

Configuration check after Ground timeout procedure
File: H_CRP_TTC_60R.xls
Author: E. Picallo



Procedure Summary

Objectives

This procedure describes the steps needed to check the TTC configuration after the recovery performed on-board by the ASW when no Ground contact has been established for a time major than 60 hours.

The CDMU ASW is able to detect the condition in which no Ground contact has been established for a time > 60 hs. Then, it starts a TTC reconfiguration procedure in order to try to re-establish contact with the Earth. This on-board procedure, which is indefinitely repeated until Ground contact is achieved, ensures that all possible combinations of redundancies within the TTC subsystem are sequentially configured for 2.5 hs (30 min x 5) each.

Summary of Constraints

During the TTC on-board autonomous reconfiguration procedure triggered after 60 hours LOS, only the TTC units status (ON/OFF) are updated in the UIU but the logical status (Nominal/Redundant) and the functional status (failed/not failed) are not. Hence when contact is reestablished the UIU logical and functional status need to be updated in line with the final TTC configuration and the related MOT entries need to be reenabled, as these have also been disabled as part of the on board autonomous recovery.

Since all the TTC entries in the MOT and in the EAT are disabled by the recovery procedure performed by the ASW, the reached TTC configuration can autonomously change in case of S/C transition to Survival mode (where the TTC chain 2 will be used by default).

Note that for ranging purpose, receiver and transmitter used have to be on the same transponder.

Spacecraft Configuration

Start of Procedure

CDMU in default configuration.
No Ground contact for > 60 hours

End of Procedure

CDMU in default configuration.
Link re-established
TM bit rate LR2 (5 Kbps)
TC bit rate 125 bps

Reference File(s)

Input Command Sequences

Output Command Sequences

HRR60R

Referenced Displays

Status : Version 3 - Unchanged
Last Checkin: 25/09/09

Configuration check after Ground timeout procedure
 File: H_CRP_TTC_60R.xls
 Author: E. Picallo



