


SPIRE-ALC-COM-001419

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	Date 17/10/02	Référence HP-ASPI-LT-1896

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Object : Herschel / Planck - CCS - AI#107-09 (CCS PDR)

RD1 : Herschel / Planck - System Data Base specification - H-P-1-ASPI-SP-0082
 RD2 : Herschel / Planck - Naming convention specification - H-P-1-ASPI-SP-0141
 RD3 : Herschel / Planck - Central Checkout System - External Interface Control Document Iss. 1.1
 RD4 : SCOS 2000 - Database import ICD Iss. 5.1

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Dear Sir,

Please find hereafter the ASPI answer to AI#107/09 (CCS PDR) : **"ASPI to clarify the real need to identify packets not only with SPID but also with PKT_NAME (see bullet 2 and 5 of CCS PDR RID ENG-043)"**

As far as this action's answer can have impact on all users of SCOS and HPSDB on the Herschel / Planck project, this answer is routed (copy) also to instruments, Astrium and GMV. The HPSDB specification Issue 2.2 and the naming convention issue 1.2 will reflect the associated impacts.

1 Answer :

" There is no need to identify TM packet with a PKT_NAME. "




2 Justifications and requests (in bold) :

SCOS does not support PKT_NAME.

SCOS does not manipulate "TM" packets (i.e. CCSDS packets) but SCOS internal Packets (made of a SCOS header and a SCOS body; body that according to configuration contains the full CCSDS packet) identified by a unique SPID and eventually by a TPCF_NAME (refer to MIB ICD table TPCF). **For Herschel / Planck the TPCF_NAME will be mandatory and unique.** The de-commutation of a TM packet is done according to the de-commutation defined for the structure it points to (MIB ICD table PLF).

Within the MIB ASCII files, SCOS allows to associate to a given type of "TM" packet, type determined by the (APID, Type, Sub-type, SID1, SID2) one or several SPID's, one and only one SPID being flagged as PID_VALID is true (meaning the SPID that is to be loaded in SCOS by the MIB Import facility. **For Herschel / Planck this facility is intentionally limited : a given "TM" packet type (refer to a given combination of APID, Type, Subtype, SID1 and SID2) is associated to one and only one SPID (as a consequence the corresponding PID_VALID shall be forced to "Y").**

SCOS allows to associate to the same SPID one or several TM packets types. **This facility is kept for Herschel / Planck.** This will allow to process in the same way (using the same de-commutation, the same archiving, ... since SCOS works on SPIDs i.e. SCOS internal packets identifier)

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3 Impacts on RD3

3-1 Chapter 8.4.3 "New ASCII table GRPK" - RID PDR-CCS-ENG043

The new ASCII table GRPK is correctly described in RD3. Referenced RID is considered as closed.
 Warning : If several packets addressed the same SPID, it will not be possible to segregate them, if the user want to segregate them, he has to put them in different SPID's.

3-2 Chapter 8.8.1 "New ASCII table TMD" - RID PDR-CCS-ENG048

The new ASCII table TMD is correctly described in RD3. Referenced RID is considered as closed.
 Warning : If several packets addressed the same SPID, it will not be possible to distribute them to different equipment's, if the user want to distribute them to different equipment's, he has to put them in different SPID's.

3-3 Chapter 8.9.1 "New ASCII table SPP"




This table is useless as far as there is no "name of the packet".
 The correspondence between packet, uniquely identified by (APID, type, sub-type, SID1, SID2), and SPID is done via PID table (one TM packet will refer one and only one SPID, one SPID can refer more than one TM packet).
 A unique ASCII identifier will be associated to each SPID via TPCF table (TPCF_NAME)

4 Impacts on RD1 and RD2

- A PKT_NAME (Char(14)) identifying each TM packet has been added to facilitate user interface with HPSDB, this PKT_NAME is hidden to SCOS-2000 users, this facility being not supported by SCOS-2000 (baseline and CCS adaptation), but could be used by non-SCOS-2000 users (software, ...),
- "SCOS archiving" item has been added, it is identified by a SCOS archiving identifier Number(10) (MIB ICD : PSID) and (mandatory) by a TPCF_NAME (Char(12)),
- A TM packet can address one and only one "SCOS archiving",
- A "SCOS archiving" can be addressed by more than one TM packet.

Those impacts have been integrated in RD1 issue 2.2 (already distributed) and in RD2 issue 1.2 (to be distributed week 43).

5 Impacts for instruments

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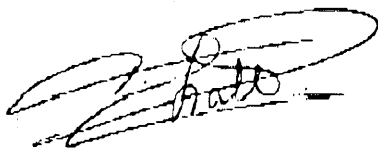
Understood that instruments use the baseline SCOS-2000 version (no specific adaptation, like for CCS) the following impacts are identified to insure compatibility between instrument SCOS-2000 files and HPSDB :

- It is requested to fill the field TPCF_NAME according to RD2 rules,
- One TM packet can address one and only one "SCOS archiving", as consequence the field PID_VALID shall be set to "Y"

This fax closes the referenced action item.

Best regards.

Author :



Authorised by :

