# Minutes of Meeting for CSDT#11 SPIRE-RAL-MOM-000998

CSDT Meeting #11 was held on the 28<sup>th</sup> November 2001 at the Cosener's House, Abingdon.

# **Participants**

A. de Jonge M. Fox K. Galloway M. Graham S. Guest R. Huygen D. Kester T. Lim J-J. Mathieu C. Porrett J. Riedinger P. Roelfsema H. Siddiqui S. Sidher S. Veillat E. Wiezorrek P. Zaal R. Zondag

1. Welcome and Introduction, Agenda, Action Items

Due to illness, Jon Brumfitt was not at the meeting and unable to present the final two topics on the agenda. The following action items were discussed:

290801/4	Persistent objects tracing	New date, next CSDT meeting
301001/9	Comments on STP	HIFI to close (closed 29/11/2001)
071101/6	CCM questions	It was felt that this represented normal day-today work. It was also stated that a User Manual is needed and that in addition, architectural documentation would be needed for a CDR. Closed.

PZ mentioned the actions from the IA Algorithms Group to produce a list of algorithms and recommendations, and what was needed for the near future. It was agreed that these actions were still valid and due by December 17<sup>th</sup>.

## 2. HIFI QLA Architecture

PZ gave a short presentation, which was followed by a long discussion. Each instrument has a different view of what their QLA is:

- For HIFI, QLA and IA have the same architecture and QLA is a set of predefined procedures.
- ➤ For PACS, QLA is a simple display tool the rest is IA.
- For SPIRE, QLA is a collection of display and analysis tools, not necessarily all written in the same language. Some elements could be prototypes for IA.

PR inquired whether the QLA architecture could be made common. This was felt to be a possibility. EW remarked that is was possible to have three different prototypes and merge later. SV asked how AIPS fitted into the HIFI scheme. PR replied that it was the next stage.

The discussion moved on from QLA to one on Product, Process. AdJ said that the outputs of Process (i.e. Products) should be observable, and that a Product is a fixed thing. Both EW and SG felt that in some cases they would want to change Products. It was agreed that it was largely a question of semantics whether a changed Product was a new one or a modified old one. DK pointed out that different people have different views as to what products are. SG said that the system should be flexible in order to allow for different concepts.

The discussion then moved on to the related topic of History mechanisms. PR said that we would need to able to tune parameters rather than just repeat what was done before, and that the History mechanism should not tell us how to process. AdJ said that we should constrain the design but not the user, and that user interfaces should be separated from processing steps. SG said that if we have a requirement to be able to reproduce products from the history, we should be careful not to define processes as too small steps, or the history could have a severe impact on performance.

Action 281101/1: HIFI to produce a technical note on QLA, including history mechanism.

## 3. Common System Update

PR summarised the outcomes of the "A la Bonne Idée" scenario meeting and the subsequent Science team meeting. There is still a need to gather requirements for which steps could be done as a common system.

# 4. Code and Integration status

JR had distributed a table on the status of code and its integration into the HCSS prior to the meeting. RZ remarked that he would prefer the term "developer release" to "prototype release". Code is "delivered" by attaching CVS tags; untagged code will not be picked up system tests. In general, there was some confusion as to the meaning of some of the columns in the table.

Action 281101/2: JR to distribute updated table by 29/11/2001.

Action 281101/3: All package managers to fill in their parts of the table by 03/12/2001.

MG gave a short presentation of the status of TC History and Out of Limits. EW said that support from ESTEC and/or ESOC was needed and that there was an action from the EGSE WG to arrange something.

SG gave a short presentation on the status of the TM/DataFrame interface package. It was agreed that there has to be support for selection of packets by type and subtype. SG said that given the current CCM container design, selection of packets across multiple APIDs, other than for a particular observation, would not be implemented for HCSS 0.1. This is because of both implementation difficulty (remerging from separate containers), and performance considerations (much of the packet database would have to be searched before merging). A simple solution would be to add apid, time, type and subtype to the TmSourcePacket class. It was agreed to do this, and that this change renders the packet containers obsolete. **Action 281101/4**: SG to propose change to the definition of TmSourcePacket in the CCM.

# 5. Structure of the OBSID field

SV gave a short presentation on this. The proposal is that the 4 most significant bits (i.e. 15, 0 being reserved for a special case) would be used to identify the site and mission phase. This will be added to the OBSID/BBID ICD. EW remarked that PACS would need to store all data in order to have the full time history available.

6. Mimic of time correlation handling in TM ingestor in ILT

SV gave a short presentation on this. The question came up of whether the time should be correlated up-front, or delayed until it is needed. AdJ argued for the latter. It was agreed implement this, and to convert time "on-the-fly" at retrieval time. KG pointed out that science products should contain correlated times. EW remarked that sometimes you might want the raw time.

# 7. ErW et al: Data flow tests between HCSS and PACS EGSE-ILT

There was a long discussion on what support was needed and appropriate for the PACS integration of weeks 50 and 51. JR felt that the schedule was very tight and that it was necessary to have integration at ESTEC followed by having developers at MPE. EW believed that the schedule was much too optimistic (but should not be slipped yet) and that integration could be done over the phone. The need to have developers at MPE was a misunderstanding. The schedule does *not* imply that there is a system test in week 51, and formal system testing is not appropriate at this time. SV confirmed that it is not a formal system test — that is scheduled for March. KG and SG both pointed out that integration is normal day-to-day work. PR asserted that there was a non-zero chance of a delay and that it could easily be 2-3 weeks because of the holiday season. SV remarked that Test Control was all that was missing for End-to-End testing.

The conclusion was that all the integration could be done at MPE and no one was needed there to support it. EW might not go to ESTEC because of time constraints. The relevant developers (AdJ, KG, JB, HS, SG), as well as RZ/CP for configuration control and testing would have to be available those two weeks for support by telephone and e-mail. CP (and optionally RZ) would visit MPE on (as a baseline) 12<sup>th</sup>-14<sup>th</sup> December. This would not be to "check anything out", just to gain experience of running procedures. The emphasis would be on integration, not system testing.

## 8. System configuration for SPIRE ILT

SG gave a short presentation of the SPIRE plan for ILT, showing the configuration of systems and hardware.

## 9. AOB

CSDT#13 is planned for 27<sup>th</sup> February 2002 at Groningen. **Action 281101/5:** All to check that this is not a holiday.