



SUBJECT: SPIRE Software Checklists

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Change Record

ISSUE	DATE	Changes
1.0	8 th January 2007	First issue of document
1.1	21 st December 2007	Updates for SPIRE audit 2007/017
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Glossary

SSTD Space Science and Technology Department, Rutherford Appleton Laboratory



1. INTRODUCTION

1.1 Scope

This document includes the SPIRE software checklists (RD01) as required under the Software Engineering Standards (AD1) for all software developed or used by projects under SSTD control.

These checklists cover all software developed by SPIRE.

1.2 Documents

1.2.1 Applicable Documents

AD1 ISO SPAP SOFT 001

1.2.2 Reference Documents

RD01 ISO SPAP SOFT 002



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2. CHECKLISTS



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2.1 Test Facility Control System

Project Name/Title:	SPIRE		
Project Cost Code:	SBB2100	Date:	5 th August 2005
Project Manager:	Dave Smith	QA Manager:	Eric Clark
Start Date:	1 st April 2001	End Date:	30 th April 2002
Job Description:			
Development of SPIRE Test Facility Control System software			
Indicate by checking box which of the following documents will be written and where others are combined.			
Document title	Document No.	Usage	
		√: if used C: if combined N/A: if not applicable	
Software project management plan	SPIRE-RAL-PRJ-000527 AIV Milestone List	MANDATORY	
Software quality assurance plan	SPIRE-RAL-PRJ-000017	√	
Software development plan	SPIRE-RAL-PRJ-000477 Test Facility Development Plan	√	
Software configuration management plan	SPIRE-RAL-PRJ-000626	√	
Software verification and validation plan	SPIRE-RAL-DOC-002281	C	
User Requirements Definition	SPIRE-RAL-DOC-001172	√	
Software requirements	SPIRE-RAL-DOC-002281	C	
Architectural design	TFCS Description (no doc number)	C	
Detailed design	TFCS Description (no doc number)	C	
Test Procedure	SPIRE-RAL-DOC-002281	C	
Test Report	Instrument Log books	N/A	
Coding		N/A	
Configuration status list	SPIRE-RAL-PRC-002468	√	
Software Users Manual	SPIRE-RAL-DOC-002486 TFCS Description (no doc number)	MANDATORY	
Acceptance Data Package		N/A	
Controlling PA/QA Plan	SPIRE-RAL-PRJ-000017		
Other Applicable Docs.	<i>(Attach supplementary sheets if necessary)</i>		
SPIRE-RAL-PRJ-001498 – TFCS Data ICD			



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2.2 CDMS Simulator

Project Name/Title:	SPIRE		
Project Cost Code:	SBB 2120	Date:	05/01/07
Project Manager:	Ken King	QA Manager:	Eric Clark
Start Date:	1/12/2000	End Date:	1/11/2002
Job Description:			
Development of CDMS Simulator software for the Herschel common instrument EGSE			
Indicate by checking box which of the following documents will be written and where others are combined.			
Document title	Document No.	Usage	
		√: if used C: if combined N/A: if not applicable	
Software project management plan	SPIRE-RAL-DOC-002487 - SOW	MANDATORY	
Software quality assurance plan	SPIRE-RAL-PRJ-000017	√	
Software development plan	SPIRE-RAL-DOC-002487 – SOW	C	
Software configuration management plan	SPIRE-RAL-PRJ-000626	√	
Software verification and validation plan	SPIRE-RAL-PRJ-000733	C	
User Requirements Definition	SRON-U/HIFI/SP/2000-004 SPIRE-HIF-DOC-002305	√	
Software requirements	SPIRE-RAL-DOC-002298 - SSD	C	
Architectural design	SPIRE-RAL-DOC-002298 - SSD	C	
Detailed design	SPIRE-RAL-DOC-002298 – SSD	C	
Test Procedure	SPIRE-RAL-PRJ-000733	C	
Test Report	SPIRE-RAL-DOC-002296 SPIRE-RAL-DOC-002297	√	
Coding		N/A	
Configuration status list	SPIRE-RAL-PRJ-000807 (Labview) CVS tags (C)	√	
Software Users Manual	SPIRE-RAL-PRJ-000807	MANDATORY	
Acceptance Data Package		N/A	
Controlling PA/QA Plan			
Other Applicable Docs.	<i>(Attach supplementary sheets if necessary)</i>		
SPIRE-RAI-DOC-001196 CDMS Simulator Data ICD			



