

SMEC\_OFF Mode Trans  
 File: H\_COP\_SPI\_MSMF.xls  
 Author: L.Lucas-hp



## Procedure Summary

### Objectives

This is a mode transition procedure. The purpose of this procedure is to switch the SMEC OFF.

Based on procedure:  
 Name:SMEC\_OFF  
 Version number:3  
 Generated:27/03/2009

### Summary of Constraints

n/a

### Spacecraft Configuration

**Start of Procedure** Sub-Mode = SDET\_OFF

**End of Procedure** Sub Mode = SMEC\_OFF

### Reference File(s)

**Input Command Sequences**

**Output Command Sequences**  
 HCSMSMF

### Referenced Displays

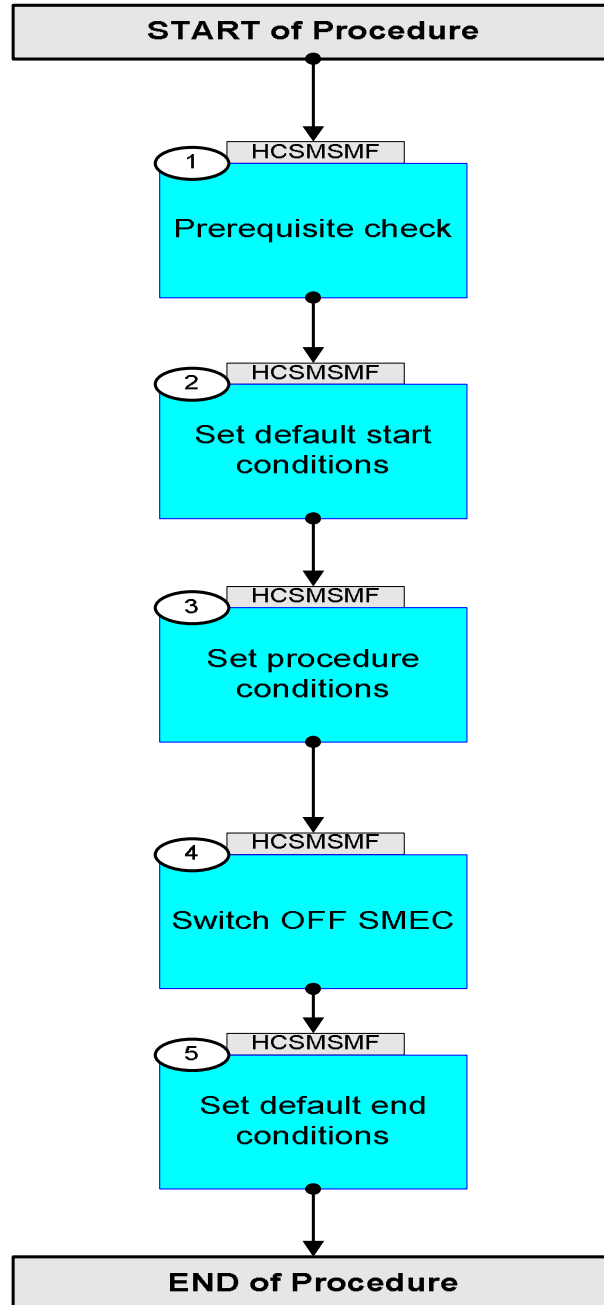
**ANDs**      **GRDs**      **SLDs**  
 ZAZ90999  
 SA\_6\_559

### Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
19/04/09		1	Created	L.Lucas-hp	
21/04/09	2.3	1.01	Validation : Text Update	L.Lucas-hp	
04/05/09	2.4	2	Remove ET	L.Lucas-hp	



