

Enable/disable NEss APID downlink
 File: H_CRP_DHS_1002.xls
 Author: S. Manganelli



Procedure Summary

Objectives

The procedure should be used to enable or disable individual diagnostic APIDs in case bandwidth constraints apply.

Summary of Constraints

n/a

Spacecraft Configuration

Start of Procedure

Initial configuration of transmit - storage for the non-essential APIDs

End of Procedure

Modified configuration of transmit - storage for the non-essential APIDs

Reference File(s)

Input Command Sequences

Output Command Sequences

HRD1002C
 HRD1002D
 HRD1002F
 HRD1002H
 HRD1002I
 HRD1002E
 HRD1002G
 HRD1002S
 HRD1002L
 HRD1002M
 HRD1002O
 HRD1002Q
 HRD1002R
 HRD1002N
 HRD1002P
 HRD1002T

Referenced Displays

ANDs GRDs SLDs

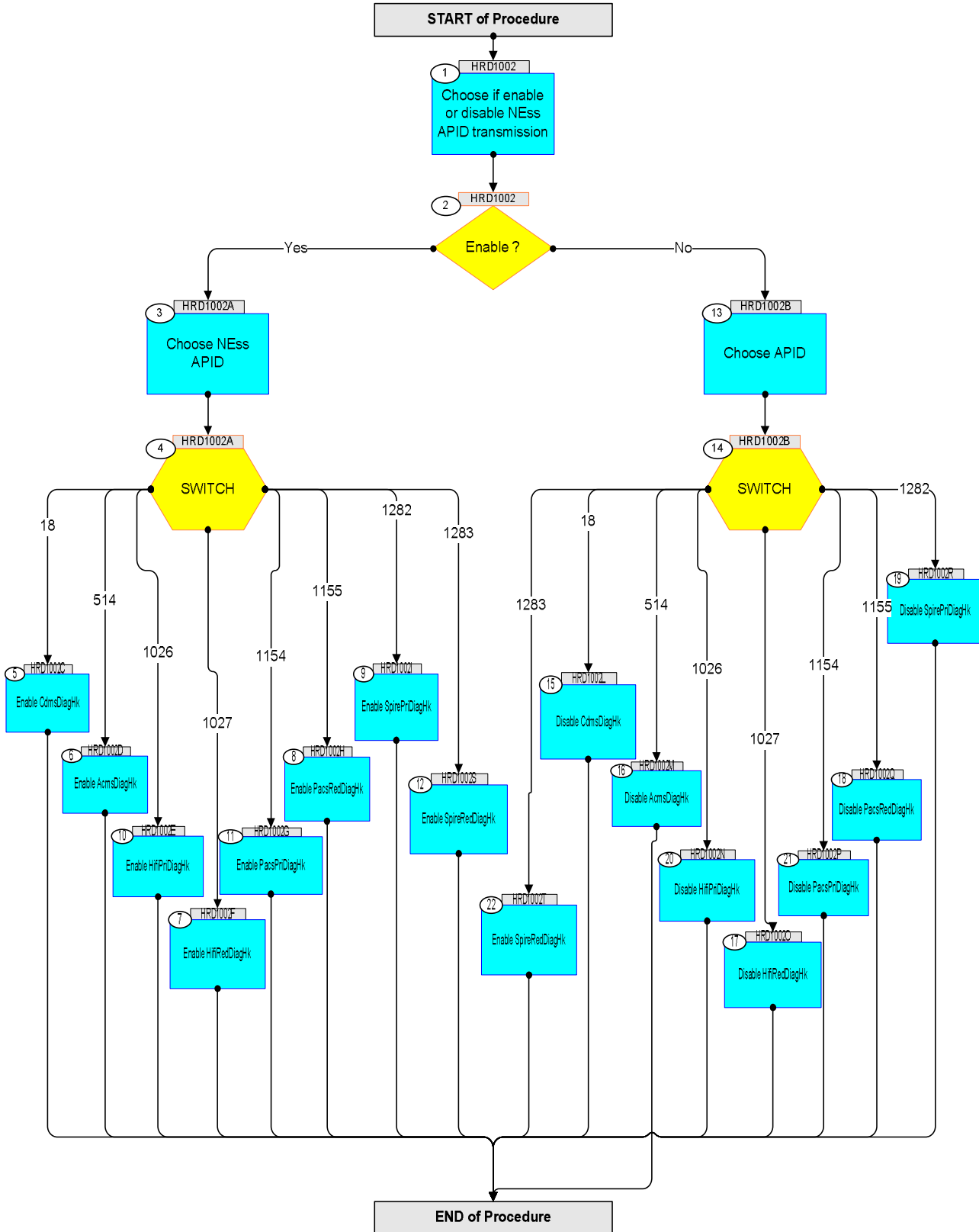
Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
18/07/08	1	1	Created	cmevi-hp	
24/10/08		2	Update for OBSW 3_6_2	S. Manganelli	
11/12/08	2	3	Added info sheet	S. Manganelli	

