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COMPTE RENDU DE REUNION / MINUTES OF MEETING LIEU / PLACE :RAL

OBJET / PURPOSE:

CLASSIFICATION:

SPIRE CQM DRB

SPIRE-ALC-MOM-002232

PARTICIPANTS ATTENDEES	SOCIETE FIRM	SIGNATURE SIGNATURE	PARTICIPANTS ATTENDEES	SOCIETE FIRM	SIGNATURE SIGNATURE
G.Crone	ESA	S. Irae	E.Sawyer	SPIRE	Consange
C.Scharmberg	ESA	lant 49	7 E.Clark	SPIRE	Gf She
N∤Nikolaizig	ESA	Lilista?	D.Griffin	SPIRE	(part)
P.Olivier	ESA	2	B.Swin#yard	SPIRE	(poart) '
H.Faas	ASED	MASS	K.King	SPIRE	(part)
D.Hendry	ASED	Whender			
Bernard Collaudin	ASP -	300			
REDACTEUR / WRITTEN BY:	B.Collaudin				

CONCLUSION:

The board conclude that the shipment of the SPIRE CQM from RAL to ASED can proceed as foreseen.

There will be an "FPU Integration Readiness Review" (IR1) to be held following incoming inspection and bench test of FPU.

A second Integration readiness review (IR2) for the warm units will be held following bench testing of warm units & CCS interface validation.

DISTRIBUTION: PARTICIPANTS / ATTENDEES	POUR ACTION : FOR FURTHER ACTION		
	POUR INFORMATION : FOR INFORMATION	ASP: J.J.Juillet, P.Rideau, C.Masse, G.Doubrovik ASED: J.Kroeker, S.Idler, W.Ruhe ESA: T.Passvogel	
	F	APPROUVE PAR / APPROVED BY	
NOM / NAME SIGNATURE / SIGNATURE			



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G.Crone	ESA		E.Sawyer	SPIRE	
C.Scharmberg	ESA		E.Clark	SPIRE	
N.Nikolaizig	ESA		D.Griffin	SPIRE	(part)
P.Olivier	ESA		B.Swinyard	SPIRE	(part)
H.Faas	ASED		K.King	SPIRE	(part)
D.Hendry	ASED				
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ACTION

Agenda:

DRB will be hold according "Delivery Review Procedure for H-P Scientific Instruments", Ref. SCI-PT-27760, Issue 1.0

The DR consists essentially of two parts:

- 1. Review of the documentation (see data package list below of the EIDP) typically $\frac{1}{2}$ day
- 2. DRB Meeting, typically 1 day, and Inspection of HW typically $\frac{1}{2}$ day

The PI team shall organise the tour through the facility for the HW inspection, taking into account possible limitations of personnel in the

facilities (limited number of personnel at any one time in the cleanrooms).

The DRB meeting shall cover the subjects below, which shall also be adequately addressed by the EIDP in the form of documents:

- 1. Confirm list of deliverable items.
- 2. Review the Configuration Item Data List, CIDL (as-designed).
- 3. Review the actual build status for hardware and software ABCL (as-built).
- a. Review of relevant change proposals status and reconciliation of changes
- b. Establish potential deviations to the design qualification baseline or to different models.
- 4. Review the status of non-conformance (major + minor).
- 5. Review the status of waivers/deviations.
- 6. Evaluate inspection results including cleanliness status.
- a. Verify witness samples
- b. MIP/KIP reports
- 7. Review the status of the test programme/test flow and test reports.
 - a. Review the verification status of requirements, VCD
- b. Qualification/Acceptance test successfully run
- 8. Establish acceptability of Residual Hazards, and verify that all safety issues were covered and well understood, including the dangerous goods declaration, when applicable.
- 9. Review all interfaces and critical items.
- 10. Evaluate Historical Records, Mate/demate log, Limited Life Item Records, Open Work Records, Temporary Installation Records, Red Flag Items, and other sections of ADP for content and completeness.
- 11. Evaluate Operational constraints, Operating and Maintenance Manuals.
- 12. Review the hardware status and procedure of packaging, handling shipping, and storage operations.
- 13. Visual inspection of HW
- 14. Authorise shipment.

