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Issued by	***Marco Frailis*** ***LFI SGS1 Manager***	**Date:** **Signature:**	**JUNE 28TH, 2007**
Agreed by	***A. Zacchei*** ***LFI DPC Manager***	**Date:** **Signature:**	**JUNE 28TH, 2007**
Agreed by	***C. Butler*** ***LFI Program Manager***	**Date:** **Signature:**	**JUNE 28TH, 2007**
Approved by	***N. Mandolesi*** ***LFI Principal Investigator***	**Date:** **Signature:**	**JUNE 28TH, 2007**

DISTRIBUTION LIST

Recipient	Company / Institute	E-mail address	Sent
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N. Mandolesi	INAF-IAsFBo	mandolesi@iasfbo.inaf.it	Y
C. Butler	INAF-IAsFBo	butler@iasfbo.inaf.it	Y
L. Stringhetti	INAF-IAsFBo	stringhetti@iasfbo.inaf.it	Y
M. Miccolis	Alcatel Alenia Space – Italy (Mi)	Maurizio.Miccolis@aleniaspazio.it	Y
M. Balasini	Alcatel Alenia Space – Italy (Mi)	Maurizio.Balasini@aleniaspazio.it	Y
A. Zacchei	INAF-OATs	Zacchei@oats.inaf.it	Y
M. Frailis	INAF-OATs	Frailis@oats.inaf.it	Y
Sonia Dos Santos	Alcatel Alenia Space - France	Sonia.Dos-Santos@support-externe.alcatelaleniaspace.com	Y
F. Chatte	Alcatel Alenia Space	Felix.Chatte@alcatelaleniaspace.com	Y
L. Perez Cuevas	ESA	Leticia.Perez.Cuevas@esa.int	Y
A. Gregorio	INAF-OATs	anna.gregorio@ts.infn.it	Y

CHANGE RECORD

Issue	Date	Sheet	Description of Change	Release
1.0	*16 April 2007*	All	First release	AVM 1.2.0
1.1	8 May 2007	All	Fixed Memory Dump Abs. interpretation from variable (V) to fixed (F)	AVM 1.2.1
1.2	28th May 2007	All	Added Memory Check Report Decommutation	AVM 1.2.2

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1 INTRODUCTION

The present document contains the release note for the LFI AVM database version 1.2.2 based on the last official release (LFI AVM 1.1.0) with the following NCRs applied:

- NCR 13323 - This NCR is divided in two points:
  1. **Telemetry validity**: a check of the telemetry validity based, for instance, on the switch on/off of the equipment.
  2. **Packets outdated**: a check of the arrival of the packets via the PID date. This change was already included in the LFI AVM database 1.1.0

- NCR 13333 – This NCR is divided in three points:
  1. **Memory Dump Absolute Address decommutation**: even if this is a variable packet, for two fixed memory areas (with identical structures) of the DPU ASW and the SPU SUSW, an explicit decommutation is needed to automatize the UFT procedure.
  2. **Telemetry parameters with type (7,2)**: this is not a real NCR since type (7,2) is allowed by the SCOS2k MIB Definition table but this parameter type caused problems to the MOIS system (see MN 8887). It was decided to change the type to (3,12). This change was already applied to the LFI AVM database 1.1.0
  3. **Memory Check Report Absolute Address decommutation**: analogously to the Memory Dump packet, an explicit decommutation is needed to automatize the UFT procedure.

