

TTC Management Status Report  
 File: H\_FCP\_TTC\_REPO.xls  
 Author: E. Picallo



## Procedure Summary

### Objectives

This procedure describes the steps needed to acquire the status of the ASW function "TTC Management" (0xFF for running idle or 0x00 for stopped).

Moreover in the TM packet are also reported the following information:

- TM Encoder (in use) Subsampling status
- TM Encoder A Configuration
- TM Encoder B Configuration
- XPND 1 RX Bit Rate
- XPND 2 RX Bit Rate
- XPND 1 Configuration Data Words
- XPND 2 Configuration Data Words
- Armed RFDN Switch Code
- Arming status for Armed RFDN Switch

### Summary of Constraints

n/a

### 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

HFRREPO

### Referenced Displays

ANDs      GRDs      SLDs  
 (None)

### Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
14/07/08	1	1	Created	R. Miniscalco	

Status : Version 3 - Unchanged  
 Last Checkin: 08/01/09

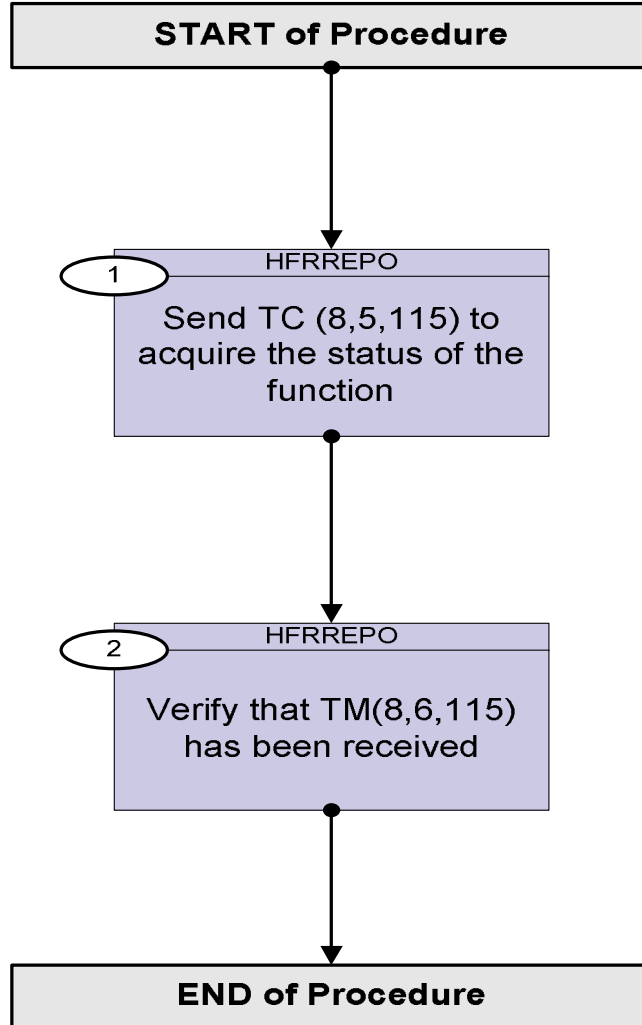
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21/10/08		2	Display mode update	E. Picallo	
08/01/09	2	3	CDMU ASW V3.8 and BSW V2.4 alignment	E. Picallo	



### Procedure Flowchart Overview



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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
<b>Beginning of Procedure</b>				
TC Seq. Name : HFRREPO (TTC function Report) Report TTC management function, parameters and TM encoder  TimeTag Type: N Sub Schedule ID:  <input type="checkbox"/>				
1		Send TC (8,5,115) to acquire the status of the function		Next Step: 2
		<b>Report TTC Management Status telecommand is used for requiring the status of the function as a telemetry packet.</b>  <b>Default status of the function: "started".</b>		
		Execute Telecommand  <div style="text-align: right;"><b>TtcReportStatus</b></div> TC Control Flags :  <div style="text-align: right;">GBM IL DSE --Y -- --</div> Subsch. ID : 10 Det. descr. : TTC: Report TTC Management Status TC(8,5,115)	DC30F170	
2		Verify that TM(8,6,115) has been received		Next Step: END
		<b>Only one of the following two types of TM packets will be received:</b>  <b>- If the function is started:</b>		
		Verify Packet Reception <b>TM 8-6-115 TTC Management Status Report - RunningIdle</b> Packet Details:  <div style="text-align: right;">             APID: 16              Type: 8              Subtype: 6              PI1: 29695              PI2: 0           </div>	TtcMngRun	
		<b>- If the function is stopped:</b>		
		Verify Packet Reception <b>TM 8-6-115 TTC Management Status Report - Stopped</b> Packet Details:  <div style="text-align: right;">             APID: 16              Type: 8              Subtype: 6              PI1: 29440              PI2: 0           </div>	TtcMngStop	
		<b>Each TM packet contains the following parameters:</b>		