The output of the DR is the conditional or unconditional authorisation for shipment and for further use.



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Deliverable Items: Differences wrt nominal configuration

1: **JFET**:

During the SPIRE functional test n° 2, one of the JFET modules (1 modules out of 6 in the Photometer JFET) has been damaged (membrane destroyed), and the unit must be replaced by the spare one (from JPL).

The damaged module has been sent to JPL for investigation, and a spare module will be sent back, but will not be available together with the FPU for shipping.

SPIRE would prefer to ship the FPU as foreseen (by truck, arrives Tuesday 16/11 at ASED), and bring the JFET when available (2 to 3 days after). Integration would take a few hours

ASED would prefer to get the instrument in one package

SPIRE proposition is agreed by all parties

SPIRE will confirm on Monday the availability of the JFET, and the proposed date for JFET integration and instrument incoming inspection.

AI 1 - SPIRE 15/11

2: Level 0 Straps

The new level 0 straps (all 3 Cooler pump, evaporator, 2K enclosure) have to be exchanged (better copper, electrical insulation) on the FPU.

The FPU is delivered with prototype straps that cannot be used for SPIRE testing SPIRE proposal is to integrate the straps on the optical bench, prior integration of the OBA on the cryostat.

The availability date of the straps is currently not known and is quite uncertain, as there are still some manufacturing problems: the straps support was welded to the strap during annealing (600°C). Investigation are on going to solve this problem without re-manufacturing the straps (which would take 2 months) SPIRE will inform ESA/Industry regularly about the best possible date for integration.

ASED indicates that the baseline to integrate the strap is **beginning of December**.

Note that installing the strap when the FPU is integrated on the OBA is not nominal, and present some risk (access, extra tools needed, ...)

For information, access to the FPU is **possible up to end of January**, where the Instrument shield is installed.

Note also that the integration takes place in class 100 room, and that all tools need to be compatible with that environment.

If the straps would have to be integrated later, ASED will analyse the impacts of the schedule, and inform Alcatel/ESA.

AI 2 - SPIRE



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ACTION

3: Mechanisms dissipation simulators

A T Piece has to be installed on the FCU connector J26 (TBC) during the thermal tests, to activate a heater from an external power supply (provided by SPIRE) on the mechanisms, to simulate the nominal dissipation. The connector has to be covered with an EMC cap during the EMC tests. (ref AI 2 from the last SPIRE AIT meeting HP-2-ASED-MN-0753 9/9/04)

4: Return of the SPIRE warm units:

SPIRE requires the warm units (QM1) to be returned at RAL before 15/12/04, to proceed with the FM1 test (allows to save 1 to 2 months on the FM sequence). The return could be done only after inspection and Warm units functional test with simulator and CCS is performed. This is currently in line with the current EQM –Instrument AIT planning.

ASP & ASED position is that a CR to IID-B (difference to QM delivered for 1 year) should be issued to cover the activities of de-integration shipment, reintegration, re-inspection, re-test.

5: ESD & Cleanliness

SPIRE units will be delivered with protection and / or shorting plugs on connectors (FFET has special ESD plugs), that shall remain with the units until integration (removed according to the integration procedure).

ASED will provide safing plugs on the cryoharness

The TN "Making SPIRE ESD safe – SPIRE –RAN NOT 0028" has been updated to issue 2.0 (industry baseline is still 0.2 draft, included in annex 6 of IID-B 3.3) SPIRE to issue a CR to make this annex applicable

AI 3 - SPIRE

6: I-EGSE

I-EGSE is not a SPIRE deliverable, but a common deliverable for all 3 instruments. It is being installed next week at ASED, under the supervision of PACS, supported by ASP (database) and ASED.

Incoming inspection is performed with specific EGSE (FPU simulator) which is not deliverable. Reference to this hardware is given in the EGSE List.

7: Power supply for DCU-FCU

FCU-DCU are using an external Power supply.

Description & user manual are part of the DCU/FCU subsystem EIDP.

The cable between power supply & warm unit is currently 3 m.

A 5m cable is needed to fit with the cryostat tilt. This cable is needed before end of march 05.