2 DATABASE VERSION

The Database version delivered is the one obtained by applying the changes specified in the NCRs 13323 (1) and 13333 (1, 3) to the database version 1.1.0

The upgraded version is tagged with: AVM_1.2.2

3 CHANGES TO PREVIOUS VERSION

The changes with respect to the LFI AVM 1.1.0 are here reported:

3.1 NCR 13323 (1) TELEMETRY VALIDITY TOPIC FROM MN-8887

Table affected: pcf.dat

3.1.1 SYNTHETIC PARAMTERS

The following synthetic parameters have been added to the pcf.dat table:

PCF_NAME	PCF_DESCR	PCF_PTC	PCF_PFC	PCF_CATEG	PCF_NATUR	PCF_USCON	PCF_DECIM	PCF_VALPAR
LD100320	VALIDITY TM	1	0	N	D	N	0	1
LD100340	VALIDITY TM	1	0	N	D	N	0	1
LD100342	VALIDITY TM	1	0	N	D	N	0	1
LD100350	VALIDITY TM	1	0	N	D	N	0	1
LD101320	VALIDITY TM	1	0	N	D	N	0	1
LD101322	VALIDITY TM	1	0	N	D	N	0	1
LD101326	VALIDITY TM	1	0	N	D	N	0	1
LD101328	VALIDITY TM	1	0	N	D	N	0	1
LD101332	VALIDITY TM	1	0	N	D	N	0	1
LD101342	VALIDITY TM	1	0	N	D	N	0	1
LD102328	VALIDITY TM	1	0	N	D	N	0	1
LD103322	VALIDITY TM	1	0	N	D	N	0	1
LD104322	VALIDITY TM	1	0	N	D	N	0	1
LD105322	VALIDITY TM	1	0	N	D	N	0	1
LD106322	VALIDITY TM	1	0	N	D	N	0	1
LD107340	VALIDITY TM	1	0	N	D	N	0	1
LD108340	VALIDITY TM	1	0	N	D	N	0	1
LD109328	VALIDITY TM	1	0	N	D	N	0	1

The synthetic parameter LD107340 checks if the REBA is ON. At present, it is defined (in the SCOS OL language) as:

```
1;
```

since it should be modified by the Alcatel team adding the corresponding SVM parameter. The other two relevant synthetic parameters are LD108340, which verifies that the DAE HK acquisition is ON, and LD109328, which verifies that the DAE sequencer is ON; these two synthetic parameters just check a fixed bit within a parameter.

In particular LD108340 is defined as:

```
(((LM543340 and (1 << 5)) >> 5) == 1);
```

i.e. it verifies that the bit number 5 within parameter LM543340 has value 1.

The synthetic parameter LD109328 is defined as:

```
(((LM413328 and (1 << 1)) >> 1) == 1);
```

i.e. it verifies that the bit number 1 within parameter LM413328 has value 1.

The synthetic parameter LD102328 is defined as:

```
LD107340 land LD108340;
```

verifying that both the REBA and the DAE HK acquisition are ON

All synthetic parameters named LD100ppp, where ppp is the position number, are defined as:

```
LD107340;
```

i.e. they are true if the REBA is ON.

Synthetic parameters named LD101ppp, where ppp is the position number, are defined as :

```
LD102328 land LD109328;
```

i.e. they are true if the REBA, the DAE HK acquisition, and the DAE sequencer are ON.

The synthetic parameters LD103322 is defined as:

```
LD101322 land (LM423332 == 1);
```

i.e. it is true if the REBA, the DAE HK acquisition, the DAE sequencer and the DC/DC converter N° 3 are ON. Analogously, the synthetic parameters LD104322, LD105322 and LD106322 verify the status of the other three DC/DC converters

3.1.2 TELEMETRY VALIDITY

For all the parameters belonging to the following TM packets:

SID	Description
120202369	Planck LFI REBA HK
120300369	Planck LFI REBA Diagnostic HK
121202369	Planck LFI REBA Essential HK
120201342	Planck LFI REBA Susw HK

the PCF_VALID field as been set to a synthetic parameter which is **true** when the REBA is ON. The synthetic parameter name depends on the **position** of each TM parameter. For instance, the PCF_VALID field of the parameter LM221**342** (in packet REBA HK) has been set to LD100**342** while the PCF_VALID field of the parameter LM563**350** (in packet REBA HK) has been set to LD100**350**.

For the parameters LM411328 and LM413328 (in packet **PLANCK LFI DAE FAST HK Format**), the PCF_VALID field has been set to LD102328.

