

Work Package: Management & System

SPIRE-SAP-REP-001214

1. Subsystem Progress This Month				
Meetings				
17/01	Part check review DAQ IF			
22/01	Part check review BIAS			
10/01	Part check review LIA P			
18/01	DRCU schedule			
22/01	Part check review LIA S			
Management act.				
Project control	<ul style="list-style-type: none"> ➤ SPIRE master schedule updated ➤ DCU EM QM1 detailed schedule updated ➤ SPIRE FPU simulator detailed schedule update ➤ SCU QM1 detailed schedule update ➤ Action list update ➤ SPIRE activities reporting 			
2. Problem Areas			Remedial Actions	
➤			➤	
3. Actions				
Still Opened				
<i>Ref.</i>	<i>Meeting</i>	<i>Actionnee</i>	<i>Due date</i>	<i>Action</i>
/	/	/	/	/
Closed				
<i>Ref.</i>	<i>Meeting</i>	<i>Actionnee</i>	<i>Due date</i>	<i>Action</i>
/	/	/	/	/
4. Project Milestones				
<i>Main Delivery Milestones</i>			<i>Resp.</i>	<i>Baseline</i>
				<i>Current</i>
DRCU QM1 delivery to RAL			SAP	03/03/2003
DRCU QM2 delivery to RAL			SAP	05/01/2004
DRCU FM delivery to RAL			SAP	30/07/2004

5.Documentation List			
PACS Ref. Doc.	Title	Reference	Version, date
➤	SPIRE Instrument Development Plan IIDR	/	Issue 1.1 – 12/4/2001 IIDR
➤	SPIRE Major Milestone List issue 1.2 IIDR	SPIRE-RAL-PRJ-000455	Issue 1.2 draft 2– 12/04/2001 IIDR
➤	SPIRE Instrument Requirements	34	Issue 1.0 – 23/11/00
➤	SPIRE System Budget	/	Issue 3.4 – 24/07/2001
➤	Cryo-cooler Control Specification	/	/
➤	Calibrator SSSD: SCAL	HSO-CDF-SP-001	Issue 1.0 10/9/2001
➤	Calibrator SSSD : PCAL	HSO-CDF-SP-003	Issue 1.0 11/9/2001
➤	Detector SSSD	/	Issue 3.1 – draft
➤	Shutter SSSD	Not yet	/
➤	Instrument Interface Document part A	SCI-PT-IIDA-04624	2.0, 31/07/2001
➤	Instrument Interface Document part B	SCI-PT-IIDB/PACS-02126	2.0, 31/07/2001
➤	SPIRE configurable document tree	SPIRE-RAL-PRJ-00033	3.1 03/05/2001
➤	SPIRE product tree	SPIRE-RAL-PRJ-00455	1.0 09/11/1999
➤	SPIRE instrument development plan	SPIRE-RAL-PRJ-0035	1.0 20/05/2000
➤	SPIRE management plan	SPIRE-RAL-PRJ-00029	01/01/2001
➤	SPIRE Data ICD	SPIRE-RAL-DOC-001078	1.0 draft1 15/01/2002
➤	SPIRE instrument AIV plan	SPIRE-RAL-PRJ-000410	2.1 29/03/2001
SAP Doc.	Title	Reference	Version, date
Management			
➤	Management plan for the Herschel project.	SAP-FIRST-JLA-0038-01	3.0 23/11/2001
➤	Actions list	SAP-FIRST-DR-0050-01	1.5
➤	DRCU & WIH Development Plan	SAP-SPIRE-JLA-0047-01	3.0 27/11/2001
➤	Action list	SAP-FIRST-DR-0050-01	1.5
➤	SPIRE product tree	SAP-FIRST-DR-0071-02	1.2
➤	WBS Herschel	SAP-FIRST-DR-0043-01	2.1
➤	WBS SPIRE	SAP-FIRST-DR-0045-01	2.1
➤	SPIRE master schedule	SAP-SPIRE-DR-0053-02	2.1
➤	DCU EM QM1 at JPL detailed schedule	SAP-FIRST-DR-0050-01	3.1
➤	SPIRE FPU simulator detailed schedule	SIG-FIRST-PdA-0052-01	3.0
➤	SCU QM1 detailed schedule	SEI-SPIRE-MM-0049-01	5.0
➤	LTU & power bench detailed schedule	SAP-FIRST-DR-0069-02	1.0 07/02/2002
➤	Milestones list update	SAP-FIRST-DR-0068-02	1.1 12/02/2002
DRCU			
➤	DRCU Specifications document	SAP-SPIRE-CCa-0025-00	Issue 0.9
➤	DRCU Development Tree	H0030	Dated 30/11/01
➤	DRCU ICD		Issue 0.5
➤	DRCU electrical ICD	SAP-SPIRE-CCa-0024-00	1.1 21/11/2000
➤	DCU design document		draft
➤	Test plan DAQ IF		Draft
➤	Test plan BIAS		Draft
➤	Test plan LIA P		Draft
➤	Test plan LIA S		draft
➤	SPIRE test configuration,	SAP-SPIRE-LD-0015-01	3.0 08/2001
➤	FPU simulator specifications for DCU / SCU test	SIG-SPIRE-PdA-0030-01	19/03/2001
QA			
➤	Standard product assurance plan	SAP-GERES-Flo-436-00	1.0 09/11/2000
➤	SPIRE liste des documents à produire	SAP-SPIRE-Flo-0028-00	0.2 15/12/2000
➤	Organisation de la gestion documentaire sur Herschel au SAP	SAP-FIRST-DR-0053-01	1.1 06/12/2001
➤	DRCU FMECA Report		Issue 1.0 – 25/10/01
➤	Analyse de fiabilité du DRCU	SAP-SPIRE-Flo-0039-01	21/08/2001
➤	DRCU processor board product assurance specification	SAP-SPIRE-Flo-0020-00	10/01/2001