## Procedure Flowchart Overview



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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
<b>Beginning of Procedure</b>				
TC Seq. Name : HCSMSMF (Mode Trans SMEC_OFF)				
TimeTag Type: N Sub Schedule ID:  □				
1		Prerequisite check		Next Step: 2
1.1		HSC/ICC input		□
		Verify that the HSC has supplied a valid OBSID value:  OBS_ID = 0xnnnn nnnn		
2		Set default start conditions		Next Step: 3
		Note that a <b>TM(5,1)</b> packet [New_Step_Report] is generated after each of the following SET_OBS_STEP telecommands		
	ET=+ UT=+00.00.00	SET_OBS_STEP  Command Parameter(s) : OBSERVATION_STEP  Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SET_OBS_STEP  SP03N500	SC003500  0 <hex>
	ET=+ UT=+00.00.01	SET_BBID  Command Parameter(s) : BUILDING_BLOCK_ID  Subsch. ID : 370 Det. descr. : SET BUILDING BLOCK IDENTIFIER	SET_BBID  SP01N500	SC001500  80010001 <hex>
		Verify Telemetry  BBFULLTYPE	SM2LN500	= ClearObs AND=ZAZ90999
	ET=+ UT=+00.00.00	SET_OBS_STEP  Command Parameter(s) : OBSERVATION_STEP  Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SET_OBS_STEP  SP03N500	SC003500  1 <hex>

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.01	SET_OBSID  Command Parameter(s) : OBSERVATION_ID  Subsch. ID : 370 Det. descr. : SET OBSERVATION IDENTIFIER	SET_OBSID  SP00N500  00000000 <hex>	
		Verify Telemetry  OBSID SM10N500	= 00000000 <hex>	AND=ZAZ90999
	ET=+ UT=+00.00.00	SET_OBS_STEP  Command Parameter(s) : OBSERVATION_STEP  Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SET_OBS_STEP  SP03N500  0 <hex>	
	ET=+ UT=+00.00.01	SET_BBID  Command Parameter(s) : BUILDING_BLOCK_ID  Subsch. ID : 370 Det. descr. : SET BUILDING BLOCK IDENTIFIER	SET_BBID  SP01N500  80000000 <hex>	
		Verify Telemetry  BBFULLTYPE SM2LN500	= Null	AND=ZAZ90999
	ET=+ UT=+00.00.00	SET_OBS_STEP  Command Parameter(s) : OBSERVATION_STEP  Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SET_OBS_STEP  SP03N500  0 <hex>	
	ET=+ UT=+00.00.01	SET_BBID  Command Parameter(s) : BUILDING_BLOCK_ID  Subsch. ID : 370 Det. descr. : SET BUILDING BLOCK IDENTIFIER	SET_BBID  SP01N500  80020001 <hex>	
		Verify Telemetry  BBFULLTYPE SM2LN500	= StartObs	AND=ZAZ90999
3		Set procedure conditions		Next Step: 4

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.00	RESET_DRCU_COUNTERS  Subsch. ID : 370 Det. descr. : RESET DRCU COUNTERS	SCD00505	
		Verify that the TRESET parameter has the same value as the THSK parameter  TRESET SM01T500	same as THSK	AND=ZAZ90999
		THSK SM00T500	any	AND=ZAZ90999
		Note that a <b>TM(5,1)</b> packet [New_Step_Report] is generated after each of the following SET_OBS_STEP telecommands		
	ET=+ UT=+00.00.00	SET_OBS_STEP  Command Parameter(s) : OBSERVATION_STEP SP03N500  Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SC003500  1 <hex>	
	ET=+ UT=+00.00.01	SET_OBSID  Command Parameter(s) : OBSERVATION_ID SP00N500  Subsch. ID : 370 Det. descr. : SET OBSERVATION IDENTIFIER	SC000500  OBS_ID	
		Verify Telemetry  OBSID SM10N500	OBS_ID	AND=ZAZ90999
	ET=+ UT=+00.00.00	SET_OBS_STEP  Command Parameter(s) : OBSERVATION_STEP SP03N500  Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SC003500  0 <hex>	
	ET=+ UT=+00.00.01	SET_BBID  Command Parameter(s) : BUILDING_BLOCK_ID SP01N500  Subsch. ID : 370 Det. descr. : SET BUILDING BLOCK IDENTIFIER	SC001500  80000000 <hex>	
		Verify Telemetry  BBFULLTYPE SM2LN500	= Null	AND=ZAZ90999

