Minutes of HCSSMG Telecon #71
Herschel/HSC/MOM/0477

HCSSMG telecon #71 was held on 2-Dec-04. Items in *blue italics* are taken from the proposed agenda (JRR e-mail dd. 30-Nov-04).

Participants:

L. Aloy (LA)
O.H. Bauer (OHB)
K. Galloway (KG)
K. Ganga (KMG)
S. Guest (SG)
S. Ott (SO)
J.R. Riedinger (JRR)
P.R. Roelfsema (PRR)
E. Sturm (ES)

1. *Agreement on agenda, Approval of Minutes of HCSSMG meeting #70, Action Item status*

   ➢ *Comments on/ additions to agenda.* There were no comments on/ additions to the agenda.

   ➢ *Comments on MoM from HCSSMG telecon #70 (Herschel/HSC/MOM/0466). OHB thinks we had agreed 12-Jan-05 (not 13-Jan-05) for the dry run of the HSGS status review presentations. 12-Jan-05 was also confirmed by KG and SO, so there shouldn't be any problem in correcting what appears to be my (and mine only) mistake.* The meeting has been reorganised to take place on 12-Jan-04. Meeting room will be Db 124.

   ➢ *Actions for this forum which I would like to discuss:*

      ▪ *051104/2: OHB to prepare/ alert Versant to the fact that we need to have a serious discussion with them concerning (i) their support to sorting out technical problems for many years to come (we are talking a timeframe extending to 2020 and beyond) and (ii) license/ cost details for using Versant in Herschel operations (with e.g. unrestricted access to data by astronomers, etc.). Due: 15-Nov-04.*

        *In a telecon on 29-Nov-04 (nothing in writing to close the action, not even a 2-line e-mail: guys, are we slipping or am I your tape recorder ?) OHB told me that he had contacted Versant. They agree to having a meeting on reasonably short notice but they would like to receive a list of questions/ agenda in advance to know who to send to this meeting. Action **closed**. The follow-on action, 051104/3, "HSCDT to draft an agenda for a meeting with Versant before the end of 2004", will be discussed under TOP 3.*

        On 30-Nov-04 OHB provided a written summary of his telecon with Versant.

      ▪ *131004/3: ICCs to identify which documentation relating to AOT and time estimator design they will submit to the [Herschel Science Ground Segment] review. Due: 15-Nov-04.*

        *You know what ? **I haven't seen anything!***

        For HIFI this information had been provided in PRR e-mail dd. 11-Aug-04 (3 documents: Observation mode description, observation mode implementation and observation mode calibration document). For PACS this action was closed by OHB on 30-Nov-04. Still open on SPIRE. SG will remind KJK.

- *131004/5: The 3 ICCs to come up with a consistent/ homogeneous set of documents based on PRR's list of HIFI documents that could be provided to the HSGS review. Original due date was 31-Oct-04, at the last telecon this was extended to 17-Nov-04.*

  You know what ? [I guess you can complete this yourself]

  OHB provided a PACS document list for the HSGS review on 30-Nov-04 and we still have the original HIFI list of 11-Aug-04. Open on SPIRE: SG will remind KJK. JRR had provided to OHB/ES a template for the tables that describe the contents of the documentation package in the review procedures. Once SPIRE have delivered their list, the 3 ICCs will coordinate merging of their three lists into such a table.

- *220904/2: Instrument teams (KK, PR, DC/HF) to respond to AI#220904/2 [PST describing their philosophy on performing complex observations (mosaics, etc.)].*

  PACS closed this with OHB's e-mail dd. 10-Nov-04. I propose we also close this for HIFI with reference to the HSPOT/CUS meeting held at SRON-G on 23-Nov-04. Presumably we can also close this for SPIRE next week after the meeting planned on 8-Dec-04.

  AI closure for PACS and HIFI was confirmed. PRR mentioned that, in addition to the meeting at SRON-G, there was an e-mail from him to TP on this issue dd. 11-Nov-04 [JRR: and, indeed, a reply from TP dd. 12-Nov-04 as well].

