

Meeting: SPIRE ICC Group, meeting #2

Place: RAL

Date: 13 April 1999

Attendees: Ken King, Trevor Dimbylow, Dave Pike, Tim Sumner, Sarah Unger and Seb Oliver

## AGREEMENTS & STATEMENTS

1 The Agenda (see Annex 1) was agreed.

2 The terms of reference for the SPIRE ICC Group were agreed as follows:

1. To perform the analysis and design of the ICC for the SPIRE instrument with due regard to the SPIRE development schedule.
2. To oversee the activities of the appropriate commonality working groups and to take note of their inputs.

3 The following recent meetings were reported on:

### 3.1 GSAG meeting on 17/03/1999

The minutes and handouts are present on the DMS in the FINDAS-Planck area, Group members should review them.

Ken and Seb reported that most of the time was taken up reviewing the MOC and FSC and that the ICCs were not fully reviewed. One outcome of this exercise was the setting up of a workshop to specify the FIRST ICC Scenarios.

During the discussion concern was expressed about the necessary ICC staffing level which might be required to validate the science processing of SPIRE data using the products from the Quality Assessment software run in the FSC.

A further concern was raised about the processing of data from the survey (approx. 1<sup>st</sup> 6 months of mission). This could be a big drain on ICC resources and SPIRE & PACS need to quantify what we will do.

It was noted that a decision from ESA on the downlink rate is expected to be made this week.

The GSAG also mentioned the possible use of SCOS 2000 for RTA, a demo is arranged for some time in June. QLA is a decoupled system, it will not use RTA as a front end.

### 3.2 SPIRE FINDAS Development Group – 26 March 1999

Met at RAL and decided on client development strategy. The SPIRE client will be a telemetry interface to IDL. This will help in the FINDAS evaluation exercise but may also leave us with a useful piece of software for use within the ICC.

A two phase approach was adopted with phase 1 due at end of July 1999. This would be a client interfaced to the Vega-supplied object

## ACTIONS

**AGREEMENTS & STATEMENTS**

server which would take an O<sub>2</sub> object from the server and convert it into an IDL structure. A progressive path of functionality updates was proposed which would eventually lead to a very general client.

Phase 2 would see the moving of the object conversion code into a SPIRE IDL Object Server.

Details are given in SPIRE-RAL-MOM-000228.

**3.3 OIRD Review – 7 April 1999**

This took place at ESOC and was originally an internal meeting between ESOC (John Dodsworth & Sandro Matussi) and ESTEC (Pierre Estaria & Francis Vandebussche). Trevor was at ESOC and was allowed to participate.

The main outcome was that ESOC recognised the need for the high level requirements placed by the OBDH (and by the ESOC operations concept) on the FIRST instruments must be made explicit. The questions raised on the OIRD by the instrument groups were dealt with in a very positive manner.

ESTEC's schedule was to issue the spacecraft ITT on December 15 1999 for which updated OIRD's and SGICD's would be needed ten weeks in advance – that is, 6 October 1999. ESOC's proposed schedule was:

1. Split the OIRD & SGICD into a FIRST and Planck version of each by mid-June 1999.
2. At the same time – mid-June 1999 – produce a draft list of requirements on the instruments and begin review process with instrument groups.
3. From mid-June begin a formal decomposition of the OIRD's to fully identify derived instrument requirements. These requirements might go in the IID-A's or somewhere else and would be ready by end-August 1999.
4. Iterate all documents with appropriate groups with the aim to have final OIRD's, SGICD's & IID-A's ready by mid-November 1999.

Resolution of these two schedules was an internal ESA problem.

**3.4 No further meetings were discussed.****4 The following forthcoming meetings were discussed:****4.1 FINDAS demo/presentation/training – 20 to 23 April 1999**

It was agreed that the SPIRE attendees would be Trevor, Ken, Andrew Harwood (RAL), Rodney Warren-Smith (RAL) and Neal Todd (ICSTM). Trevor and Ken would only stay for the first two days – presentations and demos.

**ACTIONS**

## AGREEMENTS & STATEMENTS

### 4.2 SPIRE/PACS Science Meeting – 26 to 27 April 1999

- This would discuss the science goals for the survey
- Would also try to integrate SPIRE and PACS science requirements in support of the partner mode
- No (major) impact expected on the SPIRE ICC
- SPIRE has no funding for handling science from surveys
- The comment was made that SPIRE simulations were relevant to this meeting but are not an ICC issue

### 4.3 FIRST ICC Scenarios Meeting – 5 to 7 July 1999

It was agreed that the attendees from SPIRE would be Ken (until 6 July only), Trevor, Seb and Sarah.

