27	Luc	Add warm restart capability to Router URD
EGSE#10-5		April 27	MPE	Send New requirements for TOPE to Bryan
EGSE#10-6		April 27	Erich	Describe Test-control collect input organize user-meeting
EGSE#10-7		April 27	Luc	New MIB-report
EGSE#10-8		April 12	Otto	Forward MIB editor to IFSI
EGSE#10-9		April 27	Ken	Acceptance test plan for CDMSsim
EGSE#10-10		April 12	Otto	Ask IFSI to write acceptance test plan for ICU/DPU IF.
EGSE#10-11		April 27	Otto	Invite LFI/HFI to cooperate
EGSE#10-12	Open	April 5,01	Luc	Next version of integration plan
EGSE#10-13		April 12	All	Comment on Herschel/Planck Configuration Management Plan
EGSE#10-14		April 27	All	Issue comment on PS-ICD

Schedule

Date	Supplier	Customer	Item
done			SCOS-2000/Rouer ICD
done			Router Prototype
done			MIB editor
done			SCOS-2000 V2.0
DUE	HIFI	All	Router SCOS-2000-TEI
April 15	MPE	All	Test-control
June 12	SPIRE	All	CDMS-sim
June 18	Shipment from RAL to IFSI		Integration With members of all instrument teams
June 30	ESTEC	All	SCOS-2000 v2.1e
Oct 1	MPE	All	OBSM
Oct 1	HSCDT	All	HCSS
Oct 1	Integration at MPE		Integration With members of all instrument teams and HSDT

10. Next meetings

April 20 telecon Otto/Ken/Luc 14.00 h CDT

May 8, 2001 EGSE #11 at RAL One day only

with on the agenda:

- Acceptance test plans
- CDMSsim test requirements
- PS-ICD
- CDMSsim demonstration

June 12 & 13 EGSE #12 at RAL

CDMS sim acceptance

(the meeting with tentative date **May 29** was cancelled)

11. AOB

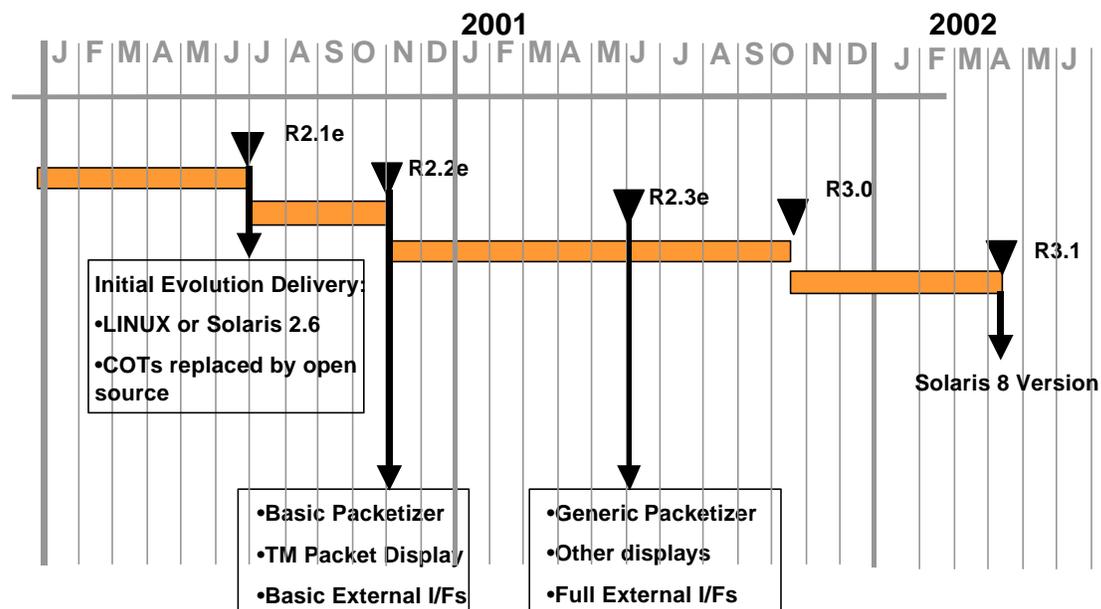
Three issues, (already covered above):

- MIB naming conventions
- OBSM technical point of contact
- Extend terms of reference.

The notes for these minutes were made using a SCOS-2000 ballpoint.

Annex A SCOS-2000 schedule

- **Release 2.1e (mid 2001)**
- Basic Porting of SCOS-2000 on PC/LINUX
- Separation of applications from OS through an OS shell
- COTS replacement by open source products:
- in particular Object Store Replacement
- **Intermediate releases 2.2e, 2.3e**
- Generic packetizer, TM packet History display, On-board event history display
- CORBA external interfaces
- **Release 3.0 (3Q/2002)**
- Contains all the functionality from SCOS-2000 consolidation up to release 2.4
- **Release 3.1 (2Q/2003)**
- SUN/Solaris 8 version



Annex B CDMS sim progress report

see powerpoint file

Annex B e-mail Stephan Thuerey (part)

The planning of the CDMS delivery meeting should be conducted by the EGSE WG /O. Bauer in my view.

However, I would like to stress one point: the question about how, when, and by whom the I/F tests according to MIL Handbook, Section 100, and test-spec. SRON-U/HIFI-SP-2000-5, is carried out. This point is open for two to four cases:

- a) for the CDMS Sim. At least for the first model(s) a full test is mandatory in my view. Further production units may undergo only a shortened electrical I/F test and protocol test. The CDMS Sim. has an I/F with flight-equipment later-on, therefore it must be demonstrated that the CDMS Sim. works properly and FMs can be connected without risk.

- b) for the ICU/DPU under development in IFSI, Frascati. The point about responsibility for the I/F test, and adequate test equipment, has been raised several times but a detailed feedback (test plan, test procedure) is still pending or not yet visible to me.

cases c) and d) EGSE I/F units and instrument DPUs for Planck, with the same set of open points as above. In my view, this question about adequate I/F testing should be addressed by the EGSE WG of Herschel, because it is part of the work related to the EGSE-to-instrument I/Fs, and it should be further pursued in the DM WG. Only if this testing is done successfully, and the proper execution of the Satellite Data Bus Protocol is demonstrated, I will confirm that the designs of the instrument I/Fs are compliant with the PS-ICD, Appendix 9 (as agreed).