

Update CDMU SGM ground image from memory dump  
 File: H\_FCP\_OBS\_1449.xls  
 Author: Liviu Stefanov



## Procedure Summary

### Objectives

This Herschel OBSM nominal procedure is used to perform the dump of the CDMU SGM memory areas and the update of the corresponding ground image. The memory dump is commanded using TC(6,5) and the memory locations content is received on ground in TM(6,6) packets.

The procedures covers both CDMU SGM A and SGM B.

The procedure assumes that the command stack has already been generated using the OBSM system and is ready for loading on the Manual Stack. The command stack generation activity is not covered by this procedure.

### Summary of Constraints

CDMU in Operational Mode

Memory areas are dumped through TC(6,5); this TC will be delayed when there is an ongoing:

- TC(6,2) Load Memory Using Absolute Addresses
- TC(6,5) Dump Memory Using Absolute Addresses
- TC(6,9) Check Memory Using Absolute Addresses
- TC(8,4,1,1) Copy Memory

### Spacecraft Configuration

**Start of Procedure**

CDMU in Operational Mode

**End of Procedure**

Same as start

### Reference File(s)

**Input Command Sequences**

**Output Command Sequences**

OFCP144A  
 OFCP144C

### Referenced Displays

ANDs      GRDs      SLDs

### Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
18/02/08	1	1	Created	Istefanov-hp	
30/12/08		2	1. updated TC Seq. names and descriptions 2. current steps 4 and 14 updated: separate sub-steps created for BSW WP, ASW WP, BSW NP and ASW NP dump command stacks manipulation	Istefanov-hp	

Update CDMU SGM ground image from memory dump  
 File: H\_FCP\_OBS\_1449.xls  
 Author: Liviu Stefanov

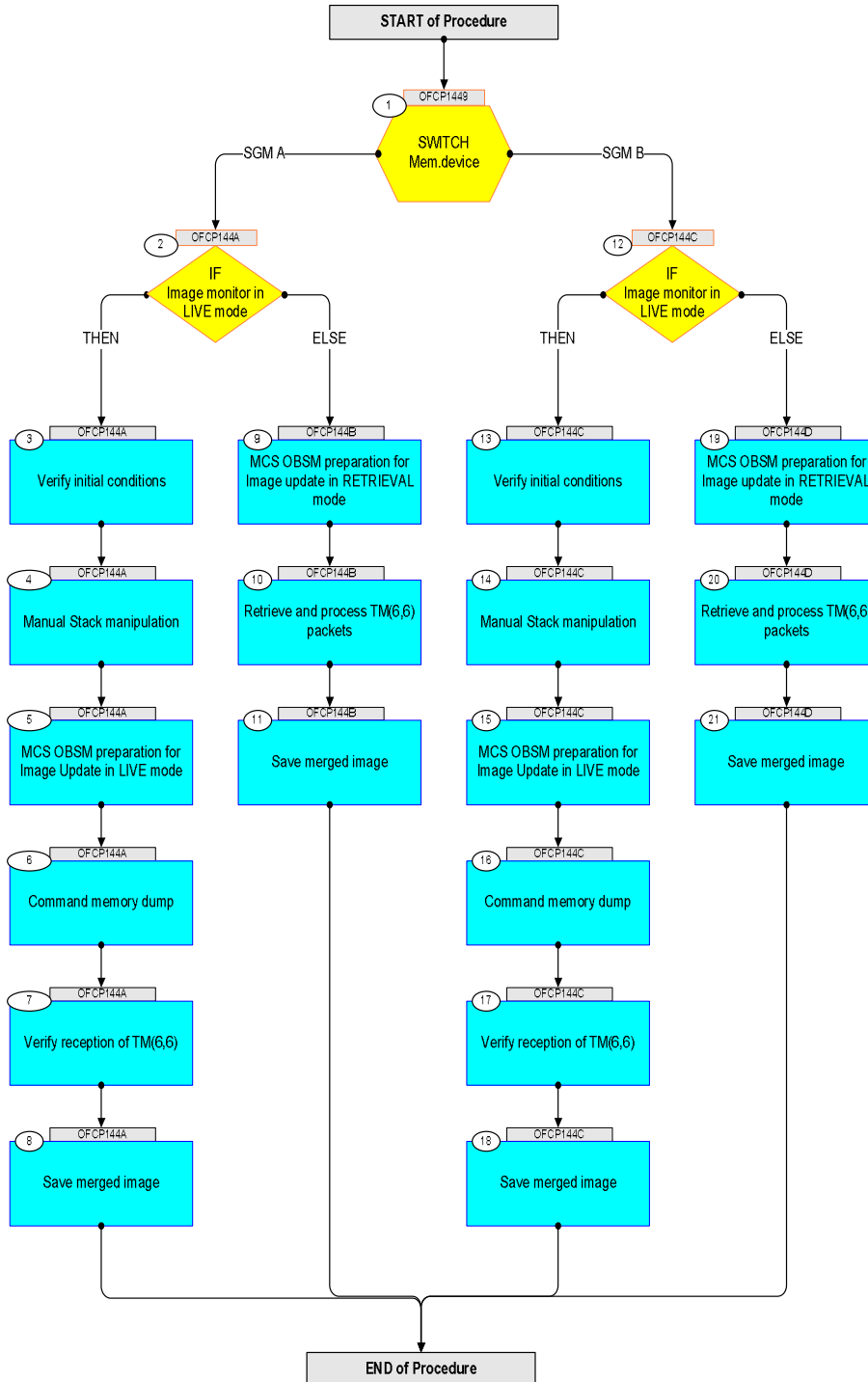


29/01/09	2	3	1. step 4 and sub-steps updated: addresses updated to include the SGMA Memory ID 2. step 14 and sub-steps updated: addresses updated to include the SGMB Memory ID	lstefanov-hp	
----------	---	---	---	--------------	--

Update CDMU SGM ground image from memory dump  
 File: H\_FCP\_OBS\_1449.xls  
 Author: lstefanov-hp



## Procedure Flowchart Overview



Update CDMU SGM ground image from memory dump File: H_FCP_OBS_1449.xls Author: lstefanov-hp	 
---	--

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
<b>Beginning of Procedure</b>					
OFCP1449		TC Seq. Name : OFCP1449 ( CDMU SGM GI update ) CDMU SGM A or B Gnd image update  TimeTag Type: Sub Schedule ID:  <input type="checkbox"/>			
1		SWITCH Mem.device  type: [Switch]		Next Step: SGM B 12 SGM A 2	
End of Sequence					
OFCP144A		TC Seq. Name : OFCP144A ( CDMU SGM A Dmp A ) CDMU SGM A Gnd image update in Live mode  TimeTag Type: B Sub Schedule ID:  <input type="checkbox"/>			
2		IF Image monitor in LIVE mode  type: [If]		Next Step: THEN 3 ELSE 9	
3		Verify initial conditions		Next Step: 4	
		Check: - CDMU in Operational Mode			
		CDMS SOE to confirm CDMU mode			
4		Manual Stack manipulation		Next Step: 5	
		<b>IMPORTANT:</b> - On each SGM A and B, the memory <b>area</b> is split in <b>two parts</b> where the <b>first part</b> is <b>write protected</b> and <b>second part</b> is <b>unprotected</b> . - <b>Each</b> protected and unprotected area is divided into <b>one part</b> allocated to the <b>ASW</b> and <b>one part</b> allocated to the <b>BSW</b>			
		The allocation of the 4 SGM memory areas - BSW Write Protected - ASW Write Protected - BSW Not Protected - ASW Not Protected is defined through HPSDB parameters:  <b>SGM_ASW_BEG_P_ADDR</b> Start address of the protected part of the ASW SGM, byte offset within SGM  <b>SGM_BSW_BEG_ADDR</b> Start address of the non protected BSW part of the SGM, byte offset within SGM  <b>SGM_ASW_BEG_ADDR_VALUE</b> Start address of the non protected part of the ASW SGM, byte offset within SGM			

Update CDMU SGM ground image from memory dump  
 File: H\_FCP\_OBS\_1449.xls  
 Author: lstefanov-hp