- *Any actions the ICCs want to discuss ?* Replying to a question from OHB/ES about AI 160703/1 ("IA-WG to provide a coherent and reasonably complete set of IA use cases") with a due date in December 2003 presumably having become obsolete, JRR/SO stated that this AI was very much alive and that it had been agreed at the IA design review in Leuven and with the IA user group to write up the user requrements/ use cases for IA (because, as SG seconded, differences in opinion had arisen over what needed to be implemented which it will only be possible to resolve if things are written down).

- Thanks to KMG for his support in helping to close out (or convert to "normal work") some of the actions that were still open from the HSCDT/ JPL exchange on the use of Horizons and the exchange of Herschel and Planck orbit files.

2. **Herschel Science Ground Segment Status Review**

   In my view the support the ICCs have provided for this review up to now is dismal.

   - *In the absence of ICC input (AIs 131004/3 and 131004/5 above) I have decided that the review panel entry point to the documentation is our HCSS documentation tree on the web: http://www.rssd.esa.int/SD-general/Projects/Herschel/hscdt/docs-jrr.shtml. Concerning the core HCSS documentation, 98% of it was written by the HSCDT but if this reflects reality, so be it. I can only hope that the percentage of documentation the ICCs will contribute to the review in the area of IA (which I still need to look at) is significantly higher.*

   In addition to the table which, in the review procedures document, introduces the part of the documentation package that is relevant to core HCSS development & use, there will be additional tables for IA documentation and for ICC documentation e.g. relevant to instrument-specific issues such as AOT design (cf. above).

   - *Peter's comments on the template for the package presentations (PRR e-mail dd. 9-Nov-04, which OHB explicitly supports) make it very clear that the ICCs see this review as taking place in a mostly documentation-free vacuum whereas the HSCDT presentations are geared to guiding the panel to and through the relevant documentation. So be it. After 5 years of development I finally accept that there is a cultural gap between the different parties contributing to this development about which I can do nothing. However, I repeat what I said during HCSSMG telecon #67 (cf. Herschel/HSC/MOM/0422):*

"JRR stated that (i) this is a Science Ground Segment Review, not a HCSS review and that consequently the ICCs need to be substantially involved, (ii) he is happy to organise the review but he will not accept doubling of this workload if poor preparation of the review on the ICC side were to lead to a (partial) failure of the review."

▪ PRR/OHB believe that the template proposed by HSCDT will lead to dry and boring presentations if they do not, e.g., include package design information whereas KG (who has just been through another two reviews of the Planck Science Ground Segment and of the HP MOC) pointed out that "pointers to documentation" is exactly (nothing more and nothing less than) what a panel in an ESA review expects.

▪ JRR proposed that rather than a wordy description we should see the PRR proposal in the form of what the VGs would look like so we can compare alike things. Because of his commitment to the IA documentation review, PRR cannot do this conversion on a short time scale but OHB thinks he can knock such a set of VGs together reasonably quickly to allow a direct comparison.

> **Action 021204/1:** **OHB to knock together a set of VGs for HCSS package presentations to allow a direct comparison between the HSCDT and ICC proposed templates. Due: 10-Dec-04.**

A final decision whether or not ICCs and HSCDT work from identical templates can then be made.

➤ *The meeting we had on 13-Oct-04 (Herschel/HSC/MOM/0458) has evaporated in a puff of smoke. I insist on the following:*

   o *"All instruments will provide an Acceptance Test Report/ Statement of Acceptance for HCSS v0.2.3." HCSS v0.2.3 has been out for more than 2 weeks (cf. my e-mail of 12-Nov-04), i.e. by our agreement you have accepted this release by default and I expect this confirmation from you by the end of this week.*

   ❑ OHB has e-mailed his acceptance of HCSS v0.2.3. He also stated (again) that PACS continue to use the "daily" developer builds.
   ❑ PRR said that he would e-mail his acceptance of HCSS v0.2.3. He also stated that HIFI could not at present run an AT and that normally HIFI was only a few developer releases behind in what they use in their labs and offices.
   ❑ SG considers a period of 2 weeks for acceptance testing of a candidate user release too short, in particular if extensive schema evolution is involved (and ironing out the associated wrinkles, which can take up to a week).
   ❑ JRR pointed out that extending this period considerably does not seem to make much sense given that the CSDT has finally started to make user releases 6-8 weeks apart (as was stated as the goal in the "roadmap document" 5 years ago).
   ❑ Slightly off topic the performance of DB retrievals was discussed, with which HIFI *do* but SPIRE *do not* have significant problems. PRR agreed that he would initiate a dedicated discussion between AdJ, PZ, TZ and SG to, if possible, clarify and resolve the issue.