ANDs **GRDs** **SLDs**
 ZAZ7J999 (None)
 ZAZ7I999
 ZAZ7M999

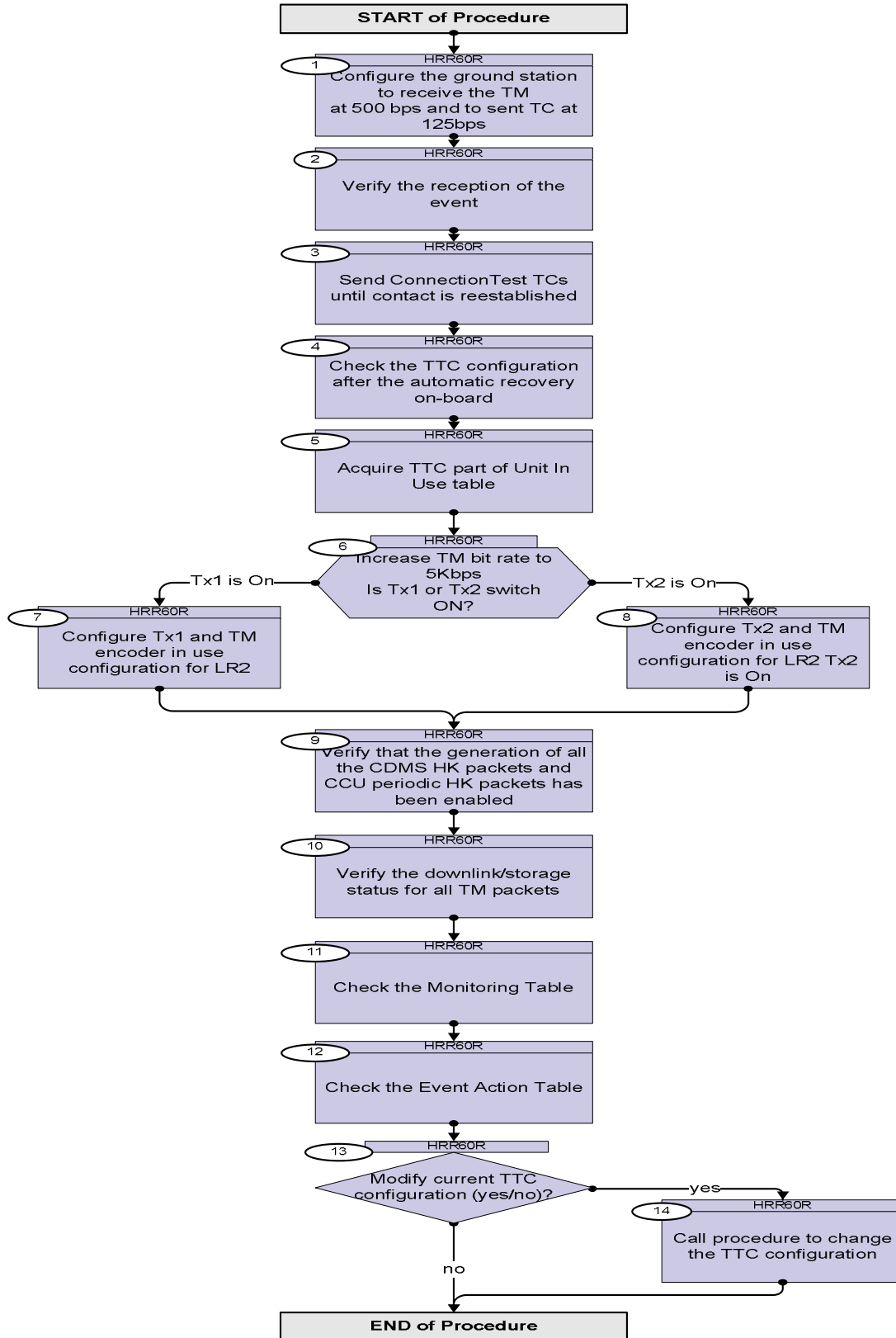
Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
05/01/09	2	1	Created	E. Picallo	
15/03/09		2	Increase TM bit rate to 5 Kbps added	E. Picallo	
18/03/09	2.2	2.01	Validation : Minor AND reference correction	E. Picallo	
25/09/09	2.5	3	Check Xpnd1Tx_L23_S and Xpnd2Tx_L16_S TMs are always ON	E. Picallo	

Configuration check after Ground timeout procedure
 File: H_CRP_TTC_60R.xls
 Author: E. Picallo



Procedure Flowchart Overview



Configuration check after Ground timeout procedure
 File: H_CRP_TTC_60R.xls
 Author: E. Picallo



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
Beginning of Procedure				
TC Seq. Name :HRR60R (Config check 60hsLOS) Configuration check after Ground timeout procedure TimeTag Type: N Sub Schedule ID: <input type="checkbox"/>				
1		Configure the ground station to receive the TM at 500 bps and to sent TC at 125bps		Next Step: 2
2		Verify the reception of the event		Next Step: 3
		Verify Packet Reception CdmuAsw Event 5-2 Evt_Mot_Exc_Id_0x8888 Packet Details: <div style="text-align: right;"> APID: 16 Type: 5 Subtype: 2 PI1: 34952 PI2: 0 </div>	D_EvRpMo8888	
		Verify Packet Telemetry (Pkt = D_EvRpMo8888)		
		EventId DE068170	= 34952 <dec>	(None)
		Verify Packet Telemetry (Pkt = D_EvRpMo8888)		
		MonitorId DE055170	MINS_FROM_GROUND	(None)
		Verify Packet Telemetry (Pkt = D_EvRpMo8888)		
		FirstMaskParVal DE070170		
		Verify Packet Telemetry (Pkt = D_EvRpMo8888)		
		RepThMaskParVal DE071170		
		Verify Packet Telemetry (Pkt = D_EvRpMo8888)		
		CheckValue DE059170	= 3480 <dec>	(None)
		Verify Packet Telemetry (Pkt = D_EvRpMo8888)		
		EventSeqCounter DE069170		
3		Send ConnectionTest TCs until contact is reestablished		Next Step: 4
		Execute Telecommand <div style="text-align: right;">ConnectionTest</div> TC Control Flags : <div style="text-align: right;"> GBM IL DSE --Y -- --- </div> Subsch. ID : 10 Det. descr. : Perform Connection Test	DC810180	
4		Check the TTC configuration after the automatic recovery on-board		Next Step: 5