8: Software

The OBS delivered with the CQM is SPIRE internal version 2 (same as for Instrument Level test)



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1 -

MIB (mission Information Base) has already been delivered and checked (by ASP). Prior to instrument testing, the version of the MIB will be determined. (this is not needed for incoming inspection).

ACTION

9: MGSE

Documentation related to the MGSE is missing from the EIDP and should be added as a separate document (description, certification,). Proof load needs to be done on the Hoisting device.

AI 4 - SPIRE

10: Purging

There is a purging requirement of the FPU in the integration procedure if the FPU is left more than 20 days

SPIRE agrees to remove this purging requirement from the Handling procedure.

SPIRE will update the shipping list and the open work section according to these remarks

AI 5 - SPIRE

Review of documentation

Latest issue of the EIDP is handed over by SPIRE to participant (from USB key)

According to above information, serial number of JFET module has to be modified.

The SPIRE EIDP log (SPIRE-SPIRE-NOT-001675 issue 2) has to be extended to include the JFET modules serial numbers, and needs to be updated

AI 6 - SPIRE

CIDL (as designed)

CIDL issue 2 is not yet available, but is almost finished Action to SPIRE to finish the CIDL for the delivery

AI 7 - SPIRE

ABCL (as Built)

The issue of the drawing has to be included.
The NCR's affecting any items has to be identified
SPIRE to update the ABCL according to these remarks.

AI 8 - SPIRE

Waivers

HP-SP-CEA-001 (component AD509 quality levels) is not in the list, and is approved

HP-SP-CEA-002.2 (External Power supply for DCU/FCU). Has been sent by mail on 27/4/04

Version 2 was rejected by Alcatel. for the following reasons: extra activities needed to accommodate the external power supply



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and difficulty to perform the EMC tests. Issue 2.2 will have the same appreciation.

ESA will have to take dispositions based on this position.

Al 9 - ESA

HP-SP-JPL-RFW-001 (JFET CQM dissipation) accepted at SPIRE project level HP-SP-JPL-RFW-003 (RF Attenuation for the RF Filter Modules) accepted at SPIRE project level

HP-SP-JPL-RFW-003 (BDA and JFET module sine test deletion) accepted at SPIRE project level

HP-SP-SPIRE-RFW-003 (Limit maximum load cycles during Warm and Cryovibration tests) has to be circulated, but does not affect CQM delivery as there are no vibration tests at CQM level.

HP-SP-SPIRE-RFW-004 (Deletion of mass properties measurements on CQM) has been distributed, following a demand from SPIRE to skip the mess property measurement to same time. RFW will be accepted by ESA/Alcatel, as no mass properties measurement is made on the QM. ASED will give their disposition (main concern is that the QM FPU will be refurbished for FM, but in that case, mass properties will have to be measured).

These RFW 3 & 4 shall be (re-)distributed

NCR's

3 Open NCR's

HP-SP-JPL-NCR-005 (minor) (incoming inspection of STM JFET). Does not affect the delivery

HP-SP-SPIRE-NCR-075 (MAJOR) (During Cold vibration test the sine test went to 200 Hz instead of 100Hz.) The level was estimated to be below 10grms. Vibration test was performed between functional test 1 & 2. SPIRE Functional test 2 has proven that no damages occurred. This NCR can be closed (common agreement).

HP-SP-SPIRE-NCR-087 (MAJOR) (JFET Membrane Failure during CQM Cold Test2)

This one is still open (origin of the problem still unknown), and do has an impact on the delivery (JFET module has to be replaced by JPL, and swapped after reception of FPU at ASED)

Closed NCR's

HP-SP-SPIRE-NCR-081 (MAJOR) (Electrical Short on JFP I/F). A short circuit was found during integration between the JFET screw and the Carbon fibre support, has been temporarily solved by a piece of scotchweld (epoxy) inside the carbon tube. The screws are nominally coated with insulator, and this one was probably scratched by a fibre. This solution modifies the configuration. SPIRE needs proper solution for the FM.

There is a check of the insulation in the integration procedure.



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It is agreed to apply the coating on all carbon feet to avoid the problem. This point is now added to the Open work.

ACTION

Evaluate inspection results including cleanliness status., MIP/KIP

Cleanliness plan is included in EIDP, old (2002) but still valid as a plan. The cleanliness reports are included in the log book.