▪ *[The 5 IA] "presentations need to be tightly coordinated and iterated. The initial exchange of drafts should start no later than end November 04." Guys, that's **NOW** and I expect to hear from Stephan by the end of this week (3-Dec-04) that this exchange has started!*

   ❑ SO stated that because of the IA design review and preparations, IA documentation review and preparations, IA iteration #7 planning, etc. he had not yet started to think about the IA presentations to the HSGS review. However, he would do so asap and hopes he can circulate a first draft on around 10-Dec-04.
   ❑ Contact points in the ICCs who might be able to support him in this are Steve, Ekki and Russ.

➢ *Terms of reference for HCSSMG and HCSS core CCB: Cf. the proposed updates I e-mailed on 29-Nov-04. Waive this through ?*

- Waived through.
- PRR will think about whether he can propose a good place in the CCB ToR to stick in a paragraph about schema evolution. JRR replied that (i) schema evolution was a standing topic for discussion at each CCB telecon and recording the plans in the MoM, (ii) schema evolution is a pain for everyone but that (iii) there seems to be no way to avoid it in a system parts of which are still undergoing massive evolution whilst other parts are already used in an operational context and environment.

➢ *Recommendation R2-32 from the PDR 2 years ago: Until now only OHB has agreed my proposed disposition. What about HIFI and SPIRE ?*

HIFI and SPIRE also agree with the proposed disposition.

➢ *At the Steering Group meeting in September we decided we would not update the Herschel Science Ground Segment schedule until we had a CDR schedule update from Project. We have this now (I'll circulate it before the telecon, hopefully with the HSC part updated) and I would like the ICCs to accept an action to provide me with their inputs on the "ICC's" section by 8-Dec-04. With the kick-off presentations for the HSGS review starting the day after the next Steering Group Meeting we don't have the luxury of delaying this update until after the meeting.*

It was agreed that there should be an IA/QLA bar per instrument.

Action 021204/2:   All ICCs to provide their comments on the HSGS schedule Issue 4 Draft 1 to JRR. Due: 8-Dec-04

➢ *Please beware that we have less than 1 working month left before the presentation dry run (assuming that quite a few people are not available from 20-Dec-04 until 10-Jan-05)!!*

3. *Versant*

HSCDT will try to separately write up and distribute before the telecon what we believe the issues are. Written ICC input to this topic by end of Wednesday, 1-Dec-04, would be greatly appreciated.

➢ KG remembered that GLP had mentioned existence of a reasonably condensed Herschel Mission Description/ Overview. This will be added to the material to be sent to Versant.

➢ No-one in the ICCs had invested the time to study in any great detail the draft questions and other material JRR had sent around.

Action 021204/3:   All ICCs to provide to JRR (i) their input to the draft questionaire, (ii) their suggestions for appropriate background material. Due: 10-Dec-04

Based on this input and its consolidation it is intended to provide the package to Versant by 17-Dec-04.

➢ An important input to Versant and to making progress on the DB architecture (which might have quite an impact on license issues) is to obtain a reasonably sound estimate for number and size of products resulting from each type of observation. PRR thought that such estimates could be produced independent of a follow-up meeting to the 8-Jul-04 IA products discussion:

Action 021204/4:   All ICCs to provide estimates for the number and size of products resulting from observations with their instruments in its different observing modes. Due: 15-Jan-05.

➢ It was agreed that we might need one or two meetings with Versant "behind closed doors" before we should involve the Steering Group in any discussion on Versant licensing issues.

4. IA Development

Stephan to take us through this.

Achieved

➢ IA#6/1 delivered with HCSS build 515.