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
		For CDMU ASW v.3.8.0 and BSW v.2.2:  SGM_ASW_BEG_P_ADDR = 80 hex SGM_BSW_BEG_ADDR = 40000 hex SGM_ASW_BEG_ADDR_VALUE = 86100 hex			
		For CDMU ASW v.3.8.0 and BSW v.2.2, the definitions of the 4 SGM A memory areas are (Memory ID = 00B hex included):  SGM BSW WP Start Address = 00B0.0000 hex Length = 80 hex  SGM ASW WP Start Address = 00B0.0080 hex Length = 3FF80 hex			
		SGM BSW NP Start Address = 00B4.0000 hex Length = 46100 hex  SGM ASW NP Start Address = 00B8.6100 hex Length = 39F00 hex			
		<b>IMPORTANT:</b> All accesses to SGM memory must be 32-bit transfers, aligned to 32-bit boundaries.			
		<b>Note:</b> Following steps assume that separate OBSM Configuration Tables are used for the 4 SGM memory areas, thus obtaining 4 separate OBSM generated command stacks. If the command stack is generated using the "Dump Regions" functionality, a single stack is produced by OBSM for the whole SGM.			
4.1		Load command stack file for SGM A BSW Write Protected part on top of Manual Stack			
		<b>NOTE:</b> The current procedure assumes that the memory dump in Live mode is performed using commands with immediate execution.			
		Select the File -> <b>LoadStack</b> option from the main menu of the Manual Stack window			
		Select file  <b>CSGMAMEM_DI_XXXXYYY_N_NoModel_NoModel_YYYY_DDDThhmmss.machine</b>  from directory  <a href="/home/hmcsops/HPMCS/SESSION/current/data/CMD/STACKS/OBSM/CSGMAMEM">/home/hmcsops/HPMCS/SESSION/current/data/CMD/STACKS/OBSM/CSGMAMEM</a>  as indicated by the OBSM engineer			
		<b>IMPORTANT:</b>  <b>XXXXYYY</b> = Image ID(X) and Version(Y) - depend on image used for stack generation  <b>YYYY_DDD hhmmss</b> - depend on stack generation time  <b>machine</b> - depends on the name of the machine used for stack generation			

Update CDMU SGM ground image from memory dump  
 File: H\_FCP\_OBS\_1449.xls  
 Author: lstefanov-hp




Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment													
		File name <b>examples</b>  - No model associated to the memory image:  CSGMAMEM_DI_0002001_N_NoModel_NoModel_2007_254T123300.sun043  - CT CSGMAMEM1, ID 0003, Version 001 associated to the memory image:  CSGMAMEM_DI_0002001_C_CSGMAMEM1_0003001_2007_337T093320.sun043																
4.2		Check memory dump command stack loaded																
		For a <b>full</b> CDMU SGM BSW WP area <b>dump</b> (Memory ID = <b>00B hex</b> included):  <b>Start Address</b> = 00B0.0000 hex <b>End Address</b> = 00B0.007F hex <b>Length</b> = 80 hex																
		Check that loaded stack contains: 1 TC DC602180																
		Display the Manual Stack in 'Full mode' and check the <b>Memory ID, Start Address</b> and <b>Length</b> parameters in the DC602180 command:  <b>Memory ID</b> = 00B hex <b>Start Address</b> = 0.0000 hex <b>Length</b> = 80 hex  <b>Note:</b> The Memory ID of the target memory device is stored in the MS 12 bits of the 16-bit long Mem ID TM parameter. The LS 4 bits of the same parameter carry the most significant 4 bits of the Start Address.																
		Execute Telecommand  <div style="text-align: right;"><b>DumpMem_AbsAddr</b></div> <div style="text-align: center;"><b>DC602180</b></div> Command Parameter(s) : <table style="margin-left: 100px;"> <tr> <td><b>Memory_ID</b></td> <td>DH003180</td> <td>00B0 &lt;hex&gt;</td> </tr> <tr> <td><b>Start_Address</b></td> <td>DH004180</td> <td>0000 &lt;hex&gt;</td> </tr> <tr> <td><b>N</b></td> <td>DH105180</td> <td>80 &lt;hex&gt;</td> </tr> </table> TC Control Flags : <table style="margin-left: 100px;"> <tr> <td><b>GBM IL DSE</b></td> <td></td> </tr> <tr> <td>--Y --</td> <td>---</td> </tr> </table> Subsch. ID : 10 Det. descr. : Dump Memory Using Absolute Addresses This Telecommand will not be included in the export	<b>Memory_ID</b>	DH003180	00B0 <hex>	<b>Start_Address</b>	DH004180	0000 <hex>	<b>N</b>	DH105180	80 <hex>	<b>GBM IL DSE</b>		--Y --	---		TC	
<b>Memory_ID</b>	DH003180	00B0 <hex>																
<b>Start_Address</b>	DH004180	0000 <hex>																
<b>N</b>	DH105180	80 <hex>																
<b>GBM IL DSE</b>																		
--Y --	---																	
4.3		Load command stack file for SGM A ASW Write Protected part on top of Manual Stack																
		<b>NOTE:</b> The current procedure assumes that the memory dump in Live mode is performed using commands with immediate execution.																
		Select the File -> <b>LoadStack</b> option from the main menu of the Manual Stack window																

Update CDMU SGM ground image from memory dump  
 File: H\_FCP\_OBS\_1449.xls  
 Author: lstefanov-hp




Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
		Select file  <b>CSGMAMEM_DI_XXXXYYY_N_NoModel_NoModel_YYYY_DDDThhmmss.machine</b>  from directory  /home/hmcsops/HPMCS/SESSION/current/data/CMD/STACKS/OBSM/CSGMAMEM  as indicated by the OBSM engineer			
		IMPORTANT:  <b>XXXXYYY</b> = Image ID(X) and Version(Y) - depend on image used for stack generation  <b>YYYY_DDD hhmmss</b> - depend on stack generation time  <b>machine</b> - depends on the name of the machine used for stack generation			
		File name <b>examples</b>  - No model associated to the memory image: CSGMAMEM_DI_0002001_N_NoModel_NoModel_2007_254T123300.sun043  - CT CSGMAMEM1, ID 0003, Version 001 associated to the memory image: CSGMAMEM_DI_0002001_C_CSGMAMEM1_0003001_2007_337T093320.sun043			
4.4		Check memory dump command stack loaded			
		For a <b>full</b> CDMU SGM ASW WP area <b>dump</b> (Memory ID = <b>00B hex</b> included):  <b>Start Address</b> = <b>00B0.0080 hex</b> <b>End Address</b> = <b>00B3.FFFF hex</b> <b>Length</b> = <b>3FF80 hex</b>			
4.4.1		Check number of memory dump commands in the stack			
		Check that loaded stack contains: <b>4 TCs DC602180</b>			
4.4.2		Check Memory ID			
		Display the Manual Stack in 'Full mode' and check that the <b>Memory ID</b> parameter in the DC602180 command(s) is set to <b>00B hex</b> :  <b>Memory ID = 00B hex</b>  <b>Note:</b> The Memory ID of the target memory device is stored in the MS 12 bits of the 16-bit long Mem ID TM parameter. The LS 4 bits of the same parameter carry the most significant 4 bits of the Start Address.			

Update CDMU SGM ground image from memory dump  
 File: H\_FCP\_OBS\_1449.xls  
 Author: lstefanov-hp



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
		Execute Telecommand <p style="text-align: right;">DumpMem_AbsAddr</p> <p style="text-align: right;">DC602180</p> Command Parameter(s) : Memory_ID          DH003180    00Bx <hex> Start_Address      DH004180    <hex> (Def) N          DH105180    <hex> (Def)  TC Control Flags : GBM IL DSE --Y -- ---  Subsch. ID : 10 Det. descr. : Dump Memory Using Absolute Addresses This Telecommand will not be included in the export		TC	
4.4.3		Check start address and length of the first dump command in the stack			
		With the Manual Stack in 'Full mode', check the <b>Start Address</b> and <b>Length</b> in the first DC602180 command (Memory ID = 00B hex included):  <b>Start Address = 00B0.0080 hex</b> <b>Length = FFFC hex</b>  <b>Note:</b> The Memory ID of the target memory device is stored in the MS 12 bits of the 16-bit long Mem ID TM parameter. The LS 4 bits of the same parameter carry the most significant 4 bits of the Start Address.			
		Execute Telecommand <p style="text-align: right;">DumpMem_AbsAddr</p> <p style="text-align: right;">DC602180</p> Command Parameter(s) : Memory_ID          DH003180    00B0 <hex> Start_Address      DH004180    0080 <hex> N          DH105180    FFFC <hex>  TC Control Flags : GBM IL DSE --Y -- ---  Subsch. ID : 10 Det. descr. : Dump Memory Using Absolute Addresses This Telecommand will not be included in the export		TC	
4.4.4		Check start address and length of the last dump command in the stack			
		With the Manual Stack in 'Full mode', check the <b>Start Address</b> and <b>Length</b> in the last DC602180 command (Memory ID = 00B hex included):  <b>Start Address = 00B3.0074 hex</b> <b>Length = FF8C hex</b>  <b>Note:</b> The Memory ID of the target memory device is stored in the MS 12 bits of the 16-bit long Mem ID TM parameter. The LS 4 bits of the same parameter carry the most significant 4 bits of the Start Address.			