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify Function ID Telemetry Function_ID DE008170	= TTC_Manag	(None)
		Verify Activity ID Telemetry ActivityId DE022170		(None)
		Verify SID Telemetry SID DE010170	= 0 <dec>	(None)
		Verify TM Encoder (in use) Subsampling Telemetry TmEncSubSSts DEW33170		(None)
		Verify TM Encoder A Configuration Telemetry TmEncAConfId DEW35170		(None)
		Verify TM Encoder B Configuration Telemetry TmEncBConfId DEW36170		(None)
		Verify XPND 1 RX Bit Rate Telemetry Xpnd1RxBitRate DE036170		(None)
		Verify XPND 2 RX Bit Rate Telemetry Xpnd2RxBitRate DE129170		(None)
		Verify DW1 unused Telemetry Xpnd1CfgDW1Unus DE037170		(None)
		Verify DW1 unused Telemetry Xpnd1CfgDW1Unus DE050170		(None)
		Verify External Reference Status Telemetry Xpnd1CfgDW1_ER DE038170	= OFF	(None)
		Verify Coherent Mode Status Telemetry Xpnd1CfgDW1_CM DE039170		(None)
		Verify Ranging Mode Status Telemetry Xpnd1CfgDW1_RM DE040170		(None)
		Verify High Rate MOD Status Telemetry Xpnd1CfgDW1_HRM DE041170		(None)
		Verify Medium Rate MOD Status Telemetry Xpnd1CfgDW1_MRM DE042170		(None)
		Verify LR-1 MOD Status Telemetry Xpnd1CfgDW1LRM1 DE043170		(None)
		Verify LR-2 MOD Status Telemetry Xpnd1CfgDW1LRM2 DE044170		(None)
		Verify RNG MOD Index Telemetry Xpnd1CfgDW1_RMI DE045170		(None)
		Verify TM MOD Index Telemetry Xpnd1CfgDW1_TMI DE046170		(None)
		Verify Internal Bit Pattern Generator Telemetry Xpnd1CfgDW2_PG DE047170	= OFF	(None)

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify DW2 unused Telemetry Xpnd1CfgDW2Unus DE048170		(None)
		Verify Output Power Level Set Telemetry Xpnd1CfgDW2OPLS DE049170		(None)
		Verify DW1 unused Telemetry Xpnd2CfgDW1Unus DEW50170		(None)
		Verify DW1 unused Telemetry Xpnd2CfgDW1Unus DEW37170		(None)
		Verify External Reference Status Telemetry Xpnd2CfgDW1_ER DEW38170	= OFF	(None)
		Verify Coherent Mode Status Telemetry Xpnd2CfgDW1_CM DEW39170		(None)
		Verify Ranging Mode Status Telemetry Xpnd2CfgDW1_RM DEW40170		(None)
		Verify High Rate MOD Status Telemetry Xpnd2CfgDW1_HRM DEW41170		(None)
		Verify Medium Rate MOD Status Telemetry Xpnd2CfgDW1_MRM DEW42170		(None)
		Verify LR-1 MOD Status Telemetry Xpnd2CfgDW1LRM1 DEW43170		(None)
		Verify LR-2 MOD Status Telemetry Xpnd2CfgDW1LRM2 DEW44170		(None)
		Verify RNG MOD Index Telemetry Xpnd2CfgDW1_RMI DEW45170		(None)
		Verify TM MOD Index Telemetry Xpnd2CfgDW1_TMI DEW46170		(None)
		Verify Internal Bit Pattern Generator Status Telemetry Xpnd2CfgDW2_PG DEW47170	= OFF	(None)
		Verify DW2 unused Telemetry Xpnd2CfgDW2Unus DEW48170		(None)
		Verify Output Power Level Set Telemetry Xpnd2CfgDW2OPLS DEW49170		(None)
		Verify Armed RFDN Switch Code Telemetry ArmRfdnSwCode DEZA7170		(None)
		Verify Arming status for Armed RFDN Switch Telemetry RfdnSwStatus DEZD2170		(None)
<b>End of Procedure</b>				