

## Long, JA (Judy)

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**From:** King, KJ (Ken)  
**Sent:** 19 January 1999 15:02  
**To:** Long, JA (Judy)  
**Subject:** FW: FIRST/Planck Payload meeting, 11 January

From: David Hall [mailto:David\_Hall@PPARC.AC.UK]  
Sent: 19 January 1999 12:53  
To: r.carvell@brightwell-instruments.co.uk; Graham\_Brooks@PPARC.AC.UK;  
Subject: FIRST/Planck Payload meeting, 11 January

Colleagues,

### THE THIRD FIRST/PLANCK PAYLOAD MEETING

ESA HQ, 11 January 1999

UK attendees were Matt Griffin and Ken King (for FIRST-SPIRE), Ray Carvell, Dave Hall and Mike Cruise.

1. The meeting was the third in the series of meetings that brought together ESA, PI's and funding agencies to resolve FIRST/Planck payload problems.

2. The meeting started with ESA reporting actions following the second meeting. ESA confirmed that TRP funding for the German FIRST-PACS instrument development has been agreed. A 3 month delay in the delivery of the Planck LFI flight model has been agreed.

3. ESA proposed that payload descoping be considered to solve the funding problems but this was not raised later in the meeting. There are several steps to be taken before that has to be contemplated seriously. The scale of the problems, including those of cash flow, are below the 10% level.

4. Key problems still to be resolved are :

#### 3.1 Cash flow

To achieve the required delivery dates for FIRST-SPIRE and HIFI, and Planck HFI and LFI, the following allocation of funds, in Meuro's, needs to be brought forward. In each case, the resources are available later in the programmes:

France - 0.5 brought forward to 1999, 1.5 to 2000, 1.5 to 2001

Germany - 1.0 to 1999

Italy - 1.0 to 2001, 1.0 to 2002, , 0.7 to 2003

Possibilities of loans from banks or ESA were discussed but it was agreed that the first step was for CNES, DLR and ASI to exhaust all possibilities within their own programmes.

#### 3.2 Lack of funds

The UK and Germany cannot support fully the ICC activities proposed for the FIRST SPIRE and PACS instruments. ESA's first reaction was that the proposed arrangements for the FIRST ground segment has the effect of reducing costs to National Agencies not, as implied by National Agencies, increasing their costs. This was disputed by the FIRST PI's, led by the PI of HIFI (from the Netherlands). ESA proposed that support from countries outside the UK and Germany be sought, for instance, there is interest in the US in supporting ICC activities. ESA also suggested that possibilities for cost reductions should be explored within the commonality working groups of FIRST/Planck. It was agreed that ESA will call a meeting (before the end of January) of the PACS, SPIRE and HIFI teams to investigate the proposed arrangements for ICC's.

### 3.3 Coolers for Planck HFI

The US may not be able to fund provision of coolers for Planck HFI, an extra 10M\$ is being requested in the US. The only alternative source of the technology is the UK, it was made clear that the UK could not consider seeking extra funds within the UK for this activity. No action is to be taken until a final decision has been made in the US.

### 3.4 Cold Vibration Test Facility

CNES will not fund the Cold Vibration Test Facility, located in Marseilles, that is required for test of most (all ?) instruments. ESA will assess the requirements for such a test facility and estimate the costs needed. ESA will then propose how the problem might be solved.

## 4. Position of non-PI countries

Belgium - a final decision will be made in May, but a positive outcome is foreseen.

Norway - a decision still had to be made but a positive outcome is expected.

Funding is firm in Denmark, Finland, Sweden and Spain.

5. Confirmation of the payload will be requested at the February SPC meeting. There will still be unresolved questions, formal approval will not have been given in many countries (including the UK, the PPARC Council meets after the SPC meeting); solutions to the cash flow and funding shortages will not have been found. The level and nature of the uncertainties though should not be a barrier to payload confirmation. Such confirmation may act as a spur to encourage countries in which there is hesitation to make up their minds, positively.

6. Strong pleas were made by the science community that the FIRST/Planck launch date (first quarter 2007) must not slip.

7. The series of meetings has been valuable in identifying quickly the key problems and communicating these to all. Also for identifying steps towards possible solutions. Resolution of the problems may now be best left to smaller

groups focusing on specific issues, i.e. ICC's and the ground segment.

Dave Hall