Update CDMU SGM ground image from memory dump  
 File: H\_FCP\_OBS\_1449.xls  
 Author: lstefanov-hp



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
		Execute Telecommand <p style="text-align: right;">DumpMem_AbsAddr</p> <p style="text-align: right;">DC602180</p> Command Parameter(s) : Memory_ID      DH003180    00B3 <hex> Start_Address  DH004180    0074 <hex> N          DH105180    FF8C <hex>  TC Control Flags : GBM IL DSE --Y -- ---  Subsch. ID : 10 Det. descr. : Dump Memory Using Absolute Addresses This Telecommand will not be included in the export		TC	
4.5		Load command stack file for SGM A BSW Not Protected part on top of Manual Stack  <b>NOTE:</b> The current procedure assumes that the memory dump in Live mode is performed using commands with immediate execution.  Select the File -> <b>LoadStack</b> option from the main menu of the Manual Stack window  Select file  <b>CSGMAMEM_DI_XXXXYYY_N_NoModel_NoModel_YYYY_DDDThmmss.machine</b>  from directory  <a href="#">/home/hmcsops/HPMCS/SESSION/current/data/CMD/STACKS/OBSM/CSGMAMEM</a>  as indicated by the OBSM engineer			
		<b>IMPORTANT:</b>  <b>XXXXYYY</b> = Image ID(X) and Version(Y) - depend on image used for stack generation  <b>YYYY_DDD hhmss</b> - depend on stack generation time  <b>machine</b> - depends on the name of the machine used for stack generation			
		File name <b>examples</b>  - No model associated to the memory image:  CSGMAMEM_DI_0002001_N_NoModel_NoModel_2007_254T123300.sun043  - CT CSGMAMEM1, ID 0003, Version 001 associated to the memory image:  CSGMAMEM_DI_0002001_C_CSGMAMEM1_0003001_2007_337T093320.sun043			
4.6		Check memory dump command stack loaded  For a <b>full</b> CDMU SGM BSW NP area <b>dump</b> (Memory ID = 00B hex included):  <b>Start Address = 00B4.0000 hex</b> <b>End Address = 00B8.60FF hex</b> <b>Length = 46100 hex</b>			

Update CDMU SGM ground image from memory dump File: H_FCP_OBS_1449.xls Author: lstefanov-hp	
---	--

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment											
4.6.1		Check number of memory dump commands in the stack														
		Check that loaded stack contains: 5 TCs DC602180														
4.6.2		Check Memory ID														
		<p>Display the Manual Stack in 'Full mode' and check that the <b>Memory ID</b> parameter in the DC602180 command(s) is set to <b>00B hex</b>:</p> <p><b>Memory ID = 00B hex</b></p> <p><b>Note:</b> The Memory ID of the target memory device is stored in the MS 12 bits of the 16-bit long Mem ID TM parameter. The LS 4 bits of the same parameter carry the most significant 4 bits of the Start Address.</p>														
		<p>Execute Telecommand</p> <p style="text-align: right;"><b>DumpMem_AbsAddr</b></p> <p style="text-align: right;"><b>DC602180</b></p> <p>Command Parameter(s) :</p> <table style="width:100%; border: none;"> <tr> <td style="width:30%;"><b>Memory_ID</b></td> <td style="width:20%;">DH003180</td> <td style="width:10%;"><b>00Bx &lt;hex&gt;</b></td> </tr> <tr> <td><b>Start_Address</b></td> <td>DH004180</td> <td><b>&lt;hex&gt; (Def)</b></td> </tr> <tr> <td><b>N</b></td> <td>DH105180</td> <td><b>&lt;hex&gt; (Def)</b></td> </tr> </table> <p>TC Control Flags :</p> <table style="width:100%; border: none;"> <tr> <td style="width:30%;"><b>GBM IL DSE</b></td> <td style="width:10%;"><b>--Y --</b></td> </tr> </table> <p>Subsch. ID : 10          Det. descr. : Dump Memory Using Absolute Addresses          This Telecommand will not be included in the export</p>	<b>Memory_ID</b>	DH003180	<b>00Bx &lt;hex&gt;</b>	<b>Start_Address</b>	DH004180	<b>&lt;hex&gt; (Def)</b>	<b>N</b>	DH105180	<b>&lt;hex&gt; (Def)</b>	<b>GBM IL DSE</b>	<b>--Y --</b>	TC		
<b>Memory_ID</b>	DH003180	<b>00Bx &lt;hex&gt;</b>														
<b>Start_Address</b>	DH004180	<b>&lt;hex&gt; (Def)</b>														
<b>N</b>	DH105180	<b>&lt;hex&gt; (Def)</b>														
<b>GBM IL DSE</b>	<b>--Y --</b>															
4.6.3		Check start address and length of the first dump command in the stack														
		<p>With the Manual Stack in 'Full mode', check the <b>Start Address</b> and <b>Length</b> in the first DC602180 command (<b>Memory ID = 00B hex</b> included):</p> <p><b>Start Address = 00B4.0000 hex</b>  <b>Length = FFFC hex</b></p> <p><b>Note:</b> The Memory ID of the target memory device is stored in the MS 12 bits of the 16-bit long Mem ID TM parameter. The LS 4 bits of the same parameter carry the most significant 4 bits of the Start Address.</p>														

Update CDMU SGM ground image from memory dump  
 File: H\_FCP\_OBS\_1449.xls  
 Author: lstefanov-hp



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
		Execute Telecommand <p style="text-align: right;">DumpMem_AbsAddr</p> <p style="text-align: right;">DC602180</p> Command Parameter(s) : Memory_ID          DH003180    00B4 <hex> Start_Address      DH004180    0000 <hex> N          DH105180    FFFC <hex>  TC Control Flags : GBM IL DSE --Y -- ---  Subsch. ID : 10 Det. descr. : Dump Memory Using Absolute Addresses This Telecommand will not be included in the export		TC	
4.6.4		Check start address and length of the last dump command in the stack			
		With the Manual Stack in 'Full mode', check the <b>Start Address</b> and <b>Length</b> in the last DC602180 command (Memory ID = 00B hex included):  <b>Start Address = 00B7.FFF0 hex</b> <b>Length = 6110 hex</b>  <b>Note:</b> The Memory ID of the target memory device is stored in the MS 12 bits of the 16-bit long Mem ID TM parameter. The LS 4 bits of the same parameter carry the most significant 4 bits of the Start Address.			
		Execute Telecommand <p style="text-align: right;">DumpMem_AbsAddr</p> <p style="text-align: right;">DC602180</p> Command Parameter(s) : Memory_ID          DH003180    00B7 <hex> Start_Address      DH004180    FFF0 <hex> N          DH105180    6110 <hex>  TC Control Flags : GBM IL DSE --Y -- ---  Subsch. ID : 10 Det. descr. : Dump Memory Using Absolute Addresses This Telecommand will not be included in the export		TC	
4.7		Load command stack file for SGM A ASW Not Protected part on top of Manual Stack			
		<b>NOTE:</b> The current procedure assumes that the memory dump in Live mode is performed using commands with immediate execution.			
		Select the File -> <b>LoadStack</b> option from the main menu of the Manual Stack window			
		Select file  <b>CSGMAMEM_DI_XXXXYYY_N_NoModel_NoModel_YYYY_DDDThmmss.machine</b>  from directory  <a href="/home/hmcsops/HPMCS/SESSION/current/data/CMD/STACKS/OBSM/CSGMAMEM">/home/hmcsops/HPMCS/SESSION/current/data/CMD/STACKS/OBSM/CSGMAMEM</a>  as indicated by the OBSM engineer			

