1. INTRODUCTION

This document describes the status of all the SPIRE OBS System Change Requests (SCRs) and System Problem Reports (SPRs) raised thus far. All these SCRs and SPRs were raised under the SPIRE specific SCR/SPR section from the Herschel Science Centre Development Team website (URL: http://astro.esa.int/SD-general/Projects/Herschel/hscdt/). With the ongoing development of the OBS the status of the open reports are naturally expected to change on a fairly regular basis. This document therefore only provides a current snapshot of the SCR/SPR status.

1.1 Reference Documents

RD01   DPU Switch-On Procedure Telemetry Packets User Manual (DPU-MA-CGS-004), Issue: draft, 5th February 2003

RD02   SPIRE Data ICD (SPIRE-RAL-PRJ-001078), Issue 1.1, 25th May 2004

1.2 OBS Versions

The latest version of the OBS is 1.2I, which at present can only be loaded using the JTAG probe. The next version of the OBS, version 1.2J, should comply with RD02 and with as many of the following open SCRs and SPRs fully implemented. Its delivery is expected shortly from IFSI, in time for the second CQM test campaign.

2. SCRs

SCR #	Description	OBS Version	Status	Needed for/Comments
0165	The HK command queue size is needed in the nominal HK report	1.0	Implemented	
0235	Changes to the nominal HK and science data reports	1.2C	Implemented	(Science data report modifications for MCU QM0 only)
0246	The APID for critical HK packet should be the same as for TC and Event packets	1.2D	Implemented	Next CQM Tests in July/Aug 2004
0286	Abort Memory Dump command	1.2G	Open	IST
0287	DPU Identification	1.2G	Accepted for Implementation	FM

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3. SPRs

SPR #	Description	OBS Version	Status	Needed for/Comments
0138	DPU crashes if DRCU simulator is not switched on	1.0	Implemented	
0140	The Force Boot command in the MIB is wrong	1.0	Implemented	
0141	The Load TC and Boot command is missing from the MIB	1.0	Implemented	
0142	Invalid operations on parameters related to time	1.0	Implemented	
0146	DPU-15V parameter is oscillating between 1D and 25	1.0	Analysed	(Not a large fluctuation)
0148	Parameter TM2N in the nominal HK report is not incrementing	1.0	Implemented	
0153	Application data is missing from a (9,9) report	1.0	Implemented	
0156	All required parameters are not being sent in a (1,8) TC exe failure report	1.0	Implemented	
0157	The protocol hangs in response to a TM packet with wrong CRC	1.0	Issued	FM
0158	Update Table TC to change HK report should fail while HK is being generated	1.0	Implemented	
0161	A Send DRCU Command produces a (5,2) with no failure codes set	1.0	Implemented	
0162	The command Run VM crashes the OBS	1.0	Implemented	
0164	Report Function command is not implemented in the OBS	1.0	Analysed	Next CQM Tests in July/Aug 2004
0210	Could not boot the OBS using telecommands	1.2A	Issued	Next CQM Tests in July/Aug 2004
0212	Procedure to insert JTAG probe into the DPU is not straightforward	1.2A	Analysed	Low priority
0215	The OBS generates event packets when science data are requested	1.2A	Analysed	DRCU Simulator related problem.
0216	The event packet lengths are inconsistent with the SPIRE Data ICD	1.2A	Analysed	SPIRE Data ICD revised.
0219	Errors occur after continuous full photometer array science data are requested	1.2A	Analysed	DRCU Simulator related problem.
0220	Anomalous HK parameter values generated when DRCU Simulator is OFF	1.2A	Implemented	
0223	An unknown event packet is generated when requesting photometer science data	1.2B	Implemented	SPIRE Data ICD revised
0228	OBS crashes while science data are being generated	1.2B	Implemented	Virtuoso Memory Pool Service now not used.
0229	Photometer offset packet could not be generate	1.2B	Issued	Problem only observed with the DRCU and FPU simulator
0239	Strange event reports generated following SCU science frame request	1.2C	Implemented	
0240	OBS stops responding to telecommands from SCOS 2000	1.2C	Issued	Next CQM Tests in July/Aug 2004
0241	Unallocated Block event reports issued in response to SCU science frame request	1.2C	Implemented	
0242	SCUFRAMESTAT parameter does not change when science is requested	1.2C	Implemented	
0243	Generation of an extra SCU science packet with APID zero	1.2C	Implemented	
0244	The nominal HK packet length appears to be one word longer than expected	1.2D	Implemented	
0245	MCU parameter values appear to be shifted forward by one word in the nominal HK	1.2D	Implemented	

SPIRE Document

SPIRE OBS SCRs and SPRs
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SPR #	Description	OBS Version	Status	Needed for/Comments
0247	TM packets should be uniquely identifiable	1.2D	Issued	Next CQM Tests in July/Aug 2004 (RD01 now appears to identify these packets uniquely)
0248	SCU science data has the wrong SID	1.2D	Implemented	
0271	Handling of negative numbers	1.2E	Issued	Next CQM Tests in July/Aug 2004
0282	OBS crashes without event reports	1.2G	Issued	Next CQM Tests in July/Aug 2004
0283	OBS crashed when an invalid command was sent to the DRCU	1.2G	Issued	Next CQM Tests in July/Aug 2004
0284	The Synchronise DRCU Counters command does not always work first time	1.2G	Implemented	(Command renamed to Reset DRCU Counters)
0288	The OBS occasionally rejects commands	1.2G	Implemented	Error occurred when telecommands were copied from the 1553 DPRAM (16-bit words) to the DPU memory (32-bit words).
0295	Boot Software Memory Check Report	1.2H	Issued	