Start/Stop PCDU Management function
File: H_CRP_EPS_MANG.xls
Author: E. Picallo

Procedure Summary

Objectives

This procedure describes the steps needed to switch ON or OFF the
ASW function "PCDU Management".

Summary of Constraints

Default status of the function: "Running".

When the function is stopped, it does not accept any other
telecommands than the:
- Start Function TC(8,1,112);
- Report Function Status TC(8,5,112).

This can cause that the UIU be out of synch with the actual
ON/OFF status of the PCDU units eg. in case Ground use Service 2
telecommands to switch PCDU units.

Spacecraft Configuration

Start of Procedure

CDMU in default configuration, that is:
- PM A or B ON (nominally A)
- TM Encoder/OBT A or B active (nominally A)
- RM A and B enabled
- MM A and B ON

End of Procedure

CDMU in default configuration, that is:
- PM A or B ON (nominally A)
- TM Encoder/OBT A or B active (nominally A)
- RM A and B enabled
- MM A and B ON

Reference File(s)

Input Command Sequences

Output Command Sequences

HRWMANG1
HRWMANG2

Referenced Displays

ANDs	GRDs	SLDs
ZAZ28999		

Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
23/07/08	1	1	Created	E. Picallo	

Status   : Version 2 - Unchanged
Last Checkin: 15/12/08

Start/Stop PCDU Management function
File: H_CRP_EPS_MANG.xls
Author: E. Picallo

			Call to H_CRP_DHS_3017 UIU table maintenance added		
			Call to H_FCP_EPS_REPO deleted		
15/12/08	2	2	Comment about multiple 1553 TCs deleted	E. Picallo	

Start/Stop PCDU Management function
File: H_CRP_EPS_MANG.xls
Author: E. Picallo

Procedure Flowchart Overview

Doc No.   :PT-HMOC-OPS-FOP-6001-OPS-OAH
Fop Issue :   3.0
Issue Date: 13/04/10

Start/Stop PCDU Management function
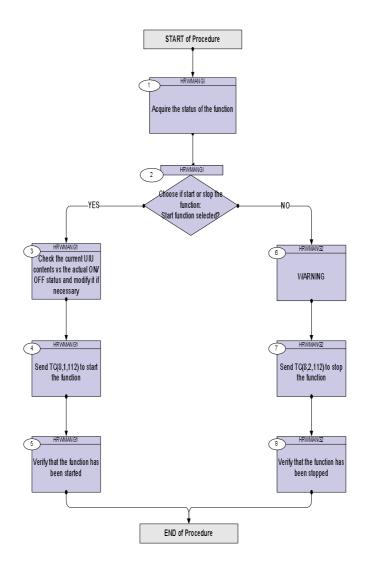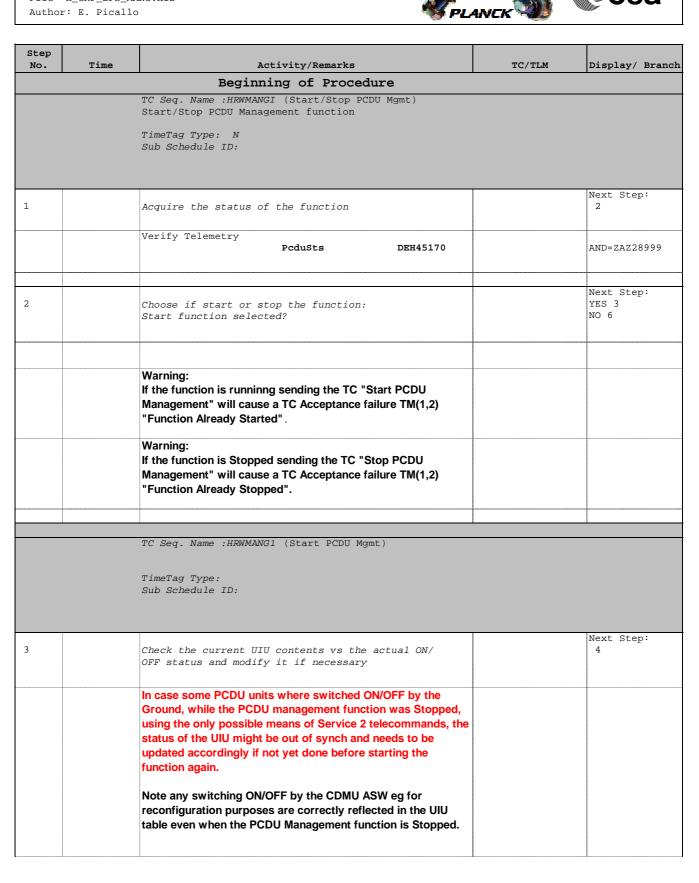File: H_CRP_EPS_MANG.xls
Author: E. Picallo