Work Package: DRCU

1. Subsystem Progress Since Project Inception	
DRCU	
DCU	<ul style="list-style-type: none"> ➤ Board PCB re-design ➤ IBDR documentation writing in progress ➤ VHDL coding & Simulation in progress. ➤ DAQ IF fabrication file send to JPL 18/01 ➤ BIAS PCB layout modification in progress ➤ LIA-P PCB layout modification in progress ➤ LIA-S design/part check review achieved
SCU	<ul style="list-style-type: none"> ➤ Draft Specification and preliminary (H/W & VHDL) design available. ➤ Draft DPU/SCU ICD issued. (internal) ➤ Preliminary command list available ➤ Heaters : prototype test in preparation ➤ Temperature sensors : test successfull ➤ PCB design preparation ➤ Heater & temperature function implementation in progress ➤ Analog ports HSK in progress ➤ DPU IF command and data IF achieved
MCU IF	<ul style="list-style-type: none"> ➤ Design defined and available at LAM & Sap
PSU	<ul style="list-style-type: none"> ➤ Separated power bench will be used for QM1 and QM2. ➤ Draft Specification available. ➤ Call for tender process started (Call for Application completed) ➤ Specification writing: finalisation
DRCU Boxes	<ul style="list-style-type: none"> ➤ Modeling ➤ DCU board front panel design achieved
Test Equipments	
LTU	<ul style="list-style-type: none"> ➤ Preliminary specification available
FPU Simulator	<ul style="list-style-type: none"> ➤ Specification available ➤ Electronics prototyping ongoing ➤ S/W evaluation on going ➤ PXI TRIG IO : Hardware test achieved. Second fabrication achieved. ➤ PXI BOLO SPIRE : Electronic & design almost achieved ➤ PXI heater/Supply : Design modification after specifications were updated (17/12/2001) ➤ PXI Cernox DC & AC : Analogue studies & design in progress. ➤ Software : user IF, script, configuration...in progress.
Part Procurement	<ul style="list-style-type: none"> ➤
Other	
Containers	<ul style="list-style-type: none"> ➤ Specification available.
AIV	
	<ul style="list-style-type: none"> ➤ DRCU development tree available (last version 30/11/2001)

2. Subsystem Progress This Month		
Documentation		
➤ DRCU Specification		Update to V 0.9
➤ DRCU ICD		Update to V 0.5
➤ DCU design document		Draft, finalisation in progress
DRCU		
DCU	➤	DAQ IF design/part check review , PCB layout modification & PCB fabrication file check achievement. File sent to JPL 18/01.
	➤	BIAS design/part check review. PCB layout modification.
	➤	LIA-P design/part check review. PCB layout modification.
	➤	LIA S design/part check review.
	➤	IBDR documentation writing.
SCU	➤	Heater function implementation.
	➤	Temperature function implementation.
	➤	Analog ports HSK, temperature & heaters implementation.
	➤	DPU I/F command and data I/F achievement.
MCU I/F	➤	/
PSU	➤	Several reviews were done to define precisely PSU specifications.
	➤	Call for tender process.
DRCU Boxes	➤	DCU QM1 board front panel design achievement
Test Equipments		
LTU	➤	Several reviews were done to define precisely LTU specifications.
FPU Simulator	➤	PXI TRIG IO : Hardware test achievement. Second fabrication achievement.
	➤	PXI BOLO SPIRE : Electronic & design finalisation
	➤	PXI heater/Supply : Design modification after specifications were updated (17/12/2001)
	➤	PXI Cernox DC & AC : Analogue studies & design.
	➤	Software : user IF, script, configuration...implementation.
Others		
	➤	
Part Procurement		
		FRB components not available !
AIV		
	➤	/
PA / QA Activities		
DAQ IF card	➤	Fabrication authorization (non conformances check, electrical scheme & mechanical drawing check, equipment file, mounting procedure check...). Authorization 16/01
BIAS Card	➤	Fabrication authorization in progress.
3. Problem Areas		Remedial Actions
FRB components not available !		
4. Milestones		Status
DCU EM QM1 delivery to SAp		07/11/2002
LTU DRCU need date		18/11/2002
SPIRE FPU simulator #1 delivery to SAp		19/11/2002
Detector test cryostat delivery to SAp by JPL		26/11/2002
MCU QM1 + simulator need date delivery to SAp		02/12/2002
SCU QM1 delivery by SEI need date		13/12/2002
DRCU QM1 harnesses need date		20/12/2002
DRCU QM1 delivery to RAL		03/03/2003
SPIRE FPU simulator #2 need date		11/07/2003
SCU QM2 ready		27/08/2003
MCU QM2 delivery to SAp need date		27/08/2003
DRCU QM2 delivery to RAL		05/01/2004
MCU FM delivery to SAp need date		26/04/2004
SCU FM need date		05/05/2004
DRCU FM ready for delivery to RAL		30/07/2004