The SPIRE outgoing inspection report and cleanliness verification will be included in the EIDP. (has not been produced yet), part of the outgoing Inspection

The standard SPIRE proforma outgoing inspection report, including checkout List, is used

Status of witness sample is recorded in the logbook.

For the CQM, no formal MIP/KIP were performed by ESA, but SPIRE performed their own verifications which is recorded in the log book.

For FM, formal MIP/KIP have been defined and will be performed.

SPIRE will include in the EIDP the incoming inspection report.

AI 10 -SPIRE

SPIRE recommends to wait 24h between reception and before opening the instrument container (for humidity, to allow the temperatures to equalize)

- Review the status of the test programme / test flow and test reports.

The ILT2 performance test report is not available, and needs a few weeks of data analysis before being written. Report will not be available before January 05.

EMC test was not designed nor foreseen to be a qualification test. Has been performed with the EM PSU for the DCU/FCU.

EMC test report (draft) will be delivered at the SPIRE IQR.

SPIRE mechanical verification p 4 typo: Change 365mm to 265 for L0 interface height 1

Mechanical and Thermal Qualification was successfully performed on the FPU. Optical tests demonstrates that the detectors and instrument survived vibration. SPIRE will be able to see the (cooled) cryostat cover shield

The complete test program has been run, except for some parts (after JFET failure)

VCD's Verification control documents are missing from the EIDP, and will be provided by end of next week

Spire QM qualification matrix (SPIRE-RAL-DOC-002165) shall be updated to reflect that the electrical interface qualification is related to external interfaces only.

Precise also that when a document reference is given, the test is performed, and when yes is written, the test will be performed.

AI 11 -SPIRE 19/11 AI 12 -SPIRE



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CQM1 Verification Matrix Report - SPIRE-RAL-REP-002095 (draft) shall be updated and added to the EIDP.

Al 13 -SPIRE

ACTION

It is agreed that no further tests need to be transferred from instrument level test to system tests

- Evaluate Operational constraints, Operating and Maintenance Manuals

User manual is not available in the EIDP

SPIRE to provide the user manual before end of this year (2004)

AI 14 -SPIRE

All commands have been verified during instrument level test. However, not all test scripts have been compiled.

SPIRE will prepare the relevant test scripts.

Alcatel will clarify what is the limit date for instruments to send the test scripts For the integration and warm test, there are no additional operational constraints (other than the existing integration procedures)

SPIRE will include in the EIDP the electrical bench test procedure (as part of the incoming inspection)

Electrical integration procedure is new, and has to be reviewed by industry.

AI 15 - ASP

AI 16 -SPIRE AI 17 - ASED

Inspection of Hardware

Performed in splinter session by the PA's

Conclusion:

SPIRE FPU will need a cleaning before packing.

The harness of the dummy JFET needs to be re-connected for the transport and the dummy module secured.

Connectors are protected with plastic dust caps with cut parts on the side for the screws. This is acceptable for a QM, but better caps will have to be used for the FM.

Alignment cube is not there yet, and should arrive tomorrow from LAL.

The external alignment verification will be documented in a separate document to be added to the EIDP

Fixation screws are supplied by ASED for the FPU & warm units. SPIRE provide the screws for the JFET. SPIRE provides also the insulating washers for the FPU. SPIRE provides also the fixation screws for the L1 interface.

The grounding of warm units on the SVM dummy has to be clarified by ASED. Units are delivered with grounding stud.

(for information, on FM, the grounding strap is provided by the SVM, the screw & torque by the instrument)

It is agreed not to use desiccant (silica gel) inside the container, to avoid contamination.

AI-18 - RAL

AI 19 - ASED



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ACTION

Establish acceptability of Residual Hazards, and verify that all safety issues were covered and well understood, including the dangerous goods declaration, when applicable.

The safety aspects are covered in the safety analysis, and in the integration and handling procedure.

The only possible hazard is the sorption cooler, covered by the Residual hazard report.

- Review all interfaces and critical items.

SPIRE Critical item list is a project level document, and is not appropriate for the CQM delivery.

Purging requirement included in the integration & handling procedure (for the QM only). As no interface for purging are existing on the FPU, it will be difficult to purge the FPU when it is integrated on the OBA, and on the cryostat. SPIRE agrees to take this requirement out of the procedure.