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Procedure Flowchart Overview



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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
Beginning of Procedure					
HRD1002 <i>TC Seq. Name :HRD1002 (Dummy sequence)</i> <i>TimeTag Type:</i> <i>Sub Schedule ID:</i> <input type="checkbox"/>					
1		Choose if enable or disable NEss APID transmission		Next Step: 2	
2		Enable ? type: [If]		Next Step: Yes 3 No 13	
End of Sequence					
HRD1002A <i>TC Seq. Name :HRD1002A (Dummy sequence)</i> <i>TimeTag Type:</i> <i>Sub Schedule ID:</i> <input type="checkbox"/>					
3		Choose NEss APID		Next Step: 4	
4		SWITCH type: [Switch]		Next Step: 18 5 514 6 1027 7 1155 8 1282 9 1026 10 1154 11 1283 12	
End of Sequence					
HRD1002C <i>TC Seq. Name :HRD1002C (Enable APID 18)</i> <i>TimeTag Type: N</i> <i>Sub Schedule ID:</i> <input type="checkbox"/>					
5		Enable CdmsDiagHk		Next Step: END	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
		Execute Telecommand SelDownlinkTMStorage Command Parameter(s) : N DH019160 Application_ID DH058160 Type DH020160 Sub-Type DH021160 Keep_Transmit DH070160 Transmit_Flag DH059160 Keep_Storage DH071160 Storage_Flag DH060160 TC Control Flags : GBM IL DSE --Y -- --- Subsch. ID : 10 Det. descr. : Select Down-linking/ Storage of Telemetry Packets	DC140160	TC	
End of Sequence					
HRD1002D TC Seq. Name :HRD1002D (Enable APID 514) TimeTag Type: N Sub Schedule ID: □					
6		Enable AcmsDiagHk		Next Step: END	
		Execute Telecommand SelDownlinkTMStorage Command Parameter(s) : N DH019160 Application_ID DH058160 Type DH020160 Sub-Type DH021160 Keep_Transmit DH070160 Transmit_Flag DH059160 Keep_Storage DH071160 Storage_Flag DH060160 TC Control Flags : GBM IL DSE --Y -- --- Subsch. ID : 10 Det. descr. : Select Down-linking/ Storage of Telemetry Packets	DC140160	TC	
End of Sequence					
HRD1002F TC Seq. Name :HRD1002F (Enable APID 1027) TimeTag Type: N Sub Schedule ID: □					
7		Enable HifiRedDiagHk		Next Step: END	