In preparation for this meeting we would update the "SPIRE ICC Operations Scenario" document fragment – Section 9 of the FIRST/Planck Operational Scenario document drafted by ESTEC.

The document will be edited by Trevor and the following tasks were allocated:

Trevor	Update the baseline assumptions, routine phase, software maintenance
Ken	Commissioning phase,
Sarah	Calibration observations
Seb	PV phase, ordinary observations

### 4.4 SPIRE PDR

This is taking place in three phases, there will be an external review board which includes one member from ESA.

Phase 1 – July 7 to 9: thermo-mechanical design of FPU, science and instrument requirements. We should review the science and instrument requirements before the review!

Phase 2 – September 1999: warm electronics & detectors, AIV and ICC

Phase 3 – February 2000: delta-PDR, for aspects of design which can only be clarified after the choice of detectors (in January 2000)

### 4.5 Other Meetings:

<u>Date(s)</u>	<u>Meeting</u>	<u>Attendees</u>
18 May	FINDAS CWG	Trevor, Neal, Rodney?
19 May	RTA CWG	Trevor, Rodney?
20 May	OBS CWG	Dave Pike?
21 May	AOCS i/f	??
?? Jun	μ-procs CWG	??
13 to 14 Oct	SIPS	??

- 5 Although we have prepared, and are updating, our "SPIRE ICC Operations Scenario" document, Seb suggested that another useful viewpoint could be to view the operations of the ICC from the perspective of what happens to an observation from its appearance as a proposal through to the processed science data.

## ACTIONS

2-1: Trevor, 7/5/99

2-2: Ken, 7/5/99

2-3: Sarah, 7/5/99

2-4: Seb, 7/5/99

2-5: All Group members

<u>AGREEMENTS &amp; STATEMENTS</u>	<u>ACTIONS</u>
<p>The need for another scenario was also identified; software maintenance in the ICC and in the FSC through all development and operational activities. This would cover implementation, testing, configuration control, change authorisation, etc. Trevor agreed to take this on-board.</p> <p>Both these Action Items are recorded in Section 4.3</p> <p>6 Staffing Levels for the ICC development were discussed.</p> <ul style="list-style-type: none"><li>• Non-UK consortium members have already promised staff for the operations phase, commencing 1 year before launch, and have indicated they are willing to help with the development activities.</li><li>• The options are for staff to work in the UK (at RAL) or their own Institutes as appropriate.</li><li>• A detailed software plan needs to be produced before asking for consortium staff to help in the development phase.</li></ul> <p>7 The following item was raised under AOB.</p> <p>Trevor requested relevant inputs from the Group's members to put in the monthly/quarterly ICC progress reports to be sent to ESTEC.</p> <p>8 The date for the next meeting was moved from Tuesday 11 May to Thursday 13 May at QMW, starting at 10am. The date for the subsequent meeting was confirmed as Tuesday 15 June at IC, starting at 10am.</p>	<p>All Group members 28<sup>th</sup> of each month</p>

## SPIRE/ICC Meeting

RAL, 13 April 1999

### Agenda

- 1 Agreement of Agenda
- 2 Definition of Terms of Reference of the SPIRE/ICC Group
- 3 Debriefing from recent meetings:
  - 3.1 Brief report on GSAG meeting. Quick review of SPIRE routine phase scenario doc.
  - 3.2 Summary of recent local FINDAS meeting and the proposed SPIRE FINDAS Client.
  - 3.3 Debrief from ESOC-ESTEC OIRD meeting (7 April).
  - 3.4 Any other meetings?
- 4 Planning for forthcoming meetings:
  - 4.1 FINDAS demo meeting (20 to 23 April) and what the SPIRE ICC wants from this.
    - 4.1.1 Requirements on CORBA interface in IDL – a proposed item at the FINDAS demo meeting.
  - 4.2 SPIRE/PACS science meeting (26 to 27 April) and what the ICC wants and needs to do for this.
  - 4.3 Preparation for the FIRST ICC scenario meeting (5 to 7 July). Perhaps:
    - 4.3.1 updating our routine phase scenario
    - 4.3.2 preparing our PV phase scenario
    - 4.3.3 preparing our Commissioning phase scenario
    - 4.3.4 preparing our calibration scenario
  - 4.4 SPIRE PDR (7 to 9 July)
  - 4.5 Any other meetings?
- 5 Discuss possibility/usefulness of preparing a scenario for "typical" observation(s).
- 6 Staffing levels and profiles for ICC tasks.
- 7 AOB
- 8 Agreement of schedule for future meetings.