Configuration check after Ground timeout procedure
 File: H_CRP_TTC_60R.xls
 Author: E. Picallo



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
4.1		Acquire TM Encoder bit rate		<input type="checkbox"/>
		Verify Telemetry TME_BITRATE DEMRF160	= 500 bps	AND=ZAZ7J999
4.2		Acquire XPND 1 status		<input type="checkbox"/>
4.2.1		Rx1 power line status verification		<input type="checkbox"/>
		Verify FCL3 (XPND1 Rx) voltage Telemetry Xpnd1_Rx_FCL3_V WM703565	>= 27.96 V <= 28.71 V	(None)
		Verify FCL3 (XPND1 Rx) current Telemetry Xpnd1_Rx_FCL3_I WM702565	>= 0.20 A <= 0.35 A	AND=ZAZ7I999
4.2.2		Rx1 Analogue Telemetry verification		<input type="checkbox"/>
		Verify RX1 AGC Level Telemetry XPD1_RX1_AGC_LV RMB09442		AND=ZAZ7I999
		Verify RX1 PLL SPE Telemetry XPD1_RX1_PLL_SP RMB11442		AND=ZAZ7I999
		Verify Receiver 1 bit rate Telemetry RX1_125-4K_Stat RMB17442	= 125 bps	AND=ZAZ7I999
		Verify Rx1 Supply Voltage Telemetry XPND1_RX1_SUP_V RMB07442		AND=ZAZ7I999
		Verify Rx1 temperature Telemetry RX1_TEMP RMB02442		AND=ZAZ7I999
4.2.3		TX1 power line status verification		<input type="checkbox"/>
		Verify LCL23 (XPND1 Tx) status Telemetry Xpnd1Tx_L23_S WM12D565	= ON	AND=ZAZ7I999
		Verify LCL23 (XPND1 Tx) current Telemetry Xpnd1Tx_L23_I WM109565		AND=ZAZ7I999
		Irrespective of which XPND is in use this LCL should always be ON		
4.2.4		TX1 Analogue Telemetry verification		<input type="checkbox"/>

Configuration check after Ground timeout procedure
 File: H_CRP_TTC_60R.xls
 Author: E. Picallo



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify Tx1 Status Telemetry TX1 ON-OFF Stat RMB15442		AND=ZAZ7I999
		Verify RF1 Output Power Telemetry XPDI_RF1_OUT_PW RMB13442		AND=ZAZ7I999
		Verify Tx1 Supply Voltage Telemetry XPND1_TX1_SUP_V RMB05442		AND=ZAZ7I999
		Verify Tx1 Temperature Telemetry TX1_TEMP RMB01442		AND=ZAZ7I999
4.2.5		Verify XPND 1 status on the 1553 S/C bus		<input type="checkbox"/>
		Verify Telemetry XPND1On_Off DEFCG160		AND=ZAZ7I999
		Verify Telemetry XPND1Val_Inval DEFCK160		AND=ZAZ7I999
4.2.6		XPND 1 1553 S/C bus TM verification (If XPND1 is On & Valid on SDB)		<input type="checkbox"/>
		Verify XPND1 status Telemetry X1 Status - XS RMB22442	= TM mode active	AND=ZAZ7I999
		Verify Low Rate-1 status Telemetry X1 LowRate-1 MD RMB30442	= ON	AND=ZAZ7I999
		Verify Low Rate-2 status Telemetry X1 LowRate-2 MD RMB31442	= OFF	AND=ZAZ7I999
		Verify Medium Rate Modulator status Telemetry X1 MedRate-MRM RMB29442	= OFF	AND=ZAZ7I999
		Verify High Rate status Telemetry X1 HIRateMD-HRM RMB28442	= OFF	AND=ZAZ7I999
		Verify Ranging Modulator status Telemetry X1 Rang MOD-RM RMB27442	= OFF	AND=ZAZ7I999
		Verify Coherent Mode status Telemetry X1 Coher MOD-CM RMB26442	= OFF	AND=ZAZ7I999
		Verify RNG Modulation Index Telemetry X1 RNGMD ID-RMI RMB32442	= 0.6 rad	AND=ZAZ7I999
		Verify TM Modulation Index Telemetry X1 TM MD ID-TMI RMB33442	= 1.2 rad	AND=ZAZ7I999
		Verify Output Power Level Telemetry X1 OutPowLevSet RMB35442	= -4 dbmW	AND=ZAZ7I999
		Verify Internal Bit Pattern Generator Telemetry X1 IntBitPatGen RMB34442	= OFF	AND=ZAZ7I999