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		Execute Telecommand SelDownlinkTMStorage Command Parameter(s) : N DH019160 Application_ID DH058160 Type DH020160 Sub-Type DH021160 Keep_Transmit DH070160 Transmit_Flag DH059160 Keep_Storage DH071160 Storage_Flag DH060160 TC Control Flags : GBM IL DSE --Y -- --- Subsch. ID : 10 Det. descr. : Select Down-linking/ Storage of Telemetry Packets	DC140160	TC	
End of Sequence					
HRD1002S TC Seq. Name :HRD1002S (Enable APID 1283) TimeTag Type: N Sub Schedule ID: □					
12		Enable SpireRedDiagHk		Next Step: END	
		Execute Telecommand SelDownlinkTMStorage Command Parameter(s) : N DH019160 Application_ID DH058160 Type DH020160 Sub-Type DH021160 Keep_Transmit DH070160 Transmit_Flag DH059160 Keep_Storage DH071160 Storage_Flag DH060160 TC Control Flags : GBM IL DSE --Y -- --- Subsch. ID : 10 Det. descr. : Select Down-linking/ Storage of Telemetry Packets	DC140160	TC	
End of Sequence					
HRD1002B TC Seq. Name :HRD1002B (Dummy sequence) TimeTag Type: Sub Schedule ID: □					
13		Choose APID		Next Step: 14	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment																																						
14		SWITCH type: [Switch]		Next Step: 1154 21 1026 20 18 15 514 16 1027 17 1155 18 1282 19 1283 22																																							
End of Sequence																																											
HRD1002L TC Seq. Name : HRD1002L (Disable APID 18) TimeTag Type: N Sub Schedule ID: <input type="checkbox"/>																																											
15		Disable CdmsDiagHk		Next Step: END																																							
		Execute Telecommand SelDownlinkTMStorage Command Parameter(s) : <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;"></td> <td style="width: 35%;">N</td> <td style="width: 20%;">DH019160</td> <td style="width: 30%;">1 <dec> (Def)</td> </tr> <tr> <td>Application_ID</td> <td>DH058160</td> <td></td> <td>CdmsDiagHk</td> </tr> <tr> <td>Type</td> <td>DH020160</td> <td></td> <td>0 <dec></td> </tr> <tr> <td>Sub-Type</td> <td>DH021160</td> <td></td> <td>0 <dec></td> </tr> <tr> <td>Keep_Transmit</td> <td>DH070160</td> <td></td> <td>Update</td> </tr> <tr> <td>Transmit_Flag</td> <td>DH059160</td> <td></td> <td>DISABLED</td> </tr> <tr> <td>Keep_Storage</td> <td>DH071160</td> <td></td> <td>Keep</td> </tr> <tr> <td>Storage_Flag</td> <td>DH060160</td> <td></td> <td>ENABLED</td> </tr> </table> TC Control Flags : <table style="width: 100%; border: none;"> <tr> <td style="width: 35%;"></td> <td style="width: 35%;">GBM IL DSE</td> <td style="width: 30%;"></td> </tr> <tr> <td></td> <td>--Y -- ---</td> <td></td> </tr> </table> Subsch. ID : 10 Det. descr. : Select Down-linking/ Storage of Telemetry Packets		N	DH019160	1 <dec> (Def)	Application_ID	DH058160		CdmsDiagHk	Type	DH020160		0 <dec>	Sub-Type	DH021160		0 <dec>	Keep_Transmit	DH070160		Update	Transmit_Flag	DH059160		DISABLED	Keep_Storage	DH071160		Keep	Storage_Flag	DH060160		ENABLED		GBM IL DSE			--Y -- ---		DC140160	TC	
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	GBM IL DSE																																										
	--Y -- ---																																										
End of Sequence																																											
HRD1002M TC Seq. Name : HRD1002M (Disable APID 514) TimeTag Type: N Sub Schedule ID: <input type="checkbox"/>																																											
16		Disable AcmsDiagHk		Next Step: END																																							
		Execute Telecommand SelDownlinkTMStorage Command Parameter(s) : <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;"></td> <td style="width: 35%;">N</td> <td style="width: 20%;">DH019160</td> <td style="width: 30%;">1 <dec> (Def)</td> </tr> <tr> <td>Application_ID</td> <td>DH058160</td> <td></td> <td>AcmsDiagHk</td> </tr> <tr> <td>Type</td> <td>DH020160</td> <td></td> <td>0 <dec></td> </tr> <tr> <td>Sub-Type</td> <td>DH021160</td> <td></td> <td>0 <dec></td> </tr> <tr> <td>Keep_Transmit</td> <td>DH070160</td> <td></td> <td>Update</td> </tr> <tr> <td>Transmit_Flag</td> <td>DH059160</td> <td></td> <td>DISABLED</td> </tr> <tr> <td>Keep_Storage</td> <td>DH071160</td> <td></td> <td>Keep</td> </tr> <tr> <td>Storage_Flag</td> <td>DH060160</td> <td></td> <td>ENABLED</td> </tr> </table> TC Control Flags : <table style="width: 100%; border: none;"> <tr> <td style="width: 35%;"></td> <td style="width: 35%;">GBM IL DSE</td> <td style="width: 30%;"></td> </tr> </table>		N	DH019160	1 <dec> (Def)	Application_ID	DH058160		AcmsDiagHk	Type	DH020160		0 <dec>	Sub-Type	DH021160		0 <dec>	Keep_Transmit	DH070160		Update	Transmit_Flag	DH059160		DISABLED	Keep_Storage	DH071160		Keep	Storage_Flag	DH060160		ENABLED		GBM IL DSE		DC140160	TC				