ESD is critical and is covered in the electrical integration procedure

Cooler is critical and covered by the hazard report

Interfaces: Industry is working with IID-B issue 3.3, and IID-A 3.3 RAL is compliant with that issue, and states that the FPU interface drawing (issue 19) needs to be updated to reflect the current hardware definition. The differences are identified, and documented in IID-B, annex 1, page A1-2 & 3.

LO interfaces: ASED will provide the IF plates & bolts

L3 interfaces: SPIRE will provide the bolts, blocks and bushes (providing

electrical insulation)

FPU feet: Electrical insulation washers & steel washers are provided by SPIRE, Cryo-harness: ASED will provide the RF tight backshells on the cold units that are not used.

Electrical interfaces

Cryo-harness

Cryo-harness has been designed/built according to SPIRE IID-B (3.3) requirements

ASED states that the cryo-harness database has been verified (pin to pin) against the IID-B

Physical verification of the database with the instrument cryo-harness is foreseen. This is possible with SPIRE until integration of the FM early December. ASED to check when this physical verification can be performed, and initiate it.

(planned to take place during the 2 first weeks of Decembre)

Independent verification of the cryo-harness will start when the database will be available (end Nov)

End of meeting for 11/11/04

AI 20 - ASED



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Start of meeting for 12/11/04

Comments on ABCL/CIDL

Final CIDL should have been issued at IHDR (and do not need to be updated then)

From that, the ABCL should be updated taking into account the built standard evolution

The ABCL should contains references for all specifications (instrument requirements, IID's, data ICD, ...), analyses, material/processes, plus the drawings

Currently, the SPIRE ABCL contains the list of drawings, without issues.

SPIRE will update the ABCL according to this clarification (see also AI 8)

Al 21 -SPIRE

Some documents, not part of the EIDP are supposed to be available:

DML/DPL, EEE part list, FMECA for the CQM

The latest issue will be presented at the IQR.

Difference between CQM & FM shall be identified.

Discussion about including the relevant documents in the EIDP (as asked in the DRB procedure)

SPIRE accepts to include DML/DPL and EEE part list in the EIDP

AI 22 -SPIRE

- Evaluate Historical Records, Mate/demate log, Limited Life Item Records, Open Work Records, Temporary Installation Records, Red Flag Items, and other sections of ADP for content and completeness.

Historical log:

Includes a statement that the external power supply has been replaced by EM PSU (for testing purposes, 20/9/04). Removal of EM PSU should also be indicated

2nd Cold thermal verification (23 dec 03) should be renamed in 1st Cold thermal verification

Mate-Demate Log:

Has not been performed as an independent log.

The connectors Mate-Demate Log have to be produced by SPIRE from the internal logbook, and included in the EIDP, and further maintained by ASED for the EQM activities.

Mate-Demate Log will be properly maintained for the FM

Limited Life Items

List is empty: No known limited life items

AI 23 -SPIRE



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Open Work Records (ref top of meeting)

- Apply Scotchweld inside the JFET carbon fibre feets (*)
- Exchange Damaged JFET
- Swap level 0 Straps
- FPU External alignment & fit alignment cube (*)
- MGSE proof load test (*)
- Change DCU/FCU external power supply cable
- Integration of the EMI backshell (performed by ASED)
- Gounding of warm units (normal work, performed by ASED, see Al 18)
- For transportation, the FPU is sealed in plastic bags, and flushed with dry nitrogen

(*) before shipping

Temporary installation Records Covered by Open works

Red Flag Items (refer to Handling & Integration procedure, section 8)

- Aperture cover
- Alignment cube
- Temporary grounding strap
- Shorting plugs

Other sections of ADP:

References are missing for some Drawings: For IF drawings, refer to IID-B 3.3 CQM ILT test plan (SPIRE RAL-Doc-001049_2) is not signed, and still has TBD's As the test as been performed, it is not planed to update the document.

The CQM test specification (SPIRE- RAL-DOC-001123) is a draft 4 issue. It will also not be updated, and is superseded by detailed test procedure which will be referenced in the test report.

The ILT test report (compilation of test 1 & test 2) will be updated by end 2004

Operating Time cycle record is empty.