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2.3 Quick-Look Analysis

Project Name/Title:	SPIRE		
Project Cost Code:	SBB 2300	Date:	05/01/07
Project Manager:	Ken King	QA Manager:	Eric Clark
Start Date:	1/12/2000	End Date:	31/12/2008
Job Description:			
Development of Herschel/SPIRE Quick Look Analysis software.			
Indicate by checking box which of the following documents will be written and where others are combined.			
Document title	Document No.	Usage √: if used C: if combined N/A: if not applicable	
Software project management plan	SPIRE-RAL-PRJ-002790	MANDATORY	
Software quality assurance plan	SPIRE-RAL-PRJ-002790	C	
Software development plan	SPIRE-RAL-PRJ-002790	C	
Software configuration management plan	SPIRE-RAL-PRJ-001106	√	
Software verification and validation plan	SPIRE-RAL-PRJ-002790	C	
User Requirements Definition	SPIRE-PRJ-000999 SPIRE-SAP-DOC-001241 SPIRE-RAL-DOC-001652	√	
Software requirements	Not needed	N/A	
Architectural design	SPIRE-RAL-DOC-002269	√	
Detailed design	Javadoc	√	
Test Procedure	SPIRE-RAL-PRC-002456 [HCSS] SPIRE-RAL-DOC-001652 [Func test]	√	
Test Report	HCSS Acceptance Test Report (last one SPIRE-RAL-REP-003029) Warm Functional Test Report (last ones SPIRE-RAL-REP-002834 & SPIRE-RAL-REP-002835)	√	
Coding	HSCDT/TN009	√	
Configuration status list	CVS tags	√	
Software Users Manual	SPIRE-RAL-DOC-002260	MANDATORY	
Acceptance Data Package		N/A	
Controlling PA/QA Plan	SPIRE-RAL-PRJ-000017		
Other Applicable Docs.	<i>(Attach supplementary sheets if necessary)</i>		



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2.4 Herschel Common Science System Contributions

Project Name/Title:	SPIRE		
Project Cost Code:	SBB 2300	Date:	05/01/07
Project Manager:	Ken King	QA Manager:	Eric Clark
Start Date:	1/12/2000	End Date:	31/12/2008
Job Description:			
Contribution to Herschel Common Science System software.			
Indicate by checking box which of the following documents will be written and where others are combined.			
Document title	Document No.	Usage	
		√: if used C: if combined N/A: if not applicable	
Software project management plan	SPIRE-RAL-PRJ-002790	MANDATORY	
Software quality assurance plan	SPIRE-RAL-PRJ-002790	C	
Software development plan	SPIRE-RAL-PRJ-002790	C	
Software configuration management plan	SPIRE-RAL-PRJ-001106	√	
Software verification and validation plan	HERSCHEL/HSC/DOC/0284	√	
User Requirements Definition	FIRST/FSC/DOC/0115	√	
Software requirements	FIRST/FSC/DOC/0158	√	
Architectural design	Herschel-HSC-DOC-043	√	
Detailed design	Javadoc	√	
Test Procedure	HSC/DOC/0211	√	
Test Report	HSC-REP-1078	√	
Coding	HSCDT/TN009	√	
Configuration status list	CVS tags	√	
Software Users Manual	ftp://ftp.rssd.esa.int/pub/HERSCHEL/csdt/releases/doc/index.html HERSCHEL-HSC-DOC-0517	MANDATORY	
Acceptance Data Package		N/A	
Controlling PA/QA Plan	HERSCHEL/HSC/DOC/0284		
Other Applicable Docs.	<i>(Attach supplementary sheets if necessary)</i>		



