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Minutes of Meeting

Date:	08.09.2005		**Herschel**
Doc.-No.:	HP-2-ASED-MN-1055		
Meeting place:	EADS Astrium OTN	Chairman:	D. Hendry / S. Idler
Date/Time:	08.09.2005 / 14:00	Secretary	S. Idler
Agenda dated:	TRR Standard Agenda	Close of Meeting:	08.09.2005

Subject: Combined Pre TRR for IMT (All Instruments)

Participants:	N. Whyborn (HIFI) pt.	Additional	ESA
	W. Luinge (HIFI)	Distribution:	ASP
	O. Bauer (PACS) by phone		
	K. King (SPIRE) by phone		
	S. Sidher (SPIRE) by phone		
	W. Pinter-Krainer (ESA)		
	G. Dubrovik (ASP)		
	D. Hendry (ASED)		
	S. Ilsen (ASED)		
	S. Idler (ASED)		

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☐ Brief-Minutes (except following sheets)   ☐ Summary of Results of Sheets 2 till

Summary and Conclusion:

The IMT test phase will include separate TRR's prior to each instrument IMT. The conclusion of this pre TRR is that there is no blocking point from the non-prime instruments. The open work as defined herein has to be completed prior to start of IMT.

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Reference	Results	Remarks
	Agenda 1. Hardware Configuration Status 2. Software Status 3. Operating Conditions 4. Operational Constraints 5. Procedure / Test Reports 6. Facilities 7. Safety 8. Open Work / Actions 9. Planning 10. Conclusion	

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Reference	Results	Remarks
	1. Hardware Configuration Status HIFI The hardware configuration of HIFI is as per HP-2-ASED-MN-1047 (last SFT warm) with the exception that the LSU simulator and the IF attenuator have now been integrated. The LSU simulator has been electrically checked. SFT cold He I has been successfully carried out. Alignment of LOU started but not yet completed. PACS/SPIRE The hardware configuration of PACS/SPIRE is as per HP-2-ASED-MN-1038/1039 (no change since last SFT warm). During the IMT the non-prime instruments will be switched in the stand-by mode (procedures see below). During HIFI non-prime operation the LSU simulator will be disconnected. CVV The cryostat hardware status is same as during last SFT's with the exception that meanwhile the cool down has been carried out. **2. Software Status** The S/W status is as per Annex 1. There has been no change of the HIFI/PACS/SPIRE on-board software since the last test (HP-2-ASED-MN-1047/1038/1039). I-EGSE S/W status is as per Annex 1.	

Reference	Results	Remarks
	3. Operating Conditions CVV temperatures see Annex 2. During IMT the prime instrument will dictate the cryostat and cryo cover temperature needs. All prerequisites shall be in the relevant instrument procedures. SPIRE IMT procedure will be provided within this week. SPIRE asks to adjust during IMT the mass flow to flight representative rate having in mind that this would lead to non-stable temperature conditions. PACS/SPIRE coolers are not operated during HIFI IMT. **4. Operational Constraints** When in non-prime operation, HIFI/PACS/SPIRE shall be kept in stand-by mode during night without I-EGSE link. During that time the instrument monitoring/data recording will be done by the CCS. ASED will create a GRD as per instruments inputs to be provided by 12.09.2005 morning. HIFI/PACS/SPIRE require I-EGSE link during the day. This requires a combined MIB running on I-EGSE. The combined PACS/SPIRE/HIFI MIB will be established by HIFI by 09.09.2005, 14:00h. The Cryo-SCOE MIB will be generated by ASP by 09.09.2005 (TBC) and will be merged with the HIFI/PACS/SPIRE MIB by HIFI as soon as it is available.	

Reference	Results	Remarks
	PACS will be available at Ottobrunn on 12.09.2005 morning 08:00 to install the merged MIB. In case of problems with the combined MIB the IMT will be conducted without I-EGSE link of non-prime instruments. During non-prime instrument operation the following non-standard equipment needs to be operated. HIFI: ext. power supply for FCU. PACS: ext. power supply for BOLC. SPIRE: ext. power supply for DRCU. I-EGSE configuration/operation will be done by prime instrument team. **5. Procedures / Reports** Principle switch on/off sequence as per HP-2-ASED-0051, issue 1.1, section 6.6.1/6.6.6 (HIFI - PACS - SPIRE). The following dedicated procedures will be used to switch non-prime instruments (switch-on, switch to stand-by and switch-off) during IMT to stand-by and to switch them off again: • HIFI: TBD (HIFI will provide dedicated procedure by 09.09.2005.). • PACS: PACS-ME-TP-026, issue 1 plus e-mail from H. Feuchtgruber dated 31.08.2005. • SPIRE: e-mail from S. Sidher dated 07.09.2005 (SPIRE will provide dedicated procedure by 09.09.2005.). Emergency shut down as per switch-off procedure. PACS/SPIRE do not have any critical	