For all the other parameters of packet **PLANCK LFI DAE FAST HK Format** (SID 120102369) and all the parameters of packet **PLANCK LFI DAE Fast Essential** (SID 121102369) the PCF_VALID field has been set to LD101ppp, where ppp is the position number of the parameter to be validated.

Finally, the following table specifies the PCF_VALID field for the parameters in packet **PLANCK LFI DAE Slow HK Format** (SID 120101369):

Parameter name	PCF_VALID	Comment
LM051322 LM052322 LM053322 LM054322 LM055322 LM056322 LM057322 LM058322 LM059322 LM060322 LM061322 LM062322 LM063322 LM064322 LM065322 LM066322	LD103322	Parameters valid when DC/DC converter N° 3 is ON

LM067322 LM068322 LM069322 LM070322 LM071322 LM072322 LM073322 LM074322	LD104322	Parameters valid when DC/DC converter N° 4 is ON
LM075322 LM076322 LM077322 LM078322 LM079322 LM080322 LM081322 LM082322 LM083322 LM084322 LM085322 LM086322	LD105322	Parameters valid when DC/DC converter N° 2 is ON
LM087322 LM088322 LM089322 LM090322 LM091322 LM092322 LM093322 LM094322	LD106322	Parameters valid when DC/DC converter N° 1 is ON
All the other parameters	LD101ppp	Where ppp is the position number of the parameter to be validated

3.2 NCR 13333 (1) MEMORY DUMP ABSOLUTE ADDRESS DECOMMUTATION

Tables affected: plf.dat, pcf.dat, dpf.dat, dpc.dat,vpd.dat

3.2.1 NEW TM PARAMETERS

The following parameters have been added to the pcf.dat table:

PCF_NAME	PCF_DESCR	PCF_PTC	PCF_PFC	PCF_CATEG	PCF_NATUR	PCF_USCON	PCF_VALPAR
LM050369	Memory Dump ID	3	12	N	R	N	1
LM051369	Start Address	3	12	N	R	N	1
LM052369	Length	3	12	N	R	N	1
LM053369	Reset Source	3	14	N	R	N	1
LM054369	Hardware Init	3	14	N	R	N	1
LM055369	PROM CRC Comp	3	14	N	R	N	1
LM056369	PROM CRC Exp	3	14	N	R	N	1
LM057369	EDAC Fail Prog	3	14	N	R	N	1
LM058369	EDAC Fail Data	3	14	N	R	N	1
LM059369	Last SEF PM	3	14	N	R	N	1
LM060369	Last SEF DM	3	14	N	R	N	1

Their offsets within the Memory Dump Absolute Address packet is defined in the plf.dat table:

PLF_NAME	PLF_SPID	PLF_OFFBY	PLF_OFFBI
LM050369	120066369	16	0
LM051369	120066369	18	0
LM052369	120066369	20	0
LM053369	120066369	22	0
LM054369	120066369	26	0
LM055369	120066369	30	0
LM056369	120066369	34	0
LM057369	120066369	42	0
LM058369	120066369	46	0
LM059369	120066369	66	0
LM060369	120066369	70	0

3.2.2 MAPPING INTO THE XML INPUT FILE FORMAT

In the XML input file which is used to update the AVM MIB on the HPSDB, the interpretation of the Memory Dump Absolute Address has been changed from **variable** to **fixed**, i.e. the following XML element:

```
<SCOS_TM_TH Id="120066369" CfCode="7" SDesc="Memory Dump Absolute
Address" Interpretation="V" TpcfName="Memory Dump"
ChangeReason="NCR 13333-1" DefaultTimeOffset="0">
```

has been changed to

```
<SCOS_TM_TH Id="120066369" CfCode="7" SDesc="Memory Dump Absolute
Address" Interpretation="F" TpcfName="Memory Dump"
ChangeReason="NCR LFI-0003" DefaultTimeOffset="0">
```

This means that all the parameters within the Memory Dump Absolute Address packet are placed in the plf.dat table when the SCOS bridge files are generated. As a side effect, also the parameter LMV01369, which originally was inserted in the vpd.dat table, now is automatically placed in the plf.dat table. This parameter is equivalent to parameter LM050369.