Update CDMU SGM ground image from memory dump File: H_FCP_OBS_1449.xls Author: lstefanov-hp	
---	--

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
		IMPORTANT:  <b>XXXXYYYY</b> = Image ID(X) and Version(Y) - depend on image used for stack generation  <b>YYYY_DDD hhmmss</b> - depend on stack generation time  <b>machine</b> - depends on the name of the machine used for stack generation			
		File name <b>examples</b>  - No model associated to the memory image:  CSGMAMEM_DI_0002001_N_NoModel_NoModel_2007_254T123300.sun043  - CT CSGMAMEM1, ID 0003, Version 001 associated to the memory image:  CSGMAMEM_DI_0002001_C_CSGMAMEM1_0003001_2007_337T093320.sun043			
4.8		Check memory dump command stack loaded			
		For a <b>full</b> CDMU SGM ASW NP area <b>dump</b> (Memory ID = <b>00B hex</b> included):  <b>Start Address</b> = 00B8.6100 hex <b>End Address</b> = 00BB.FFFF hex <b>Length</b> = 39F00 hex			
4.8.1		Check number of memory dump commands in the stack			
		Check that loaded stack contains: <b>4 TCs DC602180</b>			
4.8.2		Check Memory ID			
		Display the Manual Stack in 'Full mode' and check that the <b>Memory ID</b> parameter in the DC602180 command(s) is set to <b>00B hex</b> :  <b>Memory ID = 00B hex</b>  <b>Note:</b> The Memory ID of the target memory device is stored in the MS 12 bits of the 16-bit long Mem ID TM parameter. The LS 4 bits of the same parameter carry the most significant 4 bits of the Start Address.			

Update CDMU SGM ground image from memory dump File: H_FCP_OBS_1449.xls Author: lstefanov-hp	
---	--

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
		Execute Telecommand <div style="text-align: right; margin-left: 100px;">DumpMem_AbsAddr</div> Command Parameter(s) : <div style="margin-left: 40px;">             Memory_ID           DH003180              Start_Address       DH004180                                N            DH105180           </div> TC Control Flags : <div style="margin-left: 100px;">GBM IL DSE --Y -- ---</div> Subsch. ID : 10 Det. descr. : Dump Memory Using Absolute Addresses This Telecommand will not be included in the export	DC602180	TC	
4.8.3		Check start address and length of the first dump command in the stack			
		With the Manual Stack in 'Full mode', check the <b>Start Address</b> and <b>Length</b> in the first DC602180 command (Memory ID = 00B hex included):  <b>Start Address = 00B8.6100 hex</b> <b>Length = FFFC hex</b>  <b>Note:</b> The Memory ID of the target memory device is stored in the MS 12 bits of the 16-bit long Mem ID TM parameter. The LS 4 bits of the same parameter carry the most significant 4 bits of the Start Address.			
		Execute Telecommand <div style="text-align: right; margin-left: 100px;">DumpMem_AbsAddr</div> Command Parameter(s) : <div style="margin-left: 40px;">             Memory_ID           DH003180              Start_Address       DH004180                                N            DH105180           </div> TC Control Flags : <div style="margin-left: 100px;">GBM IL DSE --Y -- ---</div> Subsch. ID : 10 Det. descr. : Dump Memory Using Absolute Addresses This Telecommand will not be included in the export	DC602180	TC	
4.8.4		Check start address and length of the last dump command in the stack			
		With the Manual Stack in 'Full mode', check the <b>Start Address</b> and <b>Length</b> in the last DC602180 command (Memory ID = 00B hex included):  <b>Start Address = 00BB.60F4 hex</b> <b>Length = 9F0C hex</b>  <b>Note:</b> The Memory ID of the target memory device is stored in the MS 12 bits of the 16-bit long Mem ID TM parameter. The LS 4 bits of the same parameter carry the most significant 4 bits of the Start Address.			

Update CDMU SGM ground image from memory dump File: H_FCP_OBS_1449.xls Author: lstefanov-hp	
---	--

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
		Execute Telecommand <p style="text-align: right; margin-right: 100px;">DumpMem_AbsAddr</p> <p style="margin-right: 100px;">DC602180</p> Command Parameter(s) : Memory_ID          DH003180    00BB <hex> Start_Address     DH004180    60F4 <hex> N          DH105180    9F0C <hex>  TC Control Flags : GBM IL DSE --Y -- ---  Subsch. ID : 10 Det. descr. : Dump Memory Using Absolute Addresses This Telecommand will not be included in the export		TC	
5		MCS OBSM preparation for Image Update in LIVE mode		Next Step: 6	
		<b>Note:</b> It is assumed that the OBSM application is already running and the OBSM Desktop is displayed on the MCS client. Starting the OBSM application is not covered by the current procedure.			
5.1		Select 'Image UPDATE' from the menu			
		Select the <b>Image</b> menu of the <b>OBSM Desktop</b> .  From the Image menu, select <b>Update</b> .  The 'Image Catalog' window opens.			
5.2		Select image to be updated			
		Select the image to be updated for the memory device <b>CSGMAMEM</b> .  The 'Image UPDATE' window opens.			
5.3		Start dump TM processing			
		In <b>LIVE</b> mode, processing of incoming real-time telemetry starts automatically after the image selection.			
6		Command memory dump		Next Step: 7	
		<b>Uplink</b> the <b>DC602180</b> memory dump commands with <b>ARM-GO</b>			
		For each command, one or more TM(6,6) packets must be received on ground.			

Update CDMU SGM ground image from memory dump File: H_FCP_OBS_1449.xls Author: lstefanov-hp	
---	--

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
7		Verify reception of TM(6,6)		Next Step: 8	
		<b>Note:</b> One or more TM(6,6) packets will be received for each memory dump command uplinked.			
		Verify Packet Reception  Memory Dump - Absolute Addresses - SAU 8 Packet Mnemonic : MemDmpAbsAdd APID : 16 Type : 6 Subtype : 6 PI1 : PI2 :			
7.1		Check OBSM dump packet processing			
		Check that the OBSM is processing the incoming memory dump packets.			
8		Save merged image		Next Step: END	
		Save merged image with <b>new ID</b> .			
End of Sequence TC Seq. Name : OFCP144B ( CDMU SGM A Dmp B ) CDMU SGM A Gnd image update in Retrieval mode  TimeTag Type: Sub Schedule ID:  <input type="checkbox"/>					
9		MCS OBSM preparation for Image update in RETRIEVAL mode		Next Step: 10	
		<b>Note:</b> It is assumed that the OBSM application is already running and the OBSM Desktop is displayed on the MCS client. Starting the OBSM application is not covered by the current procedure.			
9.1		Select 'Image UPDATE' from the menu			
		Select the <b>Image</b> menu of the <i>OBSM Desktop</i> .  From the Image menu, select <b>Update</b> .  The 'Image Catalog' window opens.			

Update CDMU SGM ground image from memory dump File: H_FCP_OBS_1449.xls Author: lstefanov-hp	
---	--

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
9.2		Select image to be updated			
		Select the image to be updated for the memory device <b>CSGMAMEM</b> .  The 'Image UPDATE' window opens.			
9.3		Start dump TM packets processing			
		Set <b>retrieval start</b> and <b>stop time</b> and start retrieval of TM packets using the <b>PLAY buttons</b> .			
10		Retrieve and process TM(6,6) packets		Next Step: 11	
		Use the <b>STEP</b> button to retrieve and process the TM(6,6) packets, packet by packet and starting from the time shown in the packet time field.			
		OR			
		Use the <b>PLAY</b> button to retrieve and process the TM(6,6) packets in automated mode.  Pressing the PLAY button, the display will start to retrieve and process packets, starting from the time shown in the packet time field. This processing will stop automatically when a packet is received which creation time is greater than the one contained in the end time field.			
10.1		Check OBSM dump packet processing			
		Check that the OBSM is processing the retrieved memory dump packets.			
11		Save merged image		Next Step: END	
		Save merged image with <b>new ID</b> .			
End of Sequence					
<b>OFCP144C</b> <i>TC Seq. Name : OFCP144C ( CDMU SGM B Dmp C )</i> <i>CDMU SGM B Gnd image update in Live mode</i>  <i>TimeTag Type: B</i> <i>Sub Schedule ID:</i>  <input type="checkbox"/>					
12		IF Image monitor in LIVE mode  type: [If]		Next Step: ELSE 19 THEN 13	