This is usually important for relays, with limited number of cycles (10 ^ 5). SPIRE states that there are no record available, as it is an engineering model.

Photos: It is stated that the relevant photos should show the position of sensors. (Temperature sensors). To be included in EIDP issue 2

Loose items: refer to item 6 in the deliverable item list

Missing items: refer to open work

Pin allocation are covered by SPIRE IID-B 3.3 annex 3 (summary of Harness function,



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SPIRE Harness definition document issue 1.1

SPIRE harness delta: SPIRE-RAL-NOT-001819, Issue 4, 08-07-2004

ACTION

Software

Software issue 1.2j received from IFSI to SPIRE for ILT 2

Issue 1.2k has been delivered to Carlo Gavazzi Space to test the DPU (called then version 1)

SPIRE added some functionality (from 1.2k + S-CR's) to be able to drive the SMEC, starting at version 2. This is the version that will be delivered with the

The delta between software issues 1.2j and 2.0 will be clarified in the EIDP (lists S-CR's, S-PR's, updates,

AI 24 -**SPIRE**

Data ICD included in datapack is 1.0 draft 2 from 15 Janv 2003. Latest issue is 1.2k. (not available).

It will be updated to issue 2.0 for the EIDP

AI 25 -SPIRE

Update of the software (Patch) can be done via the I-EGSE, but not (yet) through the CCS. (needs to disconnect & reconnect differently)

It might be possible to have to update the software to have it working properly when the I-EGSE is connected to the instrument through the CCS.

A procedure is needed to be able to patch the instrument software through the CCS.

This point should be brought as an agenda item for the next I-EGSE working group (24/11?)

The warm electronics bench test will be performed using the instrument I-EGSE and an FPU simulator (connected to warm unit through test harness).

Following test with IEGSE connected to warm units through the CCS (still using FPU simulator)

The procedures for these tests are available in the I-EGSE, but need to be converted to be compatible with the CCS (using a template).

SPIRE states that the software works well, and has never been a problem during SPIRE functional tests.

The OBSW CIDL is not existing.

The software is delivered as a Lump, and is updated as a block. No individual libraries are identified nor managed (for the QM)

The control of the software subsystem versions will be done for FM OBSW, and proper CIDL will be issued.

The MIB files have been delivered independently. They have been validated at SPIRE, and integrated on the CCS.

AI 26 - ASP



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The software is delivered installed in the DPU.

ESA request to have a copy of the software on CD-ROM

AI 27 - SPIRE

Authorisation to shipment

It is agreed to ship SPIRE CQM on Monday 15/11, arrive on Tuesday 16/11 (transport by truck).

SPIRE would prefer to have incoming inspection and Bench test in one go (expected duration 2 days)

Arrival of SPIRE team depends of the availability of the JFET.

Nominal (if JFET is available) is to do unpacking & Bench test on Thursday 18/11 Friday 19/11.

Alternative, (if JFET is not available), is to start unpacking & Bench test on Monday 22/11. (ref Al 1)

The board conclude that the shipment of the SPIRE CQM from RAL to ASED can proceed as foreseen.

There will be an "FPU Integration Readiness Review" (IR1) to be held following incoming inspection and bench test of FPU.

A second Integration readiness review (IR2) for the warm units will be held following bench testing of warm units & CCS interface validation.

The following actions should be completed for these reviews (see Action Item List)

The transfer of responsibility from SPIRE to ESA, then Alcatel and Astrium, will take place at the Integration Readiness Review.

Issue 1.1 of the EIDP will be shipped with the Hardware It is agreed that the final issue (2) of the EIDP will consist of 2 paper copies (1) together with H/W, 1 to ESA), and 5 CD's. + 1 on FTP) The intermediate version will be updated electronically (via ftp)