3.2.3 NEW ALPHANUMERIC DISPLAY

The following row has been added to the dpf.dat table:

DPF_NUMBE	DPF_TYPE	DPF_HEAD
LA160369	1	Memory Dump Absolute Addr

The following rows have been added to the dpc.dat table:

DPC_NUMBE	DPC_NAME	DPC_FLDN	DPC_COMM	DPC_MODE	DPC_FORM
LA160369	LM050369	1	1	N	H
LA160369	LM051369	2	1	N	H
LA160369	LM052369	3	1	N	H
LA160369	LM053369	5	1	N	H
LA160369	LM054369	6	1	N	H
LA160369	LM055369	7	1	N	H
LA160369	LM056369	8	1	N	H
LA160369	LM057369	10	1	N	H
LA160369	LM058369	11	1	N	H
LA160369	LM059369	13	1	N	H
LA160369	LM060369	14	1	N	H

3.3 NCR 13333 (3) MEMORY CHECK REPORT ABSOLUTE ADDRESS DECOMMUTATION

Tables affected: plf.dat, pcf.dat, dpf.dat, dpc.dat

3.3.1 NEW TM PARAMETERS

The following parameters have been added to the pcf.dat table:

PCF_NAME	PCF_DESCR	PCF_PTC	PCF_PFC	PCF_CATEG	PCF_NATUR	PCF_USCON	PCF_VALPAR
LM070369	Memory ID	3	12	N	R	N	1
LM071369	Start Address	3	12	N	R	N	1
LM072369	Length	3	12	N	R	N	1
LM073369	Checksum	3	12	N	R	N	1

Their offsets within the Memory Check Report Absolute Address packet is defined in the plf.dat table:

PLF_NAME	PLF_SPID	PLF_OFFBY	PLF_OFFBI
LM070369	120610369	16	0
LM071369	120610369	18	0
LM072369	120610369	20	0
LM073369	120610369	22	0

3.3.2 MAPPING INTO THE XML INPUT FILE FORMAT

In the XML input file which is used to update the AVM MIB on the HPSDB, the interpretation of the Memory Check Report Absolute Address has been changed from **variable** to **fixed**, i.e. the following XML element:

```
<SCOS_TM_TH Id="120610369" CfCode="7" SDesc="Memory Check Report
Abs Address" Interpretation="V" TpcfName="Memory Check"
ChangeReason="DBAMN-096" DefaultTimeOffset="0">
```

has been changed to

```
<SCOS_TM_TH Id="120610369" CfCode="7" SDesc="Memory Check Report
Abs Address" Interpretation="F" TpcfName="Memory Check"
ChangeReason="NCR 13333-3" DefaultTimeOffset="0">
```

3.3.3 NEW ALPHANUMERIC DISPLAY

The following row has been added to the dpf.dat table:

DPF_NUMBE	DPF_TYPE	DPF_HEAD
LA161369	1	Memory Check Report

The following rows have been added to the dpc.dat table:

DPC_NUMBE	DPC_NAME	DPC_FLDN	DPC_COMM	DPC_MODE	DPC_FORM
LA161369	LM070369	1	1	N	H
LA161369	LM071369	2	1	N	H
LA161369	LM072369	3	1	N	H
LA161369	LM073369	5	1	N	H

4 VALIDATION OF THE CHANGES TO PREVIOUS VERSION

The LFI AVM Database version 1.2.2 was validated, before the release, internally at the LFI DPC.

5 DIFFERENCES BETWEEN HPSDB AND CCS DATABASE

None in the LFI AVM DB up to now.

6 DIFFERENCES BETWEEN STAND ALONE TESTING AND CCS DATABASE

None up to now.