Configuration check after Ground timeout procedure
 File: H_CRP_TTC_60R.xls
 Author: E. Picallo



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify External Reference Status Telemetry X1 Ext Ref - ER RMB25442	= OFF	AND=ZAZ7I999
		Verify Receiver lock status Telemetry X1 Rx Lock - RL RMB24442		AND=ZAZ7I999
		Verify RX AGC Level Telemetry X1 AGC TMUplnk RMB20442		AND=ZAZ7I999
		Verify PLL Phase Error Telemetry X1 RX PLL PhErr RMB19442		AND=ZAZ7I999
		Verify Squelch Status Telemetry X1 SsqlchSt - SS RMB23442		AND=ZAZ7I999
		Verify TC Bit Rate Telemetry X1 TcBitRateTCB RMB61442	= Low	AND=ZAZ7I999
4.3		Acquire XPND 2 status		<input type="checkbox"/>
4.3.1		RX2 power line status verification		<input type="checkbox"/>
		Verify FCL4 (XPND2 Rx) voltage Telemetry Xpnd2_Rx_FCL4_V WM403565	>= 27.96 V <= 28.71 V	(None)
		Verify FCL4 (XPND2 Rx) current Telemetry Xpnd2_Rx_FCL4_I WM402565	>= 0.20 A <= 0.35 A	AND=ZAZ7I999
4.3.2		RX2 Analogue Telemetry verification		<input type="checkbox"/>
		Verify Receiver 2 bit rate Telemetry RX2 125-4K Stat RMB18442	= 125 bps	AND=ZAZ7I999
		Verify RX2 AGC Level Telemetry XPD2_RX2_AGC_LV RMB10442		AND=ZAZ7I999
		Verify RX2 PLL SPE Telemetry XPD2_RX2_PLL_SP RMB12442		AND=ZAZ7I999
		Verify RX2 Supply Voltage Telemetry XPND2_RX2_SUP_V RMB08442		AND=ZAZ7I999
		Verify Rx2 temperature Telemetry RX2_TEMP RMB04442		AND=ZAZ7I999
4.3.3		TX2 power line status verification		<input type="checkbox"/>
		Verify LCL16 (XPND2 Tx) voltage Telemetry Xpnd2Tx_L16_S WM92C565	= ON	AND=ZAZ7I999

Configuration check after Ground timeout procedure
 File: H_CRP_TTC_60R.xls
 Author: E. Picallo