Update CDMU SGM ground image from memory dump File: H_FCP_OBS_1449.xls Author: lstefanov-hp	
---	--

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
13		Verify initial conditions		Next Step: 14	
		Check: - CDMU in Operational Mode			
		CDMS SOE to confirm CDMU mode			
14		Manual Stack manipulation		Next Step: 15	
		<b>IMPORTANT:</b> - On each SGM A and B, the memory area is split in two parts where the first part is write protected and second part is unprotected. - Each protected and unprotected area is divided into one part allocated to the ASW and one part allocated to the BSW			
		The allocation of the 4 SGM memory areas - BSW Write Protected - ASW Write Protected - BSW Not Protected - ASW Not Protected is defined through HPSDB parameters:  <b>SGM_ASW_BEG_P_ADDR</b> Start address of the protected part of the ASW SGM, byte offset within SGM  <b>SGM_BSW_BEG_ADDR</b> Start address of the non protected BSW part of the SGM, byte offset within SGM  <b>SGM_ASW_BEG_ADDR_VALUE</b> Start address of the non protected part of the ASW SGM, byte offset within SGM			
		For CDMU ASW v.3.8.0 and BSW v.2.2:  <b>SGM_ASW_BEG_P_ADDR</b> = 80 hex <b>SGM_BSW_BEG_ADDR</b> = 40000 hex <b>SGM_ASW_BEG_ADDR_VALUE</b> = 86100 hex			
		For CDMU ASW v.3.8.0 and BSW v.2.2, the definitions of the 4 SGM B memory areas are (Memory ID = 00E hex included):  <b>SGM BSW WP</b> Start Address = 00E0.0000 hex Length = 80 hex  <b>SGM ASW WP</b> Start Address = 00E0.0080 hex Length = 3FF80 hex			
		<b>SGM BSW NP</b> Start Address = 00E4.0000 hex Length = 46100 hex  <b>SGM ASW NP</b> Start Address = 00E8.6100 hex Length = 39F00 hex			
		<b>IMPORTANT:</b> All accesses to SGM memory must be 32-bit transfers, aligned to 32-bit boundaries.			

Update CDMU SGM ground image from memory dump  
 File: H\_FCP\_OBS\_1449.xls  
 Author: lstefanov-hp



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
14.1		Load command stack file for SGM B BSW Write Protected part on top of Manual Stack			
		<b>NOTE:</b> The current procedure assumes that the memory dump in Live mode is performed using commands with immediate execution.			
		Select the File -> <b>LoadStack</b> option from the main menu of the Manual Stack window			
		Select file <b>CSGMBMEM_DI_XXXXYYY_N_NoModel_NoModel_YYYY_DDDThhmmss.machine</b> from directory <a href="#">/home/hmcsops/HPMCS/SESSION/current/data/CMD/STACKS/OBSM/CSGMBMEM</a> as indicated by the OBSM engineer			
		<b>IMPORTANT:</b> <b>XXXXYYY</b> = Image ID(X) and Version(Y) - depend on image used for stack generation <b>YYYY_DDD hhmmss</b> - depend on stack generation time <b>machine</b> - depends on the name of the machine used for stack generation			
		File name <b>examples</b> - No model associated to the memory image: CSGMBMEM_DI_0002001_N_NoModel_NoModel_2007_254T123300.sun043 - CT CSGMBMEM1, ID 0003, Version 001 associated to the memory image: CSGMBMEM_DI_0002001_C_CSGMBMEM1_0003001_2007_337T093320.sun043			
14.2		Check memory dump command stack loaded			
		For a <b>full</b> CDMU SGM BSW WP area <b>dump</b> (Memory ID = <b>00E hex</b> included):  <b>Start Address</b> = <b>00E0.0000 hex</b> <b>End Address</b> = <b>00E0.007F hex</b> <b>Length</b> = <b>80 hex</b>			
		Check that loaded stack contains: <b>1 TC DC602180</b>			

Update CDMU SGM ground image from memory dump File: H_FCP_OBS_1449.xls Author: lstefanov-hp	
---	--

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment													
		Display the Manual Stack in 'Full mode' and check the <b>Memory ID</b> , <b>Start Address</b> and <b>Length</b> parameters in the DC602180 command:  <b>Memory ID</b> = 00E hex <b>Start Address</b> = 0.0000 hex <b>Length</b> = 80 hex  <b>Note:</b> The Memory ID of the target memory device is stored in the MS 12 bits of the 16-bit long Mem ID TM parameter. The LS 4 bits of the same parameter carry the most significant 4 bits of the Start Address.																
		Execute Telecommand <div style="text-align: right; margin-right: 20px;"><b>DumpMem_AbsAddr</b></div> <b>DC602180</b>  <i>Command Parameter(s) :</i> <table style="width:100%; border: none;"> <tr> <td style="text-align: right; padding-right: 20px;"><b>Memory_ID</b></td> <td style="padding-right: 20px;">DH003180</td> <td>00E0 &lt;hex&gt;</td> </tr> <tr> <td style="text-align: right; padding-right: 20px;"><b>Start_Address</b></td> <td style="padding-right: 20px;">DH004180</td> <td>0000 &lt;hex&gt;</td> </tr> <tr> <td style="text-align: right; padding-right: 20px;"><b>N</b></td> <td style="padding-right: 20px;">DH105180</td> <td>80 &lt;hex&gt;</td> </tr> </table> <i>TC Control Flags :</i> <table style="width:100%; border: none;"> <tr> <td style="text-align: right; padding-right: 20px;"><b>GBM IL DSE</b></td> <td></td> </tr> <tr> <td style="text-align: right; padding-right: 20px;">--Y -- ---</td> <td></td> </tr> </table> <i>Subsch. ID : 10</i> Det. descr. : Dump Memory Using Absolute Addresses This Telecommand will not be included in the export	<b>Memory_ID</b>	DH003180	00E0 <hex>	<b>Start_Address</b>	DH004180	0000 <hex>	<b>N</b>	DH105180	80 <hex>	<b>GBM IL DSE</b>		--Y -- ---			TC	
<b>Memory_ID</b>	DH003180	00E0 <hex>																
<b>Start_Address</b>	DH004180	0000 <hex>																
<b>N</b>	DH105180	80 <hex>																
<b>GBM IL DSE</b>																		
--Y -- ---																		
14.3		Load command stack file for SGM B ASW Write Protected part on top of Manual Stack																
		<b>NOTE:</b> The current procedure assumes that the memory dump in Live mode is performed using commands with immediate execution.																
		Select the File -> <b>LoadStack</b> option from the main menu of the Manual Stack window																
		Select file  <b>CSGMBMEM_DI_XXXXYYY_N_NoModel_NoModel_YYYY_DDDThhmss.machine</b>  from directory  <a href="#">/home/hmcsops/HPMCS/SESSION/current/data/CMD/STACKS/OBSM/CSGMBMEM</a>  as indicated by the OBSM engineer																
		<b>IMPORTANT:</b>  <b>XXXXYYY</b> = Image ID(X) and Version(Y) - depend on image used for stack generation  <b>YYYY_DDD hhmss</b> - depend on stack generation time  <b>machine</b> - depends on the name of the machine used for stack generation																

Update CDMU SGM ground image from memory dump File: H_FCP_OBS_1449.xls Author: lstefanov-hp	
---	--