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2.5 Data Processing

Project Name/Title:	SPIRE		
Project Cost Code:	SBB 2300	Date:	05/01/07
Project Manager:	Ken King	QA Manager:	Eric Clark
Start Date:	1/1/2004	End Date:	31/12/2008
Job Description:			
Development of SPIRE data processing software. This includes pipeline processing, interactive analysis and data visualization tools.			
Indicate by checking box which of the following documents will be written and where others are combined.			
Document title	Document No.	Usage	
		√: if used C: if combined N/A: if not applicable	
Software project management plan	SPIRE-RAL-PRJ-002790	MANDATORY	
Software quality assurance plan	SPIRE-RAL-PRJ-002790	C	
Software development plan	SPIRE-RAL-PRJ-002790	C	
Software configuration management plan	SPIRE-RAL-PRJ-001106	√	
Software verification and validation plan	SPIRE-RAL-PRJ-002790 Scientific Validation Plan TBW	C	
User Requirements Definition	SPIRE-RAL-DOC-002791	√	
Software requirements	Not needed	N/A	
Architectural design	TBW		
Detailed design	Javadoc	√	
Test Procedure	Reference number to be allocated		
Test Report	TBW		
Coding	HSCDT/TN009	√	
Configuration status list	CVS tags	√	
Software Users Manual	Reference number to be allocated	MANDATORY	
Acceptance Data Package		N/A	
Controlling PA/QA Plan	SPIRE-RAL-PRJ-000017		
Other Applicable Docs.	<i>(Attach supplementary sheets if necessary)</i>		



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2.6 Calibration and Trend Analysis

Project Name/Title:	SPIRE		
Project Cost Code:	SBB 2300	Date:	05/01/07
Project Manager:	Ken King	QA Manager:	Eric Clark
Start Date:	1/12/2006	End Date:	31/12/2008
Job Description:			
Development of SPIRE calibration analysis and trend analysis software.			
Indicate by checking box which of the following documents will be written and where others are combined.			
Document title	Document No.	Usage	
		√: if used C: if combined N/A: if not applicable	
Software project management plan	SPIRE-RAL-PRJ-002790	MANDATORY	
Software quality assurance plan	SPIRE-RAL-PRJ-002790	C	
Software development plan	SPIRE-RAL-PRJ-002790	C	
Software configuration management plan	SPIRE-RAL-PRJ-001106	√	
Software verification and validation plan	SPIRE-RAL-PRJ-002790	C	
User Requirements Definition	SPIRE-RAL-DOC-001866	√	
Software requirements	Not needed	N/A	
Architectural design	Not needed	N/A	
Detailed design	Javadoc	√	
Test Procedure	TBW		
Test Report	TBW		
Coding	HSCDT/TN009 for Java		
Configuration status list	CVS tags	√	
Software Users Manual	TBW	MANDATORY	
Acceptance Data Package		N/A	
Controlling PA/QA Plan	SPIRE-RAL-PRJ-000017		
Other Applicable Docs.	<i>(Attach supplementary sheets if necessary)</i>		



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2.7 Miscellaneous Tools

Project Name/Title:	SPIRE		
Project Cost Code:	SBB 2300	Date:	05/01/07
Project Manager:	Ken King	QA Manager:	Eric Clark
Start Date:	1/1/2004	End Date:	31/12/2008
Job Description:			
Development of miscellaneous tools that could not be foreseen at the beginning of the project.			
Indicate by checking box which of the following documents will be written and where others are combined.			
Document title	Document No.	Usage	
		√: if used C: if combined N/A: if not applicable	
Software project management plan	SPIRE-RAL-PRJ-002790	MANDATORY	
Software quality assurance plan	SPIRE-RAL-PRJ-002790	C	
Software development plan	SPIRE-RAL-PRJ-002790	C	
Software configuration management plan	SPIRE-RAL-PRJ-001106	√	
Software verification and validation plan	SPIRE-RAL-PRJ-002790	C	
User Requirements Definition	SCR system	√	
Software requirements	SCR system	√	
Architectural design	Not needed	N/A	
Detailed design	Javadoc for Java, not needed otherwise	N/A	
Test Procedure	Only in some cases, see SPMP		
Test Report	Only in some cases, see SPMP		
Coding	HSCDT/TN009 for Java		
Configuration status list	CVS tags		
Software Users Manual	For individual tools	MANDATORY	
Acceptance Data Package		N/A	
Controlling PA/QA Plan	SPIRE-RAL-PRJ-000017		
Other Applicable Docs.	<i>(Attach supplementary sheets if necessary)</i>		