Reference	Results	Remarks
	parameters. They state that only emergency case would be malfunction of cryostat. For HIFI the critical device is the LSU simulator which is powered via UPS. Monitoring/recording/reporting during PACS and SPIRE stand-by as per procedure. ## 6. Facilities Facility status to be discussed in the separate IMT TRR's. ## 7. Safety In case of loss of mains power PACS should not be switched on within the next 15 minutes. For SPIRE no constraints. HIFI should not be switched on without presence of HIFI engineers. ## 8. Open Work / Actions - Generation of merged MIB file (by HIFI). - Provision of non-prime instrument operation procedures incl. limits to be monitored (by instruments). - Procedure to archive data on I-EGSE (prime instrument to implement, non-prime instruments to specifiy how they want them to be stored) (to be provided by PACS). - Procedure for data back-up (to be provided by PACS). - Procedure for retrieval of data from CCS when I-EGSE is not connected (to be provided by instruments). - Clarification which SCOS machine of the I-EGSE the combined MIB file shall run (by PACS).	

Reference	Results	Remarks
	## 9. Planning IMT planning as per HP-ASED-FX-0466-05. HIFI IMT TRR is now shifted to 09.09.2005, 10:30. PACS IMT TRR is planned on 14.09.2005, 09:00. HIFI/SPIRE is reminded to provide hourly planning for the IMT based on 8h working days. SPIRE state that 8h day is not optimum for their testing and will provide their preferred optimised testing plan to ESA in addition. ASED state that the present manning allocation does not allow for double shift or for continue long days (>10 h) or week ends. Any revised planning except standard hours will need to be agreed with ALC/ESA. ## 9. Conclusion The IMT test phase will include separate TRR's prior to each instrument IMT. The conclusion of this pre TRR is that there is no blocking point from the non-prime instruments. The open work as defined herein has to be completed prior to start of IMT.	

Action Item List

No.:	Description:	Due Date	Originator Comp./Pers.	Actionee Comp./Pers.	Source	Completion

ANNEX 1

Software Status

Date: 08.09.05
Test: Instruments IMT

Prime Instrument: HIFI

SW Ident	Issue /Version	Responsible	Comment
Inst ICU OBS	2.22	Inst	18.05.2005
Inst LCU OBS	17.0	Inst	01.10.2004

Standby Instrument: PACS

SW Ident	Issue /Version	Responsible	Comment
Inst OBS SPU	11.7	Inst	
Inst SPU boot OBSW	1.4	Inst	
Inst OBS DECMEC	5.0.25 Version for Mech control cold	Inst	V 5.0.24 Mech controller hot
Inst DECMEC boot OBSW	1.1	Inst	
Inst OBS DPU	7.65	Inst	
Inst DPU Boot OBSW	1.0	Inst	

Standby Instrument: SPIRE

SW Ident	Issue /Version	Responsible	Comment
Inst DPU OBS	2.0.A1	Inst	
Inst DRCU OBS	Boot SW June 2003	Inst	

IEGSE Configuration

SW Ident	Issue /Version	Responsible	Comment
MIB on I-EGSE	52	Inst	
HCSS Build Version	644	Inst	
HIFI Build	249	Inst	

CCS Configuration

SW Ident	Issue /Version	Responsible	Comment
TCL Scripts HIFI	ist_cus_0.7_tcl.zip	ASP	Delivered on 19.08.2005
TCL Scripts PACS	IMT_cus-shell-scripts_28062005.zip	ASP	Delivered on 28.06.2005
TCL Scripts SPIRE	Not Available yet	ASP	

ANNEX 1

CCS MIB Bridge files	Not Available yet	ASP	
CCS S/W Release	2.0.614	Terma	

CDMU DFE Configuration

SW Ident	Issue /Version	Responsible	Comment
CDMU DFE CMS	2.3.0.0	SSBV	Part of CDMU DFE Workstation
CDMU DFE Pipe I/F (IPC Handler P7001)	2.3.0.0	SSBV	Part of CDMU DFE Workstation
CDMU DFE Pipe I/F (IPC Handler Pipe P 7002)	1.2.1.0	SSBV	Part of CDMU DFE Workstation
CDMU archive Browser	2.2.2.72	SSBV	Part of CDMU DFE Workstation
Mil-STD-1553b BusMonitor	1.11.1.87	SSBV	Part of CDMU DFE Workstation
CDMU DFE IPC Handler object implementation	2.4.0.18	SSBV	Part of CDMU DFE Workstation
SimFE	1.5.0.0	SSBV	Part of CDMU DFE Platform
HLBC	1.06.00	SSBV	Part of CDMU DFE Platform

PLM SCOE Configuration

SW Ident	Issue /Version	Responsible	Comment
PLM SCOE CMS	1.5.0.0	SSBV	Part of PLM SCOE Workstation
PLM SCOE archive browser	2.2.1.70	SSBV	Part of PLM SCOE Workstation
PLM SCOE pipe I/F	1.3.0.0	SSBV	Part of PLM SCOE Workstation
PLM SCOE IPC Handler object implementation	2.1.0.7	SSBV	Part of PLM SCOE Workstation
PDU Controller	1.5.0.0	SSBV	Part of PLM SCOE Platform