

Updated Plan for SPIRE Grounding Scheme Review

Matt Griffin, 16 September 2002

Introduction

This note is an update of the review plan note of July 19. Please read it carefully and take note of the need to prepare properly in advance of the meeting itself.

Background

Following extensive discussion in the recent series of telecons on the grounding scheme for the SPIRE detectors, there is still a lack of unanimity within the consortium on the best approach. This is a complex and highly critical issue, with implications for the scientific performance of SPIRE and the instrument development plan and schedule. It has therefore been decided that we shall hold a detailed review of the options and seek the advice of independent experts before coming to a decision. The review must therefore be carried out as quickly, but also as carefully, as possible, and needs to be given a high priority by all concerned.

Given the importance of this question, we have decided that a formal review of the issue and the options is going to be necessary to make sure that we make the best decision, and to make sure that even if it is controversial it will have been arrived at by an agreed process.

This note outlines the objectives and format of the review and places actions on various people who will be involved.

Objectives

- Review the technical merits of a set of grounding options to be put forward by JPL, CEA, and RAL
- Advise (if appropriate) on additional options
- Consider also the programmatic (schedule and funding) implications of the proposed options
- Recommend a course of action to the Project

Meeting arrangements

Date: September 23, 24
 Location: RAL
 Room: Conference room 3 building R61 (above the library)
 Start: 14: 00 Sept. 23
 End: 17:00 Sept. 24
 Chairman: Matt Griffin

Envisaged attendance

- **SPIRE:**
 - Cardiff: Matt Griffin
 - CEA: Laurent Vigroux, Jean-Louis Augueres, Christophe Cara, Dominique Schmitt, others as appropriate
 - JPL: Jamie Bock, Viktor Hristov, Gary Parks, others as appropriate
 - RAL: Eric Sawyer, Ken King, John Delderfield, Bruce Swinyard, Doug Griffin
 - ATC: Colin Cunningham

- **Panel of Advisers:**

- ESA: Project Team (TBC): Gerry Crone, Thomas Passvogel, Astrid Heske
EMC experts: Bernard Jackson, Filippo Marliani
- Agencies: PPARC (Ray Carvell - 23rd only)
CNES representative (TBD - Laurent to liase)
NASA representative (TBD - JPL to liase)
- Independent technical expert: Martin von Berg (PACS) - TBC

Review format

Documentation (preferably two weeks before):

- JPL and SAp each to provide a document outlining their proposals including design description, analysis, and comment as appropriate
- RAL (John Delderfield) then to provide a document reviewing these and outlining specific options for consideration (this needs the above docs. to be available early at least in draft form)
- SAp to provide a summary of their likely development plans for all the proposed options (with particular attention to schedule and model philosophy, with the objective of retaining the current delivery date of the SPIRE PFM instrument to ESA)

*Note: These deadlines have already passed. JPL and CEA are requested to provide clear documentation covering these issues in advance of the review. This must be received by **Sept. 19** at the latest in order for it to be distributed to the attendees before the review.*

Draft agenda

Day 1 Sept. 23		
14:00	Introduction	Griffin
14:15	Summary of submitted documents	Delderfield
14:30	Current SPIRE electronics/AIV schedule	Sawyer
15:00	SPIRE system grounding philosophy	Delderfield
15:30	Coffee	
16:00	JPL view on detector grounding scheme	JPL
16:45	CEA view on detector grounding scheme: proposed DCU and PSU design	CEA
17:30	Discussion	
Day 2 Sept. 24		
09:00	RAL analysis and comments; summary of proposed options	Delderfield
09:30	Panel questions and answers	Experts
10:30	Coffee	
11:00	Discussion: technical merits of proposed options	
11:30	CEA schedule and funding implications of proposed options	CEA
12:00	Overall schedule implications of proposed options	Sawyer
12:30	Lunch	
14:00	Discussion: programmatic factors	
14:30	Panel members advice	
15:30	Coffee	
16:00	Conclusions and decision on future plan	Griffin, Vigroux, Bock
17:00	Meeting end	