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ACTIONS						
Origine	N°	For Review	Description	Responsable / Responsible	Echéance / <i>Due</i>	
Board	1	-	SPIRE will confirm on Monday the availability of the JFET, and the proposed date for JFET integration and instrument incoming inspection.	SPIRE	15/11	
Board	2	-	SPIRE will inform ESA/Industry weekly about the best possible date for integration of the Level 0 Straps.	SPIRE	19/11	
	3	-	The TN "Making SPIRE ESD safe – SPIRE –RAN NOT 0028" has been updated to issue 2.0 (industry baseline is still 0.2 draft, included in annex 6 of IID-B 3.3) SPIRE to issue a CR to make this annex applicable	SPIRE	15/12	
	4	Incommi ng	Documentation related to the MGSE is missing from the EIDP and should be added as a separate document (description, certification,). Proof load needs to be done on the Hoisting device.	SPIRE	17/11	
	5	Shipping	SPIRE will update the shipping list and the open work section according to these remarks	SPIRE	15/11	
	6	Issue 2	The SPIRE EIDP log (SPIRE-SPIRE-NOT-001675 issue 2) has to be extended to include the JFET modules serial numbers, and needs to be updated	SPIRE	15/12	
	7	Issue 2	Action to SPIRE to finish the CIDL for the delivery (with IHDR comments)	SPIRE	15/12	
	8	IR-1	The issue of the drawing has to be included. The NCR's affecting any items has to be identified SPIRE to update the ABCL according to these remarks. (see also AI 20	SPIRE	22/11	



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	ACTIONS						
Origine	N°			Responsable / Responsible	Echéance / <i>Due</i>		
	9		ESA to provide disposition on HP-SP-CEA-002.2 (External Power supply for DCU/FCU). (taking into account industry rejection).	ESA	15/11		
	10	Shipping	SPIRE will include in the EIDP the incoming inspection report.	SPIRE	15/11		
	11	IR-1	VCD's (Verification Control Documents) are missing from the EIDP, and will be provided by end of next week	SPIRE	22/11		
	12	IR-1	Spire QM qualification matrix shall be updated to reflect that the electrical interface qualification is related to external interfaces only. Precise also that when a reference is given, the test is performed, and when yes is written, the qualification will be performed.	SPIRE	22/11		
	13	IR-1	CQM1 Verification Matrix Report - SPIRE-RAL-REP-002095 (draft) shall be updated and added to the EIDP	SPIRE	22/11		
	14		SPIRE to provide the user manual before end of this year (2004)	SPIRE	31/12		
	15	-	Alcatel will clarify what is the limit date for instruments to send the test scripts	Alcatel	19/11		
	16		SPIRE will include in the EIDP the FPU & Warm units electrical bench test procedure (as part of the incoming inspection)	SPIRE	17/11 (FPU) 26/11 (WU)		



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ACTIONS					
Origine	jine N° For Review		Description	Responsable / Responsible	Echéance / <i>Due</i>
	17		Electrical integration procedure is new, and has to be reviewed by industry.	ASED	3/12
	18	IR-1	Alignment cube is not there yet, and should arrive tomorrow from LAL. The external alignment verification will be documented in a separate document to be added to the EIDP	SPIRE	22/11
	19		The grounding of warm units on the SVM dummy has to be clarified by ASED. Units are delivered with grounding stud.	ASED	25/11
	20		Physical verification of the database with the instrument cryo-harness is foreseen. This is possible with SPIRE until integration of the FM early December. ASED to check when this physical verification can be performed, and initiate it.	ASED	30/11
	21		SPIRE will update the ABCL according to this clarification (linked to Al 8)	SPIRE	22/11
	22		SPIRE accepts to include DML/DPL and EEE part list in the EIDP (in issue 2)	SPIRE	15/12
	23	Issue 2	The Mate-Demate Log have to be produced by SPIRE from the internal logbook, and included in the EIDP, and further maintained by ASED for the EQM activities. (use black table now, and complete properly for EIDP issue 2	SPIRE	15/12
	24	Issue 2	The delta between software issues 1.2j and 2.0 will be clarified in the EIDP (lists S-CR's, S-PR's, updates,	SPIRE	15/12



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	ACTIONS				
Origine	ne N° For Description				Echéance / <i>Due</i>
	25	Issue 2	Data ICD will be updated to issue 2.0 for the EIDP	SPIRE	15/12
	A procedure is needed to be able to patch the instrument software through the CCS. This point should be brought as an agenda item for the next I-EGSE working group (24/11)		ASP	19/11	
	27		ESA request to have a copy of the software on CD-ROM	SPIRE	25/12