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Beginning of Procedure		
		TC Seq. Name :HRWMANGI (Start/Stop PCDU Mgmt) Start/Stop PCDU Management function *TimeTag Type: N* *Sub Schedule ID:*		
1		*Acquire the status of the function*		Next Step: 2
		Verify Telemetry **PcduSts** **DEH45170**		AND=ZAZ28999
2		*Choose if start or stop the function:* *Start function selected?*		Next Step: YES 3 NO 6
		Warning: **If the function is runninng sending the TC "Start PCDU Management" will cause a TC Acceptance failure TM(1,2) "Function Already Started"** .		
		Warning: **If the function is Stopped sending the TC "Stop PCDU Management" will cause a TC Acceptance failure TM(1,2) "Function Already Stopped".**		
		TC Seq. Name :HRWMANG1 (Start PCDU Mgmt) *TimeTag Type:* *Sub Schedule ID:*		
3		*Check the current UIU contents vs the actual ON/ OFF status and modify it if necessary*		Next Step: 4
		In case some PCDU units where switched ON/OFF by the Ground, while the PCDU management function was Stopped, using the only possible means of Service 2 telecommands, the status of the UIU might be out of synch and needs to be updated accordingly if not yet done before starting the function again. **Note any switching ON/OFF by the CDMU ASW eg for reconfiguration purposes are correctly reflected in the UIU table even when the PCDU Management function is Stopped.**		

Start/Stop PCDU Management function
File: H_CRP_EPS_MANG.xls
Author: E. Picallo

HERSCHEL PLANCK   esa

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Execute Procedure: **H_CRP_DHS_3017** **Unit in Use table maintenance**		
4		*Send TC(8,1,112) to start the function*		Next Step: 5
		Start PCDU Management telecommand is used for switching on the function.		

		Execute Telecommand
		                    Start_PCDU_Management
		
		TC Control Flags :
		                         GBM IL DSE
		                         --Y -- ---
		Subsch. ID : 10
		Det. descr. : Start PCDU Management TC(8,1,112)
			DC01A170	

5		*Verify that the function has been started*		Next Step: END
		Verify Telemetry **PcduSts DEH45170**	**= Running**	AND=ZAZ28999
		TC Seq. Name :HRWMANG2 (Stop PCDU Mgmt) *TimeTag Type:* *Sub Schedule ID:*		
6		*WARNING*		Next Step: 7
		Stopping the PCDU Management function results in the rejection of any subsequent PCDU Management related TCs other than 'Start' or 'Report Status'. **This means that in order to switch PCDU units ON/OFF the Ground needs to use Service 2 telecommands, though this can disturb the autonomous operations of the ASW, the UIU not being updated autonsmously onboard.** **Currently there is no way to tell ASW that the status of a PCDU unit has been changed by a Service 2 telecommand. Therefore it is strongly discouraged to use Service 2 telecommands to control the PCDU units.**		
7		*Send TC(8,2,112) to stop the function*		Next Step: 8

Start/Stop PCDU Management function
File: H_CRP_EPS_MANG.xls
Author: E. Picallo

HERSCHEL PLANCK   **esa**

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Stop PCDU Management telecommand is used for switching off the function. **When the function is stopped, it does not accept any other telecommands than the Start Function and Report Function Status TCs.**		

		Execute Telecommand
		
		        Stop_PCDU_Management
		
		TC Control Flags :
		        GBM IL DSE
		        --Y -- ---
		Subsch. ID : 10
		Det. descr. : Stop PCDU Management TC(8,2,112)
			DC02A170	

8		*Verify that the function has been stopped*		Next Step: END
		Verify Telemetry **PcduSts** **DEH45170**	**= Stopped**	AND=ZAZ28999

End of Procedure