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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment
		--Y -- --- Subsch. ID : 10 Det. descr. : Select Down-linking/ Storage of Telemetry Packets			
End of Sequence TC Seq. Name :HRD1002O (Disable APID 1027) HRD1002O TimeTag Type: N Sub Schedule ID: <input type="checkbox"/>					
17		Disable HifiRedDiagHk		Next Step: END	
		Execute Telecommand <div style="text-align: right; margin-left: 20px;">SelDownlinkTMStorage</div> Command Parameter(s) : <div style="margin-left: 20px;"> N DH019160 1 <dec> (Def) Application_ID DH058160 HifiRedDiagHk Type DH020160 0 <dec> Sub-Type DH021160 0 <dec> Keep_Transmit DH070160 Update Transmit_Flag DH059160 DISABLED Keep_Storage DH071160 Keep Storage_Flag DH060160 ENABLED </div> TC Control Flags : <div style="margin-left: 20px;">GBM IL DSE</div> <div style="text-align: right;">--Y -- ---</div> Subsch. ID : 10 Det. descr. : Select Down-linking/ Storage of Telemetry Packets	DC140160	TC	
End of Sequence TC Seq. Name :HRD1002Q (Disable APID 1155) HRD1002Q TimeTag Type: N Sub Schedule ID: <input type="checkbox"/>					
18		Disable PacsRedDiagHk		Next Step: END	
		Execute Telecommand <div style="text-align: right; margin-left: 20px;">SelDownlinkTMStorage</div> Command Parameter(s) : <div style="margin-left: 20px;"> N DH019160 1 <dec> (Def) Application_ID DH058160 PacsRedDiagHk Type DH020160 0 <dec> Sub-Type DH021160 0 <dec> Keep_Transmit DH070160 Update Transmit_Flag DH059160 DISABLED Keep_Storage DH071160 Keep Storage_Flag DH060160 ENABLED </div> TC Control Flags : <div style="margin-left: 20px;">GBM IL DSE</div> <div style="text-align: right;">--Y -- ---</div> Subsch. ID : 10 Det. descr. : Select Down-linking/ Storage of Telemetry Packets	DC140160	TC	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment																											
End of Sequence																																
TC Seq. Name :HRD1002R (Disable APID 1282)																																
HRD1002R TimeTag Type: N Sub Schedule ID: <input type="checkbox"/>																																
19		Disable SpirePriDiagHk		Next Step: END																												
		Execute Telecommand <div style="text-align: right; margin-right: 20px;">SelDownlinkTMStorage</div> Command Parameter(s) : <table style="margin-left: 40px; border: none;"> <tr><td>N</td><td>DH019160</td><td>1 <dec> (Def)</td></tr> <tr><td>Application_ID</td><td>DH058160</td><td>SpirePriDiagHk</td></tr> <tr><td>Type</td><td>DH020160</td><td>0 <dec></td></tr> <tr><td>Sub-Type</td><td>DH021160</td><td>0 <dec></td></tr> <tr><td>Keep_Transmit</td><td>DH070160</td><td>Update</td></tr> <tr><td>Transmit_Flag</td><td>DH059160</td><td>DISABLED</td></tr> <tr><td>Keep_Storage</td><td>DH071160</td><td>Keep</td></tr> <tr><td>Storage_Flag</td><td>DH060160</td><td>ENABLED</td></tr> </table> TC Control Flags : <table style="margin-left: 40px; border: none;"> <tr><td>GBM IL DSE</td></tr> <tr><td> </td></tr> <tr><td>--Y -- ---</td></tr> </table> Subsch. ID : 10 Det. descr. : Select Down-linking/ Storage of Telemetry Packets	N	DH019160	1 <dec> (Def)	Application_ID	DH058160	SpirePriDiagHk	Type	DH020160	0 <dec>	Sub-Type	DH021160	0 <dec>	Keep_Transmit	DH070160	Update	Transmit_Flag	DH059160	DISABLED	Keep_Storage	DH071160	Keep	Storage_Flag	DH060160	ENABLED	GBM IL DSE		--Y -- ---	DC140160	TC	
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TC Seq. Name :HRD1002N (Disable APID 1026)																																
HRD1002N TimeTag Type: N Sub Schedule ID: <input type="checkbox"/>																																
20		Disable HifiPriDiagHk		Next Step: END																												