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
		File name <b>examples</b>  - No model associated to the memory image:  CSGMBMEM_DI_0002001_N_NoModel_NoModel_2007_254T123300.sun043  - CT CSGMBMEM1, ID 0003, Version 001 associated to the memory image:  CSGMBMEM_DI_0002001_C_CSGMBMEM1_0003001_2007_337T093320.sun043			
14.4		Check memory dump command stack loaded			
		For a <b>full</b> CDMU SGM ASW WP area <b>dump</b> (Memory ID = <b>00E hex</b> included):  <b>Start Address</b> = 00E0.0080 hex <b>End Address</b> = 00E3.FFFF hex <b>Length</b> = 3FF80 hex			
14.4.1		Check number of memory dump commands in the stack			
		Check that loaded stack contains: <b>4 TCs DC602180</b>			
14.4.2		Check Memory ID			
		Display the Manual Stack in 'Full mode' and check that the <b>Memory ID</b> parameter in the DC602180 command(s) is set to <b>00E hex</b> :  <b>Memory ID = 00E hex</b>  <b>Note:</b> The Memory ID of the target memory device is stored in the MS 12 bits of the 16-bit long Mem ID TM parameter. The LS 4 bits of the same parameter carry the most significant 4 bits of the Start Address.			
		Execute Telecommand  <div style="text-align: right; margin-right: 20px;"><b>DumpMem_AbsAddr</b></div> <div style="text-align: right; margin-right: 20px;"><b>DC602180</b></div> <b>Command Parameter(s) :</b> <div style="display: flex; justify-content: space-between; margin-left: 20px;"> <div style="width: 40%;"> <b>Memory_ID</b>  <b>Start_Address</b>  <b>N</b> </div> <div style="width: 30%;"> <b>DH003180</b>  <b>DH004180</b>  <b>DH105180</b> </div> <div style="width: 30%;"> <b>00Ex &lt;hex&gt;</b>  <b>&lt;hex&gt; (Def)</b>  <b>&lt;hex&gt; (Def)</b> </div> </div> <b>TC Control Flags :</b> <div style="display: flex; justify-content: space-between; margin-left: 20px;"> <div style="width: 40%;"> <b>GBM IL DSE</b>  <b>--Y -- ---</b> </div> </div> <b>Subsch. ID : 10</b> <b>Det. descr. : Dump Memory Using Absolute Addresses</b> <b>This Telecommand will not be included in the export</b>		TC	
14.4.3		Check start address and length of the first dump command in the stack			


Update CDMU SGM ground image from memory dump  
 File: H\_FCP\_OBS\_1449.xls  
 Author: lstefanov-hp



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment												
		<p>With the Manual Stack in 'Full mode', check the <b>Start Address</b> and <b>Length</b> in the first DC602180 command (Memory ID = 00E hex included):</p> <p><b>Start Address = 00E0.0080 hex</b>  <b>Length = FFFC hex</b></p> <p><b>Note:</b>            The Memory ID of the target memory device is stored in the MS 12 bits of the 16-bit long Mem ID TM parameter. The LS 4 bits of the same parameter carry the most significant 4 bits of the Start Address.</p>															
		<p>Execute Telecommand</p> <p style="text-align: right;"><b>DumpMem_AbsAddr</b></p> <p style="text-align: center;"><b>DC602180</b></p> <p>Command Parameter(s) :</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;"><b>Memory_ID</b></td> <td style="width: 20%;">DH003180</td> <td style="width: 20%;">00E0 &lt;hex&gt;</td> <td style="width: 30%;"></td> </tr> <tr> <td><b>Start_Address</b></td> <td>DH004180</td> <td>0080 &lt;hex&gt;</td> <td></td> </tr> <tr> <td><b>N</b></td> <td>DH105180</td> <td>FFFC &lt;hex&gt;</td> <td></td> </tr> </table> <p>TC Control Flags :</p> <p style="text-align: right;"><b>GBM IL DSE</b>  <b>--Y -- ---</b></p> <p>Subsch. ID : 10            Det. descr. : Dump Memory Using Absolute Addresses            This Telecommand will not be included in the export</p>	<b>Memory_ID</b>	DH003180	00E0 <hex>		<b>Start_Address</b>	DH004180	0080 <hex>		<b>N</b>	DH105180	FFFC <hex>			TC	
<b>Memory_ID</b>	DH003180	00E0 <hex>															
<b>Start_Address</b>	DH004180	0080 <hex>															
<b>N</b>	DH105180	FFFC <hex>															
14.4.4		<p>Check start address and length of the last dump command in the stack</p>															
		<p>With the Manual Stack in 'Full mode', check the <b>Start Address</b> and <b>Length</b> in the last DC602180 command (Memory ID = 00E hex included):</p> <p><b>Start Address = 00E0.0074 hex</b>  <b>Length = FF8C hex</b></p> <p><b>Note:</b>            The Memory ID of the target memory device is stored in the MS 12 bits of the 16-bit long Mem ID TM parameter. The LS 4 bits of the same parameter carry the most significant 4 bits of the Start Address.</p>															
		<p>Execute Telecommand</p> <p style="text-align: right;"><b>DumpMem_AbsAddr</b></p> <p style="text-align: center;"><b>DC602180</b></p> <p>Command Parameter(s) :</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;"><b>Memory_ID</b></td> <td style="width: 20%;">DH003180</td> <td style="width: 20%;">00E3 &lt;hex&gt;</td> <td style="width: 30%;"></td> </tr> <tr> <td><b>Start_Address</b></td> <td>DH004180</td> <td>0074 &lt;hex&gt;</td> <td></td> </tr> <tr> <td><b>N</b></td> <td>DH105180</td> <td>FF8C &lt;hex&gt;</td> <td></td> </tr> </table> <p>TC Control Flags :</p> <p style="text-align: right;"><b>GBM IL DSE</b>  <b>--Y -- ---</b></p> <p>Subsch. ID : 10            Det. descr. : Dump Memory Using Absolute Addresses            This Telecommand will not be included in the export</p>	<b>Memory_ID</b>	DH003180	00E3 <hex>		<b>Start_Address</b>	DH004180	0074 <hex>		<b>N</b>	DH105180	FF8C <hex>			TC	
<b>Memory_ID</b>	DH003180	00E3 <hex>															
<b>Start_Address</b>	DH004180	0074 <hex>															
<b>N</b>	DH105180	FF8C <hex>															
14.5		<p>Load command stack file for SGM B BSW Not Protected part on top of Manual Stack</p>															
		<p><b>NOTE:</b>            The current procedure assumes that the memory dump in Live mode is performed using commands with immediate execution.</p>															

Update CDMU SGM ground image from memory dump File: H_FCP_OBS_1449.xls Author: lstefanov-hp	 
---	--

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
		Select the File -> <b>LoadStack</b> option from the main menu of the Manual Stack window			
		Select file  <b>CSGMBMEM_DI_XXXXYYY_N_NoModel_NoModel_YYYY_DDDThhmss.machine</b>  from directory  <a href="#">/home/hmcsops/HPMCS/SESSION/current/data/CMD/STACKS/OBSM/CSGMBMEM</a>  as indicated by the OBSM engineer			
		IMPORTANT:  <b>XXXXYYY</b> = Image ID(X) and Version(Y) - depend on image used for stack generation  <b>YYYY_DDD hhmss</b> - depend on stack generation time  <b>machine</b> - depends on the name of the machine used for stack generation			
		File name <b>examples</b>  - No model associated to the memory image:  <b>CSGMBMEM_DI_0002001_N_NoModel_NoModel_2007_254T123300.sun043</b>  - CT CSGMBMEM1, ID 0003, Version 001 associated to the memory image:  <b>CSGMBMEM_DI_0002001_C_CSGMBMEM1_0003001_2007_337T093320.sun043</b>			
14.6		Check memory dump command stack loaded			
		For a <b>full</b> CDMU SGM BSW NP area <b>dump</b> (Memory ID = <b>00E hex</b> included):  <b>Start Address = 00E4.0000 hex</b> <b>End Address = 00E8.60FF hex</b> <b>Length = 46100 hex</b>			
14.6.1		Check number of memory dump commands in the stack			
		Check that loaded stack contains: <b>5 TCs DC602180</b>			
14.6.2		Check Memory ID			

Update CDMU SGM ground image from memory dump File: H_FCP_OBS_1449.xls Author: lstefanov-hp	
---	--