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify LCL16 (XPND2 Tx) current Telemetry Xpnd2Tx_L16_I WM908565		AND=ZAZ7I999
		Irrespective of which XPND is in use this LCL should always be ON		
4.3.4		TX2 Analogue Telemetry verification		<input type="checkbox"/>
		Verify TX2 Status Telemetry TX2 ON-OFF Stat RMB16442		AND=ZAZ7I999
		Verify RF2 Output Power Telemetry XPD2_RF2_OUT_PW RMB14442		AND=ZAZ7I999
		Verify TX2 Supply Voltage Telemetry XPND2_TX2_SUP_V RMB06442		AND=ZAZ7I999
		Verify TX2 Temperature Telemetry TX2_TEMP RMB03442		AND=ZAZ7I999
4.3.5		Verify XPND 2 status on the 1553 S/C bus		<input type="checkbox"/>
		Verify Telemetry XPND2On_Off DEFD1160		AND=ZAZ7I999
		Verify Telemetry XPND2Val_Inval DEFD5160		AND=ZAZ7I999
4.3.6		XPND 2 1553 S/C bus TM verification (If XPND2 is On & Valid on SDB)		<input type="checkbox"/>
		Verify XPND2 status Telemetry X2 Status - XS RMB43442	= TM mode active	AND=ZAZ7I999
		Verify Low Rate-1 status Telemetry X2 LowRate-1 MD RMB51442	= ON	AND=ZAZ7I999
		Verify Low Rate-2 status Telemetry X2 LowRate-2 MD RMB52442	= OFF	AND=ZAZ7I999
		Verify Medium Rate Modulator status Telemetry X2 MedRate-MRM RMB50442	= OFF	AND=ZAZ7I999
		Verify High Rate status Telemetry X2 HIRateMD-HRM RMB49442	= OFF	AND=ZAZ7I999
		Verify Ranging Modulator status Telemetry X2 Rang MD - RM RMB48442	= OFF	AND=ZAZ7I999
		Verify Coherent Mode status Telemetry X2 Coher MOD-CM RMB47442	= OFF	AND=ZAZ7I999
		Verify RNG Modulation Index Telemetry X2 RNGMD ID-RMI RMB53442	= 0.6 rad	AND=ZAZ7I999

Configuration check after Ground timeout procedure
 File: H_CRP_TTC_60R.xls
 Author: E. Picallo



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify TM Modulation Index Telemetry X2 TM MD ID-TMI RMB54442	= 1.2 rad	AND=ZAZ7I999
		Verify Output Power Level Telemetry X2 OutPowLevSet RMB56442	= -4 dbmW	AND=ZAZ7I999
		Verify Internal Bit Pattern Generator Telemetry X2 IntBitPatGen RMB55442	= OFF	AND=ZAZ7I999
		Verify External Reference Status Telemetry X2 Ext Ref - ER RMB46442	= OFF	AND=ZAZ7I999
		Verify Receiver lock status Telemetry X2 Rx Lock - RL RMB45442		AND=ZAZ7I999
		Verify RX AGC Level Telemetry X2 AGC TMUplnk RMB41442		AND=ZAZ7I999
		Verify PLL Phase Error Telemetry X2 RX PLL PhErr RMB40442		AND=ZAZ7I999
		Verify Squelch Status Telemetry X2 SqlchSts-SS RMB44442		AND=ZAZ7I999
		Verify TC Bit Rate Telemetry X2 TcBitRateTCB RMB62442	= Low	AND=ZAZ7I999
4.4		Acquire TWTA 1 status		<input type="checkbox"/>
		Verify OPLCL49 (TWTA 1) Status Telemetry Twta_1_L49_1S WM22E565		AND=ZAZ7J999
		Verify TWTAL current Telemetry Twta_1_L49_I WM210565		AND=ZAZ7J999
		Verify EPC1 Status Telemetry EPC1_ONOFF_STS RMB05439		AND=ZAZ7J999
		Verify EPC1 Anode Voltage Telemetry EPC1_ANODE_VOLT RMB01439		AND=ZAZ7J999
		Verify EPC1 Helix current Telemetry EPC1_HELIX_CURR RMB02439		AND=ZAZ7J999
		Verify EPC1 Automatic Restart Status Telemetry EPC1_AUT_RSTART RMB06439		AND=ZAZ7J999
		Verify EPC1 Temperature Telemetry EPC1_TEMP RMB11439		AND=ZAZ7J999
		Verify TWT1 Status Telemetry TWT1_ONOFF_STS RMB09439		AND=ZAZ7J999
4.5		Acquire TWTA 2 status		<input type="checkbox"/>