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.00	SET_OBS_STEP  SET_OBS_STEP  Command Parameter(s) : OBSERVATION_STEP SP03N500  TC Control Flags :  GBM IL DSE --Y -- ---  Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SC003500  0 <hex>	
	ET=+ UT=+00.00.01	SET_BBID  SET_BBID  Command Parameter(s) : BUILDING_BLOCK_ID SP01N500  Subsch. ID : 370 Det. descr. : SET BUILDING BLOCK IDENTIFIER	SC001500  820A0001 <hex>	
		Verify Telemetry  BBFULLTYPE SM2LN500	= SMEC_Off	AND=ZAZ90999
4		Switch OFF SMEC		Next Step: 5
	ET=+ UT=+00.00.02	SET_OBS_MODE  SET_OBS_MODE  Command Parameter(s) : OBSERVING_MODE SP02N500  TC Control Flags :  GBM IL DSE --Y -- ---  Subsch. ID : 370 Det. descr. : SET OBSERVING MODE	SC002500  2FC <hex>	
	ET=+ UT=+00.00.01	SEND_DRCU_COMMAND  SEND_DRCU_COMMAND  Command Parameter(s) : DRCUCOMMAND SPD4N505 OVERRIDE SPD9N505  TC Control Flags :  GBM IL DSE --- --- ---  Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505  90490000 <hex> 0 <hex> (Def)	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.00	SEND_DRCU_COMMAND  SEND_DRCU_COMMAND  Command Parameter(s) : DRCUCOMMAND                   SPD4N505 OVERRIDE                   SPD9N505  TC Control Flags :  GBM IL DSE --- -- ---  Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505  904503e8 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.01	SEND_DRCU_COMMAND  SEND_DRCU_COMMAND  Command Parameter(s) : DRCUCOMMAND                   SPD4N505 OVERRIDE                   SPD9N505  TC Control Flags :  GBM IL DSE --- -- ---  Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505  90460000 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.01	SEND_DRCU_COMMAND  SEND_DRCU_COMMAND  Command Parameter(s) : DRCUCOMMAND                   SPD4N505 OVERRIDE                   SPD9N505  TC Control Flags :  GBM IL DSE --- -- ---  Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505  90471388 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.00	SEND_DRCU_COMMAND  SEND_DRCU_COMMAND  Command Parameter(s) : DRCUCOMMAND                   SPD4N505 OVERRIDE                   SPD9N505  TC Control Flags :  GBM IL DSE --- -- ---  Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505  90490001 <hex> 0 <hex> (Def)	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.10	SEND_DRCU_COMMAND  SEND_DRCU_COMMAND  Command Parameter(s) : DRCUCOMMAND                   SPD4N505 OVERRIDE                   SPD9N505  TC Control Flags :  GBM IL DSE --- -- ---  Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505  90440006 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.00	SEND_DRCU_COMMAND  SEND_DRCU_COMMAND  Command Parameter(s) : DRCUCOMMAND                   SPD4N505 OVERRIDE                   SPD9N505  TC Control Flags :  GBM IL DSE --- -- ---  Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505  90400000 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.01	SEND_DRCU_COMMAND  SEND_DRCU_COMMAND  Command Parameter(s) : DRCUCOMMAND                   SPD4N505 OVERRIDE                   SPD9N505  TC Control Flags :  GBM IL DSE --- -- ---  Subsch. ID : 370 Det. descr. : SEND A SINGLE COMMAND TO THE DRCU	SCD06505  90410000 <hex> 0 <hex> (Def)	
	ET=+ UT=+00.00.01	SET_OBS_MODE  SET_OBS_MODE  Command Parameter(s) : OBSERVING_MODE                   SP02N500  TC Control Flags :  GBM IL DSE --- -- ---  Subsch. ID : 370 Det. descr. : SET OBSERVING MODE	SC002500  2fc <hex>	



