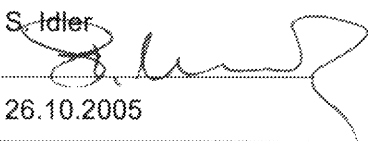
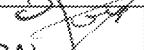




**Minutes of Meeting**

Date:	26.10.2005	<b>Herschel</b>	
Doc.-No.:	HP-2-ASED-MN-1100		
Meeting place:	EADS Astrium OTN	Chairman:	C. Jewell
Date/Time:	26.10.2005 / 14:00	Secretary:	S. Idrer 
Agenda dated:		Close of Meeting:	26.10.2005

Subject: EQM Test Phase Check Point Meeting

Participants:	G. Doubrovik (ASP)  W. Pinter-Krainer (ESA) C. Jewell (ESA)  C. Schlosser (ASED) D. Hendry (ASED) S. Idrer (ASED) S. Sidher (SPIRE) pt. A. Aramburu (SPIRE) pt. A.S. Goizel (SPIRE) pt. 	Additional Distribution:	ESA ASP
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<input type="checkbox"/> Brief-Minutes (except following sheets)	<input type="checkbox"/> Summary of Results of Sheets 2 till
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Reference	Results	Remarks
	<p><b>Agenda:</b></p> <ol style="list-style-type: none"> <li>1. Optimisation of effective instrument test time</li> <li>2. Short term planning for cryo operations</li> <li>3. Test data distribution</li> <li>4. NCR's handling</li> </ol> <p><b>1. Optimisation of effective instrument test time</b></p> <p>Problem experienced during SPIRE IMT this week is that the cryo cover warmed up during night and simultaneously the SPIRE L1 temperature. In the mornings it needed several hours to get back to proper conditions due to time constant of L1, leading to considerable loss of effective test time.</p> <p>Goal:        Optimise cryo operations such that the available daily test time (08:00 to 19:00) is efficiently used. I. e. avoid waiting times due to cryo operations as much as possible.</p> <p>Measures to be undertaken:        Ensure that cryostat reference temperature conditions (L0, 1, 2 and cryo cover) are correctly adjusted (and stable) at the morning when the instrument tests are started (at 08:00).</p> <p>This would need start of cryo operation at 06:00, i. e. 2 hours in advance to start of instrument testing. Cryo operations could end together with instrument testing.</p>	



Reference	Results	Remarks
	<p>Required manpower:            2 shift team of 2 people each for the cryo operations: 1st shift from 06:00 to 15:00, 2nd shift from 10:00 to 19:00.</p> <p>Manpower constraints:            The daily test time is clearly restricted by the operator resources (1 man) with a max. working time of 10 hours per day.</p> <p>Dewars:            Currently 6 dewars are available: 2 in operation (1 dewar is used to cool the shields, the other to cool the cryo cover), 3 filled as spares and 1 at Linde for refill.</p> <p>Currently 1 dewar lasts 1-2 days for cover flushing and about 4 days for shield cooling. Mass flow through cover seems much too high and should be optimised. 50 mg/sec should be sufficient, the current consumption is about 300 mg/sec. ASED will look for appropriate tools to better control the mass flow (e.g. with ball valve or needle valve in the exhaust).</p> <p>ESA strongly recommends resolving these issues.</p> <p><b>2. Short term planning for SPIRE testing</b></p> <p>Both dewars are expected to deplete in the course of tomorrow. The SPIRE cooler is expected to work until tomorrow late evening.</p> <p>It is agreed that both dewars will be exchanged tomorrow morning at 07:00.</p> <p>For tomorrow it is agreed that SPIRE will try to do as much tests as possible which need 1.75 K L0 and 80 K cryo cover temperature in order to use as much as possible the existing environment and</p>	



Reference	Results	Remarks
	<p>the cooler hold time. Adequate test steps are the ones identified in the SPIRE IMT planning for Day 2 2nd half, Day 4 and Day 5.</p> <p>For Friday it is planned to perform "warm" cooler recycle (with L0 = 2K). On Friday evening SPIRE will be left switched to stand-by with cooler heat switch on and the cooler allowed depleting. ASED will switch off the heat switch during the weekend as per the instructions/procedure given by SPIRE. All instruments will be left switched to stand-by. Testing will resume on Wednesday 02.11.2005 with PACS IMT continuation.</p> <p>Due to time constraints it is agreed to skip the pump characterisation tests.</p> <p><b>3. Test data distribution</b></p> <p>ESA request to distribute temperature raw data on a daily basis to ESA and ASP (M. Lindner, Th. Passvogel, C. Jewell, W. Pinter-Krainer, B. Collaudin, G. Dubrovik). Similar approach as for STM.</p> <p><b>4. NCR's handling</b></p> <p>Anomalies related to instrument and CCS operation are tracked by NCR's to be raised by ASED. Anomalies related to instrument performance are tracked by NCR's to be raised by the instruments. Anomalies related to the cryostat operation and performance are covered by NCR's to be raised by ASED, e. g. NCR will be raised by ASED for the observed unexpected correlation between cryo cover and SPIRE L1 temperature.</p>	



### Action Items List

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