➢ First draft of IA ADD:
ftp://astro.esa.int/pub/HERSCHEL/csdt/ia/review_nov_2004/archdesign.html

➢ First skeleton of IA use case document:
ftp://astro.esa.int/pub/HERSCHEL/csdt/ia/review_nov_2004/ia-usecase-list.html

➢ IA design review 16- 17 November 2004: All IA packages and sandbox were reviewed. Of these 13 packages, only 2 got an amber light:

- help: the set of user requirements is not completely available.
- system: a coherent set of use-cases/ requirements is needed history, stopping of tasks has to be tackled, the IA system architect should be appointed.

➢ Toolbox WS 18-Nov-04 (organised by JBa) to enable the ICC experts on numerics to contribute efficiently by using the toolbox mechanism.

➢ Inputs received for IA#7 functionality.

In progress

➢ Preparations for IA documentation review 7-Dec-04. PRR (chair) provided the review guidelines, IA documentation will be discussed in four separate panels.

➢ Preparations for IA#7 roadmap meeting 8 December 2004 to finalise the priorities for the next five months.

➢ Work on IA#6/2, the main points being

- upgrades to online-help system
- enhancement of numerics functionality, testing and documentation
- user-friendly error handling
- debugging facilities for Jython code for users and developers
- definition of calibration product framework
- re-designing spectrum dataset
- IA ADD
- IA use-case-document
- "How to code efficiently"

As chair of the HCSSMG I would like to draw attention to the following:

➢ *I take note of the fact that with the exception of the PACS user group representative, none of the ICCs have provided any input/ requirement to IA iteration #7 planning by the deadline requested by SO. I propose that for IA iteration #7 planning we strictly limit the effort put into SCR-implementation to 40% of the available manpower and automatically shift any additional wishes that might come up between now and the end of iteration #7 to iteration #8 and beyond. Otherwise any planning becomes obsolete.*

➢ *I am very concerned that despite my e-mails dd. 9 and 12-Nov-04 the IA WG meeting on 18-Nov-04 was partially hijacked for a management discussion. I understand one of the outcomes of this meeting to be that the technical arm of the IA WG has been replaced by an "IA architecture WG". During the summary session of the "IA Design Review" on 17-Nov-04, which I attended, I did not hear that there are severe and immediate architectural problems in any part of IA. I am therefore concerned that what to me appeared to be a working arrangement (IA-WG telecons and meetings) is being replaced by a "vapor-ware", lofty "IA architecture WG" which will dissolve itself after 2 or 3 meetings during early 2005 when the few medium and long-term architectural issues have been settled that did surface during this review.*

- As reported by SO, the IA-WG did not not agree on a date for their next meeting.
- JRR suggested that we should perhaps consider a 3-level structure with an IAMG on top, an IA architecture WG which meets as necessary to "get the big picture right" and a technical IA WG which meets regularly (could be mixed telecons/ meetings) to ensure sufficient information exchange at the implementation level.
- It was agreed that the issue of how we structure IA development should be discussed in depth and agreed at the next Steering Group meeting.

5. *AOB*

➢ *Next meeting is already agreed for 12-Jan-05 (cf. discussion above). Can we plan one or two beyond that ?* After 12-Jan-05 the next meeting/ telecon will be on 17-Feb-05. This is the day before the clarification "meeting" of the HSGS status review; if this status review is a real meeting (instead of something done via e-mail and/or telecon) it could be turned into a face-to-face meeting, otherwise it will be a telecon starting at 16:30.

➢ This was KMG's final HCSSMG telecon and his successor as NHSC/ Herschel liaison is expected to be announced soon, possibly as soon as 3-Dec-04. The HCSSMG thanks Ken for his participation and input. KMG himself stated that although in many telecons he has been rather quiet he considers that his participation was essential for the NHSC to stay in the loop and to understand what happens as much as why things happens the *way they do*.

➢ *Because of the Xmas period and the upcoming Herschel Science Ground Segment Review, HCSS v0.2.4 release is now planned for wk 5/2005. Any input from the ICCs concerning implementation of functionality that should be considered high priority ?*

Action 021204/5: **All ICCs to provide to JRR their wish list for high priority items in HCSS v0.2.4 (code freeze in cw 4/2005). Due: 15-Jan-05.**

JRR, 3-Dec-04