Configuration check after Ground timeout procedure
 File: H_CRP_TTC_60R.xls
 Author: E. Picallo



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify OPLCL50 (TWTA 2) Status Telemetry Twta_2_L50_1S WM92E565		AND=ZAZ7J999
		Verify Telemetry Twta_2_L50_I WM910565		AND=ZAZ7J999
		Verify EPC2 Status Telemetry EPC2_ONOFF_STS RMB07439		AND=ZAZ7J999
		Verify EPC2 Anode Voltage Telemetry EPC2_ANODE_VOLT RMB03439		AND=ZAZ7J999
		Verify EPC2 Helix current Telemetry EPC2_HELIX_CURR RMB04439		AND=ZAZ7J999
		Verify EPC2 Automatic Restart Status Telemetry EPC2_AUT_RSTART RMB08439		AND=ZAZ7J999
		Verify EPC2 Temperature Telemetry EPC2_TEMP RMB12439		AND=ZAZ7J999
		Verify TWT2 Status Telemetry TWT2_ONOFF_STS RMB10439		AND=ZAZ7J999
4.6		Acquire RFDN SWs position		<input type="checkbox"/>
		Verify Telemetry RFDN SW1 Pos A RMB05436		AND=ZAZ7J999
		Verify Telemetry RFDN SW1 Pos B RMB09436		AND=ZAZ7J999
		Verify Telemetry RFDN SW2 Pos A RMB06436		AND=ZAZ7J999
		Verify Telemetry RFDN SW2 Pos B RMB10436		AND=ZAZ7J999
		Verify Telemetry RFDN SW3 Pos A RMB07436		AND=ZAZ7J999
		Verify Telemetry RFDN SW3 Pos B RMB11436		AND=ZAZ7J999
		Verify Telemetry RFDN SW4 Pos A RMB08436		AND=ZAZ7J999
		Verify Telemetry RFDN SW4 Pos B RMB12436		AND=ZAZ7J999
5		Acquire TTC part of Unit In Use table		Next Step: 6
5.1		XPND1 UIU table status verification		<input type="checkbox"/>

Configuration check after Ground timeout procedure
 File: H_CRP_TTC_60R.xls
 Author: E. Picallo



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify Telemetry XpndRx1FuncSts DEL58170		AND=ZAZ7M999
		Verify Telemetry XpndRx1Use DEL56170		AND=ZAZ7M999
		Verify Telemetry XpndRx1LogSts DEL57170		AND=ZAZ7M999
		Verify Telemetry XpndRx1FailSts DEL59170		AND=ZAZ7M999
		Verify Telemetry XpndTx1FuncSts DEL27170		AND=ZAZ7M999
		Verify Telemetry XpndTx1Use DEL29170		AND=ZAZ7M999
		Verify Telemetry XpndTx1LogSts DEL28170		AND=ZAZ7M999
		Verify Telemetry XpndTx1FailSts DEL26170		AND=ZAZ7M999
5.2		XPND2 UIU table status verification		<input type="checkbox"/>
		Verify Telemetry XpndRx2FuncSts DEL62170		AND=ZAZ7M999
		Verify Telemetry XpndRx2Use DEL60170		AND=ZAZ7M999
		Verify Telemetry XpndRx2LogSts DEL61170		AND=ZAZ7M999
		Verify Telemetry XpndRx2FailSts DEL63170		AND=ZAZ7M999
		Verify Telemetry XpndTx2FuncSts DEL31170		AND=ZAZ7M999
		Verify Telemetry XpndTx2Use DEL33170		AND=ZAZ7M999
		Verify Telemetry XpndTx2LogSts DEL32170		AND=ZAZ7M999
		Verify Telemetry XpndTx2FailSts DEL30170		AND=ZAZ7M999
5.3		TWTA1 UIU table status verification		<input type="checkbox"/>
		Verify Telemetry TwtalFuncSts DEL19170		AND=ZAZ7M999

Configuration check after Ground timeout procedure
 File: H_CRP_TTC_60R.xls
 Author: E. Picallo