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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.01	SET_OBS_STEP  SET_OBS_STEP  Command Parameter(s) : OBSERVATION_STEP SP03N500  TC Control Flags :  GBM IL DSE --- -- ---  Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SC003500  0 <hex>	
	ET=+ UT=+00.00.00	SET_BBID  SET_BBID  Command Parameter(s) : BUILDING_BLOCK_ID SP01N500  TC Control Flags :  GBM IL DSE --- -- ---  Subsch. ID : 370 Det. descr. : SET BUILDING BLOCK IDENTIFIER	SC001500  80000000 <hex>	
4.1		Verify TM		<input type="checkbox"/>
		Verify Telemetry  SMECENC PWR SMS0W515	= 0 <hex>	AND=SA_6_559
		Verify Telemetry  SMECLVDTPWR SMS1W515	= 0 <hex>	AND=SA_6_559
		Verify Telemetry  MODE SM00M500	= SMEC_OFF	AND=SA_6_559
5		Set default end conditions		Next Step: END
		Note that a <b>TM(5,1)</b> packet [New_Step_Report] is generated after each of the following SET_OBS_STEP telecommands		
	ET=+ UT=+00.00.00	SET_OBS_STEP  SET_OBS_STEP  Command Parameter(s) : OBSERVATION_STEP SP03N500  Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SC003500  0 <hex>	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	
	ET=+ UT=+00.00.01	SET_BBID  Command Parameter(s) : BUILDING_BLOCK_ID  Subsch. ID : 370 Det. descr. : SET BUILDING BLOCK IDENTIFIER	SET_BBID  SP01N500  80000000 <hex>	SC001500	
		Verify Telemetry  BBFULLTYPE	SM2LN500  = Null	AND=ZAZ90999	
	ET=+ UT=+00.00.00	SET_OBS_STEP  Command Parameter(s) : OBSERVATION_STEP  Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SET_OBS_STEP  SP03N500  0 <hex>	SC003500	
	ET=+ UT=+00.00.01	SET_BBID  Command Parameter(s) : BUILDING_BLOCK_ID  Subsch. ID : 370 Det. descr. : SET BUILDING BLOCK IDENTIFIER	SET_BBID  SP01N500  80030001 <hex>	SC001500	
		Verify Telemetry  BBFULLTYPE	SM2LN500  = EndObs	AND=ZAZ90999	
	ET=+ UT=+00.00.00	SET_OBS_STEP  Command Parameter(s) : OBSERVATION_STEP  Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SET_OBS_STEP  SP03N500  1 <hex>	SC003500	
	ET=+ UT=+00.00.01	SET_OBSID  Command Parameter(s) : OBSERVATION_ID  Subsch. ID : 370 Det. descr. : SET OBSERVATION IDENTIFIER	SET_OBSID  SP00N500  00000000 <hex>	SC000500	
		Verify Telemetry  OBSID	SM10N500  = 00000000 <hex>	AND=ZAZ90999	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+ UT=+00.00.00	SET_OBS_STEP  Command Parameter(s) : OBSERVATION_STEP            SP03N500  Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SC003500  0 <hex>	
	ET=+ UT=+00.00.01	SET_BBID  Command Parameter(s) : BUILDING_BLOCK_ID            SP01N500  Subsch. ID : 370 Det. descr. : SET BUILDING BLOCK IDENTIFIER	SC001500  80000000 <hex>	
		Verify Telemetry  BBFULLTYPE                    SM2LN500	= Null	AND=ZAZ90999
<b>End of Procedure</b>				