

## **FRENCH REPORT by CNES – ISO/TC20/SC13 SAO JOSE DOS CAMPOS – June 2010**

### **1 – MANAGEMENT:**

#### 1-1 ORGANIZATION

CNES has a new Inspector General and Quality Director, Mrs Isabelle RONGIER.  
Any activity related to standards is to be reported to her directorate.

#### 1-2 AREA OF AGENCY INVOLVEMENT

Global, for category A missions.

#### 1-3 MANPOWER ALLOTTED TO TC-20/SC-13

Tentatively maintained to 0.1 man x year on the SC-13 specifics.  
In the order of 3 to 4 FTE in the CCSDS activities.

### **2 – IMPLEMENTATION ACTIVITIES**

#### 2-1 SPACECRAFT UTILIZING SC13 STANDARDS FOR TLM / CMD

All CNES satellites make use of CCSDS / SC13 standards, at least partially.

Product lines Proteus and Myriade make use of Space Link Standards.

PICARD satellite, belonging to the Myriade series, will be launched in June 2010.

Four ELISA satellites, belonging to the Myriade series, will be launched 1<sup>st</sup> quarter 2011.

PLEIADES satellite to be launched 1<sup>st</sup> quarter 2011 will make use of the same CCSDS standards and in addition the SLE transfer services (user side).

French Industry also use the Myriade Product Line for commercial activities: ALSAT-2A (July 2010) ; SSOT satellite (1<sup>st</sup> quarter 2011). For those missions, the interfaces with the CNES Ground Stations make use of SLE transfer services (user and provider sides).

#### 2-2 GROUND FACILITIES UTILIZING SC-13 STANDARDS

Implementation of CCSDS standards (RF&Modulation, Packet TM&TC, OPM, SLE transfer services) is qualified in all CNES Ground Stations. The provider side is now fully available from CNES Networks.

Kiruna station of SSC was also aligned to CNES implementations at the end of 2009.

### 3 – DOCUMENTATION ACTIVITIES

#### 3-1 ADOPTION OF SC13 STANDARDS AT FRANCE NATIONAL LEVEL

Ballots completed since last SC-13 meeting in ESTEC (Fall 2009):

ISO Reference	Title	Status	Date of Response	CNES response	CCSDS Reference
ISO 13764	Space data and information transfer systems – Standard formatted data units – Control authority procedures	Systematic Review	07/12/09	Yes	CCSDS 630.0-B-1
ISO 12175	Space data and information transfer systems – Standard formatted data units – Structure and construction rules	Systematic Review	07/12/09	Yes	CCSDS 620.0-B-2
ISO 21459	Space data and information transfer systems – Proximity-1 space link protocol – Coding and synchronization sublayer	Systematic Review	07/12/09	Yes	CCSDS 211.2-B-1
ISO 14962	Space data and information transfer systems – ASCII encoded English	Systematic Review	07/12/09	Yes	CCSDS 643.0-B-1
ISO 13527	Space data and information transfer systems – XML formatted data unit (XFDU) structure and construction rules	DIS Review	17/12/09	Yes	CCSDS 661.0-B-1
ISO 13526	Space data and information transfer systems – Tracking data message	DIS Review	17/12/09	Yes	CCSDS 503.0-B-1
ISO 13541	Space data and information transfer systems – Attitude data messages	DIS Review	17/12/09	Yes	CCSDS 504.0-B-1
ISO 13537	Space data and information transfer systems – Reference architecture for space data systems	DIS Review	17/12/09	Yes	CCSDS 311.0-M-1
ISO 22671	Space data and information transfer systems – Space link extension (SLE) – Forward communications link transmission unit (CLTU) service	Systematic Review	03/06/10	Revision	CCSDS 912.1-B-2
ISO 22669	Space data and information transfer systems – Space link extension (SLE) – Return all frames service	Systematic Review	03/06/10	Withdraw with comments	CCSDS 911.1-B-2
ISO 26143	Space data and information transfer systems – Space link extension (SLE) – Return operational control fields service	Systematic Review	03/06/10	Withdraw with comments	CCSDS 911.5-B-1

In progress :

ISO Reference	Title	Status	Expected response	CCSDS Reference
ISO 15396	Space data and information transfer systems – Cross support reference model – Space link extension services	Review	30/08/10	

#### 3-2 TRANSLATIONS

None in the period

## **4 – MISCELLANEOUS**

### 4-1 Documents

Periodical reviews of ISO SC13 documents not being phased with the production of CCSDS recommendations, it happened in the period that CCSDS documents of a latest version are available at the time when the ISO periodical review is initiated. There is no mention of the availability of a replacement version in the ISO review. Therefore the vote from the delegations may be any of the following :

- confirm: meaning that the document should be confirmed under the same ISO number as it is considered useful. The advantage is to maintain the same ISO number but the drawback is that there is no guarantee that the new version will be taken into account. HoD's who are not aware of the new version may tend to use this option.
- revise with comments: meaning that the document should be revised using the terms of the replacement version. The advantage is to maintain the same ISO number but the drawback is that the guarantee that the modification in the new version will be taken into account relies on the fact that it is known by the HoD's.
- withdraw with comments : meaning that the document should be deleted and the comment being to take into account the new document. The HOD's who know there is a new version with significant changes may wish to use this option but the drawback is that it may not maintain the same ISO number. CNES seeks for guidance from SC13 on how to address this in future SR's.

### 4-2 Liaisons

No concern.

Respectfully submitted:

**Jean-Marc Soula, CNES, French Representative to ISO-TC20-SC13 on behalf of AFNOR - BNAE.**