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify Telemetry Twta1Use	DEL21170	AND=ZAZ7M999
		Verify Telemetry Twta1LogSts	DEL20170	AND=ZAZ7M999
		Verify Telemetry Twta1FailSts	DEL18170	AND=ZAZ7M999
		Verify Telemetry Epc1FuncSts	DEG25170	AND=ZAZ7M999
		Verify Telemetry Epc1Use	DEG27170	AND=ZAZ7M999
		Verify Telemetry Epc1LogSts	DEG26170	AND=ZAZ7M999
		Verify Telemetry Epc1FailSts	DEG24170	AND=ZAZ7M999
		Verify Telemetry TwtaAmplFuncSts	DEH13170	AND=ZAZ7M999
		Verify Telemetry TwtaAmplUse	DEH15170	AND=ZAZ7M999
		Verify Telemetry TwtaAmplLogSts	DEH14170	AND=ZAZ7M999
		Verify Telemetry TwtaAmplFailSts	DEH12170	AND=ZAZ7M999
5.4		<i>TWTA2 UIU table status verification</i>		□
		Verify Telemetry Twta2FuncSts	DEL23170	AND=ZAZ7M999
		Verify Telemetry Twta2Use	DEL25170	AND=ZAZ7M999
		Verify Telemetry Twta2LogSts	DEL24170	AND=ZAZ7M999
		Verify Telemetry Twta2FailSts	DEL22170	AND=ZAZ7M999
		Verify Telemetry Epc2FuncSts	DEG29170	AND=ZAZ7M999
		Verify Telemetry Epc2Use	DEG31170	AND=ZAZ7M999
		Verify Telemetry Epc2LogSts	DEG30170	AND=ZAZ7M999
		Verify Telemetry Epc2FailSts	DEG28170	AND=ZAZ7M999

Configuration check after Ground timeout procedure
 File: H_CRP_TTC_60R.xls
 Author: E. Picallo



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify Telemetry TwtAmp2FuncSts DEH17170		AND=ZAZ7M999
		Verify Telemetry TwtAmp2Use DEH19170		AND=ZAZ7M999
		Verify Telemetry TwtAmp2LogSts DEH18170		AND=ZAZ7M999
		Verify Telemetry TwtAmp2FailSts DEH16170		AND=ZAZ7M999
6		<i>Increase TM bit rate to 5Kbps Is Tx1 or Tx2 switch ON?</i>		Next Step: Tx1 is On 7 Tx2 is On 8
7		<i>Configure Tx1 and TM encoder in use configuration for LR2</i>		Next Step: 9
		Execute Procedure: H_CRP_TTC_T1L2 Tx1 and TM encoder in use configuration for LR2		
8		<i>Configure Tx2 and TM encoder in use configuration for LR2 Tx2 is On</i>		Next Step: 9
		Execute Procedure: H_CRP_TTC_T2L2 Tx2 and TM encoder in use configuration for LR2		
9		<i>Verify that the generation of all the CDMS HK packets and CCU periodic HK packets has been enabled</i>		Next Step: 10
9.1		<i>Send TC(14,3) to report the enabled Telemetry</i>		□
		When this request is received, the enabled telemetry source packet of the CDMU are determined and a report (14,4) is generated.		
		Execute Telecommand ReportEnabledTm <i>TC Control Flags :</i> GBM IL DSE --Y -- --- <i>Subsch. ID : 10</i> <i>Det. descr. : Report Enabled Telemetry Packets</i>	DC904180	

Configuration check after Ground timeout procedure
 File: H_CRP_TTC_60R.xls
 Author: E. Picallo