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment											
		Display the Manual Stack in 'Full mode' and check that the <b>Memory ID</b> parameter in the DC602180 command(s) is set to <b>00E hex</b> :  <b>Memory ID = 00E hex</b>  <b>Note:</b> The Memory ID of the target memory device is stored in the MS 12 bits of the 16-bit long Mem ID TM parameter. The LS 4 bits of the same parameter carry the most significant 4 bits of the Start Address.														
		Execute Telecommand <div style="text-align: right; margin-right: 20px;"><b>DumpMem_AbsAddr</b></div> <div style="text-align: right; margin-right: 20px;"><b>DC602180</b></div> <i>Command Parameter(s) :</i> <table style="width:100%; border: none;"> <tr> <td style="text-align: right; padding-right: 20px;"><b>Memory_ID</b></td> <td style="padding-right: 20px;">DH003180</td> <td style="padding-right: 20px;">00Ex &lt;hex&gt;</td> </tr> <tr> <td style="text-align: right; padding-right: 20px;"><b>Start_Address</b></td> <td style="padding-right: 20px;">DH004180</td> <td style="padding-right: 20px;">&lt;hex&gt; (Def)</td> </tr> <tr> <td style="text-align: right; padding-right: 20px;"><b>N</b></td> <td style="padding-right: 20px;">DH105180</td> <td style="padding-right: 20px;">&lt;hex&gt; (Def)</td> </tr> </table> <i>TC Control Flags :</i> <table style="width:100%; border: none;"> <tr> <td style="text-align: right; padding-right: 20px;"><b>GBM IL DSE</b></td> <td style="padding-right: 20px;">--Y -- ---</td> </tr> </table> <i>Subsch. ID : 10</i> Det. descr. : Dump Memory Using Absolute Addresses This Telecommand will not be included in the export	<b>Memory_ID</b>	DH003180	00Ex <hex>	<b>Start_Address</b>	DH004180	<hex> (Def)	<b>N</b>	DH105180	<hex> (Def)	<b>GBM IL DSE</b>	--Y -- ---		TC	
<b>Memory_ID</b>	DH003180	00Ex <hex>														
<b>Start_Address</b>	DH004180	<hex> (Def)														
<b>N</b>	DH105180	<hex> (Def)														
<b>GBM IL DSE</b>	--Y -- ---															
14.6.3		Check start address and length of the first dump command in the stack														
		With the Manual Stack in 'Full mode', check the <b>Start Address</b> and <b>Length</b> in the first DC602180 command ( <b>Memory ID = 00E hex</b> included):  <b>Start Address = 00E4.0000 hex</b> <b>Length = FFFC hex</b>  <b>Note:</b> The Memory ID of the target memory device is stored in the MS 12 bits of the 16-bit long Mem ID TM parameter. The LS 4 bits of the same parameter carry the most significant 4 bits of the Start Address.														
		Execute Telecommand <div style="text-align: right; margin-right: 20px;"><b>DumpMem_AbsAddr</b></div> <div style="text-align: right; margin-right: 20px;"><b>DC602180</b></div> <i>Command Parameter(s) :</i> <table style="width:100%; border: none;"> <tr> <td style="text-align: right; padding-right: 20px;"><b>Memory_ID</b></td> <td style="padding-right: 20px;">DH003180</td> <td style="padding-right: 20px;">00E4 &lt;hex&gt;</td> </tr> <tr> <td style="text-align: right; padding-right: 20px;"><b>Start_Address</b></td> <td style="padding-right: 20px;">DH004180</td> <td style="padding-right: 20px;">0000 &lt;hex&gt;</td> </tr> <tr> <td style="text-align: right; padding-right: 20px;"><b>N</b></td> <td style="padding-right: 20px;">DH105180</td> <td style="padding-right: 20px;">FFFC &lt;hex&gt;</td> </tr> </table> <i>TC Control Flags :</i> <table style="width:100%; border: none;"> <tr> <td style="text-align: right; padding-right: 20px;"><b>GBM IL DSE</b></td> <td style="padding-right: 20px;">--Y -- ---</td> </tr> </table> <i>Subsch. ID : 10</i> Det. descr. : Dump Memory Using Absolute Addresses This Telecommand will not be included in the export	<b>Memory_ID</b>	DH003180	00E4 <hex>	<b>Start_Address</b>	DH004180	0000 <hex>	<b>N</b>	DH105180	FFFC <hex>	<b>GBM IL DSE</b>	--Y -- ---		TC	
<b>Memory_ID</b>	DH003180	00E4 <hex>														
<b>Start_Address</b>	DH004180	0000 <hex>														
<b>N</b>	DH105180	FFFC <hex>														
<b>GBM IL DSE</b>	--Y -- ---															
14.6.4		Check start address and length of the last dump command in the stack														

Update CDMU SGM ground image from memory dump  
 File: H\_FCP\_OBS\_1449.xls  
 Author: lstefanov-hp



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment												
		<p>With the Manual Stack in 'Full mode', check the <b>Start Address</b> and <b>Length</b> in the last DC602180 command (Memory ID = 00E hex included):</p> <p><b>Start Address = 00E7.FFF0 hex</b>  <b>Length = 6110 hex</b></p> <p><b>Note:</b>            The Memory ID of the target memory device is stored in the MS 12 bits of the 16-bit long Mem ID TM parameter. The LS 4 bits of the same parameter carry the most significant 4 bits of the Start Address.</p>															
		<p>Execute Telecommand</p> <p style="text-align: right;"><b>DumpMem_AbsAddr</b></p> <p style="text-align: center;"><b>DC602180</b></p> <p>Command Parameter(s) :</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"><b>Memory_ID</b></td> <td style="width: 20%;">DH003180</td> <td style="width: 20%;">00E7 &lt;hex&gt;</td> <td style="width: 30%;"></td> </tr> <tr> <td><b>Start_Address</b></td> <td>DH004180</td> <td>FFF0 &lt;hex&gt;</td> <td></td> </tr> <tr> <td><b>N</b></td> <td>DH105180</td> <td>6110 &lt;hex&gt;</td> <td></td> </tr> </table> <p>TC Control Flags :</p> <p style="text-align: right;"><b>GBM IL DSE</b>  <b>--Y -- ---</b></p> <p>Subsch. ID : 10            Det. descr. : Dump Memory Using Absolute Addresses            This Telecommand will not be included in the export</p>	<b>Memory_ID</b>	DH003180	00E7 <hex>		<b>Start_Address</b>	DH004180	FFF0 <hex>		<b>N</b>	DH105180	6110 <hex>			TC	
<b>Memory_ID</b>	DH003180	00E7 <hex>															
<b>Start_Address</b>	DH004180	FFF0 <hex>															
<b>N</b>	DH105180	6110 <hex>															
14.7		Load command stack file for SGM B ASW Not Protected part on top of Manual Stack															
		<p><b>NOTE:</b>            The current procedure assumes that the memory dump in Live mode is performed using commands with immediate execution.</p>															
		Select the File -> <b>LoadStack</b> option from the main menu of the Manual Stack window															
		<p>Select file</p> <p><b>CSGMBMEM_DI_XXXXYYY_N_NoModel_NoModel_YYYY_DDDThhmmss.machine</b></p> <p>from directory</p> <p><a href="#">/home/hmcsops/HPMCS/SESSION/current/data/CMD/STACKS/OBSM/CSGMBMEM</a></p> <p>as indicated by the OBSM engineer</p>															
		<p>IMPORTANT:</p> <p><b>XXXXYYY</b> = Image ID(X) and Version(Y) - depend on image used for stack generation</p> <p><b>YYYY_DDD hhmmss</b> - depend on stack generation time</p> <p><b>machine</b> - depends on the name of the machine used for stack generation</p>															
		<p>File name <b>examples</b></p> <p>- No model associated to the memory image:</p> <p>CSGMBMEM_DI_0002001_N_NoModel_NoModel_2007_254T123300.sun043</p> <p>- CT CSGMBMEM1, ID 0003, Version 001 associated to the memory image:</p> <p>CSGMBMEM_DI_0002001_C_CSGMBMEM1_0003001_2007_337T093320.sun043</p>															



Update CDMU SGM ground image from memory dump File: H_FCP_OBS_1449.xls Author: lstefanov-hp	
---	--

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
14.8		Check memory dump command stack loaded			
		For a full CDMU SGM ASW NP area dump (Memory ID = 00E hex included):  <b>Start Address = 00E8.6100 hex</b> <b>End Address = 00EB.FFFF hex</b> <b>Length = 39F00 hex</b>			
14.8.1		Check number of memory dump commands in the stack			
		Check that loaded stack contains: 4 TCs DC602180			
14.8.2		Check Memory ID			
		Display the Manual Stack in 'Full mode' and check that the <b>Memory ID</b> parameter in the DC602180 command(s) is set to <b>00E hex</b> :  <b>Memory ID = 00E hex</b>  <b>Note:</b> The Memory ID of the target memory device is stored in the MS 12 bits of the 16-bit long Mem ID TM parameter. The LS 4 bits of the same parameter carry the most significant 4 bits of the Start Address.			
		Execute Telecommand <div style="text-align: right; margin-left: 200px;"><b>DumpMem_AbsAddr</b></div> <div style="text-align: right; margin-left: 200px;"><b>DC602180</b></div> Command Parameter(s) : <div style="margin-left: 40px;"> <b>Memory_ID</b>                   DH003180     00Ex &lt;hex&gt;  <b>Start_Address</b>           DH004180     &lt;hex&gt; (Def)  <div style="margin-left: 100px;">N                   DH105180     &lt;hex&gt; (Def)</div> </div> TC Control Flags : <div style="margin-left: 100px;"> <b>GBM IL DSE</b>  <b>--Y -- ---</b> </div> Subsch. ID : 10 Det. descr. : Dump Memory Using Absolute Addresses This Telecommand will not be included in the export		TC	
14.8.3		Check start address and length of the first dump command in the stack			