		Execute Telecommand <div style="text-align: right; margin-right: 20px;">SelDownlinkTMStorage</div> Command Parameter(s) : <table style="margin-left: 40px; border: none;"> <tr><td>N</td><td>DH019160</td><td>1 <dec> (Def)</td></tr> <tr><td>Application_ID</td><td>DH058160</td><td>HifiPriDiagHk</td></tr> <tr><td>Type</td><td>DH020160</td><td>0 <dec></td></tr> <tr><td>Sub-Type</td><td>DH021160</td><td>0 <dec></td></tr> <tr><td>Keep_Transmit</td><td>DH070160</td><td>Update</td></tr> <tr><td>Transmit_Flag</td><td>DH059160</td><td>DISABLED</td></tr> <tr><td>Keep_Storage</td><td>DH071160</td><td>Keep</td></tr> <tr><td>Storage_Flag</td><td>DH060160</td><td>ENABLED</td></tr> </table> TC Control Flags : <table style="margin-left: 40px; border: none;"> <tr><td>GBM IL DSE</td></tr> <tr><td> </td></tr> <tr><td>--Y -- ---</td></tr> </table> Subsch. ID : 10 Det. descr. : Select Down-linking/ Storage of Telemetry Packets	N	DH019160	1 <dec> (Def)	Application_ID	DH058160	HifiPriDiagHk	Type	DH020160	0 <dec>	Sub-Type	DH021160	0 <dec>	Keep_Transmit	DH070160	Update	Transmit_Flag	DH059160	DISABLED	Keep_Storage	DH071160	Keep	Storage_Flag	DH060160	ENABLED	GBM IL DSE		--Y -- ---	DC140160	TC	
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Application_ID	DH058160	HifiPriDiagHk																														
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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch	AIT Comment																								
TC Seq. Name :HRD1002P (Disable APID 1154) HRD1002P TimeTag Type: N Sub Schedule ID: <div style="text-align: center;">□</div>																													
21		Disable PacsPriDiagHk		Next Step: END																									
		Execute Telecommand <div style="text-align: right; margin-right: 20px;">SelDownlinkTMStorage</div> <div style="text-align: right; margin-right: 20px;">DC140160</div> Command Parameter(s) : <table style="width:100%; border: none;"> <tr><td style="width:30%;">N</td><td style="width:30%;">DH019160</td><td style="width:40%;">1 <dec> (Def)</td></tr> <tr><td>Application_ID</td><td>DH058160</td><td>PacsPriDiagHk</td></tr> <tr><td>Type</td><td>DH020160</td><td>0 <dec></td></tr> <tr><td>Sub-Type</td><td>DH021160</td><td>0 <dec></td></tr> <tr><td>Keep_Transmit</td><td>DH070160</td><td>Update</td></tr> <tr><td>Transmit_Flag</td><td>DH059160</td><td>DISABLED</td></tr> <tr><td>Keep_Storage</td><td>DH071160</td><td>Keep</td></tr> <tr><td>Storage_Flag</td><td>DH060160</td><td>ENABLED</td></tr> </table> TC Control Flags : <div style="text-align: right; margin-right: 20px;">GBM IL DSE</div> <div style="text-align: right; margin-right: 20px;">--Y -- ---</div> Subsch. ID : 10 Det. descr. : Select Down-linking/ Storage of Telemetry Packets	N	DH019160	1 <dec> (Def)	Application_ID	DH058160	PacsPriDiagHk	Type	DH020160	0 <dec>	Sub-Type	DH021160	0 <dec>	Keep_Transmit	DH070160	Update	Transmit_Flag	DH059160	DISABLED	Keep_Storage	DH071160	Keep	Storage_Flag	DH060160	ENABLED		TC	
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Transmit_Flag	DH059160	DISABLED																											
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Storage_Flag	DH060160	ENABLED																											
End of Sequence TC Seq. Name :HRD1002T (Disable APID 1283) HRD1002T TimeTag Type: N Sub Schedule ID: <div style="text-align: center;">□</div>																													
22		Enable SpireRedDiagHk		Next Step: END																									
		Execute Telecommand <div style="text-align: right; margin-right: 20px;">SelDownlinkTMStorage</div> <div style="text-align: right; margin-right: 20px;">DC140160</div> Command Parameter(s) : <table style="width:100%; border: none;"> <tr><td style="width:30%;">N</td><td style="width:30%;">DH019160</td><td style="width:40%;">1 <dec> (Def)</td></tr> <tr><td>Application_ID</td><td>DH058160</td><td>SpireRedDiagHk</td></tr> <tr><td>Type</td><td>DH020160</td><td>0 <dec></td></tr> <tr><td>Sub-Type</td><td>DH021160</td><td>0 <dec></td></tr> <tr><td>Keep_Transmit</td><td>DH070160</td><td>Update</td></tr> <tr><td>Transmit_Flag</td><td>DH059160</td><td>DISABLED</td></tr> <tr><td>Keep_Storage</td><td>DH071160</td><td>Keep</td></tr> <tr><td>Storage_Flag</td><td>DH060160</td><td>ENABLED</td></tr> </table> TC Control Flags : <div style="text-align: right; margin-right: 20px;">GBM IL DSE</div> <div style="text-align: right; margin-right: 20px;">--Y -- ---</div> Subsch. ID : 10 Det. descr. : Select Down-linking/ Storage of Telemetry Packets	N	DH019160	1 <dec> (Def)	Application_ID	DH058160	SpireRedDiagHk	Type	DH020160	0 <dec>	Sub-Type	DH021160	0 <dec>	Keep_Transmit	DH070160	Update	Transmit_Flag	DH059160	DISABLED	Keep_Storage	DH071160	Keep	Storage_Flag	DH060160	ENABLED		TC	
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End of Sequence <div style="text-align: center;">End of Procedure</div>																													