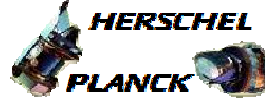
Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
9.2		Verify that TM(14,4) has been received		<input type="checkbox"/>
		The following HK have to be enabled: - CDMS: packet IDs 0x0 (High Rate), 0x8 (Low Rate), 0x40 (P1), 0x41 (P4), 0x42 (P64); - CCU: packet IDs 0x44 (CCU A Monit #1), 0x47 (CCU B Monit #1).		
		Verify Packet Reception TM Packet Generation Status Report Packet Details: APID: 16 Type: 14 Subtype: 4 PI1: PI2:	TmpktGenRep	
		Verify Packet Telemetry N DE140180		
		The following 3 parameters are repeated N times:		
		Verify Packet Telemetry Type DE141180		
		Verify Packet Telemetry Sub-Type DE142180		
		Verify Packet Telemetry Packet-ID DE143180		
10		Verify the downlink/storage status for all TM packets		Next Step: 11
10.1		Send TC(14,6) to report the downlink Telemetry and SSMM Storage		<input type="checkbox"/>
		When CDMU receives this request, the real time down-linking and SSMM storage status are determined for all telemetry packet {Application ID, Type, Sub-Type} and a report (14,7) is generated.		
		Execute Telecommand RepDownlinkTMStorage TC Control Flags : GBM IL DSE --Y -- -- Subsch. ID : 10 Det. descr. : Report Telemetry Packets Down-linking/ Storage Status	DC141160	

Configuration check after Ground timeout procedure
 File: H_CRP_TTC_60R.xls
 Author: E. Picallo



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
10.2		Verify that TM(14,7) has been received		<input type="checkbox"/>
		Verify Packet Reception Telemetry Packets DownLinking-Storage Status Report Packet Details: <div style="text-align: right;"> APID: 16 Type: 14 Subtype: 7 PI1: PI2: </div>	(14,7)-1400	
		Verify Packet Telemetry <div style="text-align: right;"> N DE042160 </div>		
		The following 5 parameters are repeated N times:		
		Verify Packet Telemetry <div style="text-align: right;"> APID DE047160 </div>		
		Verify Packet Telemetry <div style="text-align: right;"> Type DE043160 </div>		
		Verify Packet Telemetry <div style="text-align: right;"> Sub-Type DE046160 </div>		
		Verify Packet Telemetry <div style="text-align: right;"> Transmit_Flag DE048160 </div>		
		Verify Packet Telemetry <div style="text-align: right;"> Storage_Flag DE049160 </div>		
11		Check the Monitoring Table		Next Step: 12
		verify in the report: - MOT entry ID 0 (60 hours LOS entry) is re-enabled; - MOTentries IDs 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 76, 77, 96 and 97 (RFDN SWs and TTC related entries)		
		Execute Telecommand <div style="text-align: right;"> ReportMonitList </div> TC Control Flags : <div style="text-align: right;"> GBM IL DSE --Y -- --- </div> Subsch. ID : 10 Det. descr. : TEMPLATE Report current monitoring list, TC(12,8) no appl. data	DC51F170	
12		Check the Event Action Table		Next Step: 13
		Verify in the report that: - EAT entry ID (hex) 8888 (60 hours LOS entry) is re-enabled; - EATentries IDs (hex) 9218, 9219, 9228, 9229, 921A, 921B, 9200, 9201, 9202, 9203, 9204, 9205, 9206, 9207, 00A0 and 00A1 (RFDN SWs and TTC related entries) are disabled.		

Configuration check after Ground timeout procedure
 File: H_CRP_TTC_60R.xls
 Author: E. Picallo



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Execute Telecommand <p style="text-align: right;">ReptEvtActTable</p> <i>TC Control Flags :</i> <p style="text-align: right;">GBM IL DSE --Y -- --</p> <i>Subsch. ID : 10</i> Det. descr. : TEMPLATE Report The contents of the event/action table TC(19,6)	DCT86170	
13		<i>Modify current TTC configuration (yes/no)?</i> For ranging purpose, receiver and transmitter used have to be on the same transponder. Thus in case the Tx and Rx used are on different transponders is necessary to align the TTC configuration.		Next Step: no END yes 14
14		<i>Call procedure to change the TTC configuration</i> Execute Procedure: H_CRP_TTC_60RB Alignment of TTC configuration		Next Step: END
End of Procedure				