Update CDMU SGM ground image from memory dump  
 File: H\_FCP\_OBS\_1449.xls  
 Author: lstefanov-hp



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment												
		<p>With the Manual Stack in 'Full mode', check the <b>Start Address</b> and <b>Length</b> in the first DC602180 command (Memory ID = 00E hex included):</p> <p><b>Start Address = 00E8.6100 hex</b>  <b>Length = FFFC hex</b></p> <p><b>Note:</b>            The Memory ID of the target memory device is stored in the MS 12 bits of the 16-bit long Mem ID TM parameter. The LS 4 bits of the same parameter carry the most significant 4 bits of the Start Address.</p>															
		<p>Execute Telecommand</p> <p style="text-align: right;"><b>DumpMem_AbsAddr</b></p> <p style="text-align: center;"><b>DC602180</b></p> <p>Command Parameter(s) :</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"><b>Memory_ID</b></td> <td style="width: 20%;">DH003180</td> <td style="width: 20%;">00E8 &lt;hex&gt;</td> <td style="width: 30%;"></td> </tr> <tr> <td><b>Start_Address</b></td> <td>DH004180</td> <td>6100 &lt;hex&gt;</td> <td></td> </tr> <tr> <td><b>N</b></td> <td>DH105180</td> <td>FFFC &lt;hex&gt;</td> <td></td> </tr> </table> <p>TC Control Flags :</p> <p style="text-align: right;"><b>GBM IL DSE</b>  <b>--Y -- ---</b></p> <p>Subsch. ID : 10            Det. descr. : Dump Memory Using Absolute Addresses            This Telecommand will not be included in the export</p>	<b>Memory_ID</b>	DH003180	00E8 <hex>		<b>Start_Address</b>	DH004180	6100 <hex>		<b>N</b>	DH105180	FFFC <hex>			TC	
<b>Memory_ID</b>	DH003180	00E8 <hex>															
<b>Start_Address</b>	DH004180	6100 <hex>															
<b>N</b>	DH105180	FFFC <hex>															
14.8.4		Check start address and length of the last dump command in the stack															
		<p>With the Manual Stack in 'Full mode', check the <b>Start Address</b> and <b>Length</b> in the last DC602180 command (Memory ID = 00E hex included):</p> <p><b>Start Address = 00EB.60F4 hex</b>  <b>Length = 9F0C hex</b></p> <p><b>Note:</b>            The Memory ID of the target memory device is stored in the MS 12 bits of the 16-bit long Mem ID TM parameter. The LS 4 bits of the same parameter carry the most significant 4 bits of the Start Address.</p>															
		<p>Execute Telecommand</p> <p style="text-align: right;"><b>DumpMem_AbsAddr</b></p> <p style="text-align: center;"><b>DC602180</b></p> <p>Command Parameter(s) :</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"><b>Memory_ID</b></td> <td style="width: 20%;">DH003180</td> <td style="width: 20%;">00EB &lt;hex&gt;</td> <td style="width: 30%;"></td> </tr> <tr> <td><b>Start_Address</b></td> <td>DH004180</td> <td>60F4 &lt;hex&gt;</td> <td></td> </tr> <tr> <td><b>N</b></td> <td>DH105180</td> <td>9F0C &lt;hex&gt;</td> <td></td> </tr> </table> <p>TC Control Flags :</p> <p style="text-align: right;"><b>GBM IL DSE</b>  <b>--Y -- ---</b></p> <p>Subsch. ID : 10            Det. descr. : Dump Memory Using Absolute Addresses            This Telecommand will not be included in the export</p>	<b>Memory_ID</b>	DH003180	00EB <hex>		<b>Start_Address</b>	DH004180	60F4 <hex>		<b>N</b>	DH105180	9F0C <hex>			TC	
<b>Memory_ID</b>	DH003180	00EB <hex>															
<b>Start_Address</b>	DH004180	60F4 <hex>															
<b>N</b>	DH105180	9F0C <hex>															
15		MCS OBSM preparation for Image Update in LIVE mode		Next Step: 16													
		<p><b>Note:</b>            It is assumed that the OBSM application is already running and the OBSM Desktop is displayed on the MCS client.            Starting the OBSM application is not covered by the current procedure.</p>															

Update CDMU SGM ground image from memory dump File: H_FCP_OBS_1449.xls Author: lstefanov-hp	 
---	--

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
15.1		Select 'Image UPDATE' from the menu			
		Select the <b>Image</b> menu of the <i>OBSM Desktop</i> .  From the Image menu, select <b>Update</b> .  The 'Image Catalog' window opens.			
15.2		Select image to be updated			
		Select the image to be updated for the memory device <b>CSGMBMEM</b> .  The 'Image UPDATE' window opens.			
15.3		Start dump TM processing			
		In <b>LIVE</b> mode, processing of incoming real-time telemetry starts automatically after the image selection.			
16		Command memory dump		Next Step: 17	
		<b>Uplink</b> the <b>DC602180</b> memory dump commands with <b>ARM-GO</b>			
		For each command, one or more TM(6,6) packets must be received on ground.			
17		Verify reception of TM(6,6)		Next Step: 18	
		<b>Note:</b> One or more TM(6,6) packets will be received for each memory dump command uplinked.			
		Verify Packet Reception  Memory Dump - Absolute Addresses - SAU 8 Packet Mnemonic : MemDmpAbsAdd APID : 16 Type : 6 Subtype : 6 PI1 : PI2 :			
17.1		Check OBSM dump packet processing			
		Check that the OBSM is processing the incoming memory dump packets.			

Update CDMU SGM ground image from memory dump  
 File: H\_FCP\_OBS\_1449.xls  
 Author: lstefanov-hp



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
18		Save merged image		Next Step: END	
		Save merged image with <b>new ID</b> .			
End of Sequence					
<b>OFCP144D</b> TC Seq. Name : OFCP144D ( CDMU SGM A Dmp D ) CDMU SGM B Gnd image update in Retrieval mode  TimeTag Type: Sub Schedule ID:  <input type="checkbox"/>					
19		MCS OBSM preparation for Image update in RETRIEVAL mode		Next Step: 20	
		<b>Note:</b> It is assumed that the OBSM application is already running and the OBSM Desktop is displayed on the MCS client. Starting the OBSM application is not covered by the current procedure.			
19.1		Select 'Image UPDATE' from the menu			
		Select the <b>Image</b> menu of the <b>OBSM Desktop</b> .  From the Image menu, select <b>Update</b> .  The 'Image Catalog' window opens.			
19.2		Select image to be updated			
		Select the image to be updated for the memory device <b>CSGMBMEM</b> .  The 'Image UPDATE' window opens.			
19.3		Start dump TM packets processing			
		Set <b>retrieval start</b> and <b>stop time</b> and start retrieval of TM packets using the <b>PLAY</b> buttons.			
20		Retrieve and process TM(6,6) packets		Next Step: 21	
		Use the <b>STEP</b> button to retrieve and process the TM(6,6) packets, packet by packet and starting from the time shown in the packet time field.			
		OR			

Update CDMU SGM ground image from memory dump File: H_FCP_OBS_1449.xls Author: lstefanov-hp	 
---	--

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
		Use the <b>PLAY</b> button to retrieve and process the TM(6,6) packets in automated mode.  Pressing the <b>PLAY</b> button, the display will start to retrieve and process packets, starting from the time shown in the packet time field. This processing will stop automatically when a packet is received which creation time is greater than the one contained in the end time field.			
20.1		Check OBSM dump packet processing			
		Check that the OBSM is processing the retrieved memory dump packets.			
21		Save merged image		Next Step: END	
		Save merged image with <b>new ID</b> .			
End of Sequence					
<b>End of Procedure</b>					