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Info

APID d	APID h	UHIT	TC packets	TM descr
0	0h	CDMS	Standard CPDU TC	Time Source pkt
16	10h	CDMS	All CDMS TC	All except Ion Ess HK / Diagn / Science
18	12h	CDMS		Non Ess HK / Diagn
512	200h	ACMS	All ACMS TC	All except Ion Ess HK / Diagn / Science
514	202h	ACMS		Non Ess HK / Diagn
2047	7FFh	CDMS		Idle TM pkt
1024	400h	HIFI prime	All HIFI TC	All except Ion Ess HK / Diagn / Science
1026	402h	HIFI prime		Non Ess HK / Diagn
1025	401h	HIFI redundant		All except Ion Ess HK / Diagn / Science
1027	403h	HIFI redundant		Non Ess HK / Diagn
1028;1029;1030;1031	404h; 405h; 406h; 407h	HIFI (prime and redundant)		HIFI Science TM(21_x)
1152	480h	PACS prime	All PACS TC	All except Ion Ess HK / Diagn / Science
1154	482h	PACS prime		Non Ess HK / Diagn
1158	486h	PACS prime		Diagnostic Science TM(21_3)
1160;1162	488h and 484h	PACS prime		PACS Science TM(21_x)
1153	481h	PACS redundant		All except Ion Ess HK / Diagn / Science
1155	483h	PACS redundant		Non Ess HK / Diagn
1159	487h	PACS redundant		Diagnostic Science TM(21_3)
1161;1163	489h and 488h	PACS redundant		PACS Science TM(21_x)
1280	500h	SPIRE prime	All SPIRE TC	All except Ion Ess HK / Diagn / Science
1282	502h	SPIRE prime		Non Ess HK / Diagn
1284;1286;1288	504h; 506h; 508h	SPIRE prime		SPIRE Science TM(21_x)
1281	501h	SPIRE redundant		All except Ion Ess HK / Diagn / Science
1283	503h	SPIRE redundant		Non Ess HK / Diagn
1285;1287;1289	505h; 507h; 509h	SPIRE redundant		SPIRE Science TM(21_x)
1408	580h	HFI prime	All HFI TC	All except Ion Ess HK / Diagn / Science
1410	582h	HFI prime		Non Ess HK / Diagn
1412;1414	584h and 586h	HFI prime		HFI Science TM(21_x)
1409	581h	HFI redundant		All except Ion Ess HK / Diagn / Science
1411	583h	HFI redundant		Non Ess HK / Diagn
1413;1415	585h and 587h	HFI redundant		HFI Science TM(21_x)
1536	600h	LFI (Prime and Redundant)	All LFI TC	All except Ion Ess HK / Diagn / Science
1538	602h	LFI (Prime and Redundant)		Non Ess HK / Diagn
1540	604h	LFI (Prime and Redundant)		LFI Science TM(21_x)
1664	680h	SCS prime	All SCS TC	All TM packets except Ion Ess HK / Diagn
1666	682h	SCS prime		Non Ess HK / Diagn
1665	681h	SCS redundant		All TM packets except Non Ess HK / Diagn
1667	683h	SCS redundant		Non Ess HK / Diagn