Subject: Minutes of the Twenty-eighth International Organization for Standardization

(ISO)/Technical Committee (TC) 20/Subcommittee (SC) 13 Meeting

Location: Ledra Marriott Hotel, Athens, Greece

Date: 13 April 2005

Attendance

Canada

CountryNameBrazilEduardo Bergamini

France Jean-Marc Soula

Germany Martin Pilgram

Italy Loredana Bruca

Japan Kaneaki Narita

Russian Federation Vladimir Grishin

A. MutafyanA. Lipenko

Leo Hartman

United Kingdom Peter Allan

United States John Kelley

Andrew Dowen Adrian Hooke Madeline Butler Linda Kezer Sandra Moore Debbie Ronning Penelope Walz

1. Opening of the Meeting

Dr. Eduardo Bergamini called the meeting to order.

2. Roll Call of Delegates

The following nations were represented at the meeting: Brazil, Canada, France, Germany, Italy, Japan, the Russian Federation, the United Kingdom and the United States. Representatives from China and Ukraine were not present.

3. Adoption of the Agenda

The agenda for the meeting was approved as presented and is provided as <u>Attachment 1</u>.

4. Appointment of a Drafting Committee

In compliance with the ISO requirement to appoint a drafting committee, the subcommittee resolved that Ms. Debbie Ronning, in support of the TC20/SC13 Secretariat, would be responsible for drafting and distributing the meeting minutes (Resolution SC-R-0504-001.)

5. Report of the Secretariat

a. Approval of Draft Minutes of the Fall 2004 Meeting

Draft minutes from the previous meeting for 2004 Fall were approved by the attendees without comment or correction.

b. Review of ISO TC20/SC13 Programme of Work

Ms. Linda Kezer presented information on the current status of the ISO TC20/SC13 Programme of Work. It was suggested to list this document on the CCSDS website. (See <u>Attachment 2</u>).

c. Review and Status of Action Items from 2004 Fall:

Draft Action Items – 8 December 2004, Toulouse, France

SC-F04-A01

Mr. Andrew Dowen and the SC13 Secretariat Support Office will investigate how the U.S. National Archives and Records Administration (NARA) can be invited into a formal ISO liaison relationship with SC13 with the understanding that ISO Central governs liaisons with Technical Committees and subcommittees. NARA has recently formed a Liaison with CCSDS. Mr. Dowen will report his findings to the Secretariat.

Actionee: Andrew Dowen/SC13 Secretariat Support Office

Due Date: April 2005 **Status: Open**

SC-F04-A02

Mr. Andrew Dowen and the SC13 Secretariat Support Office will draft and transmit a letter inviting the subcommittee's current O-members to consider becoming P-members with an understanding that P-member status involves the firm commitment of resources.

Actionee: Andrew Dowen/SC13 Secretariat Support Office

Due Date: April 2005 **Status: Closed**

6. Report of Delegates regarding activities relating to SC 13

Brazil - Dr. Eduardo Bergamini reported that the processing of ISO/TC20/SC13 documents by ABNT continues to be performed in its regular pace. The last documents which have been considered in the ABNT balloting process are: ISO DIS 22670 and ISO DIS 20652.

The process of transforming CCSDS and ISO originated standards, after translation and editing, into Brazilian standards (NBRs) also continues to be executed under its normal scheduling.

ABNT aware of the progress and contents of the ISO/TC999 Business plan, Version 3.1, as of Nov. 30, 2004, and after being specifically inquired as a P-Member by the ISO/TC20 Secretariat, has already responded by March 30, 2003, on its formal approval to the transitioning of ISO/TC20/SC13 and ISO/TC20/SC14 subcommittees to a new ISO/TC in Space (Systems). (The Report from Brazil is <u>Attachment 3</u>.)

Canada – Mr. Leo Hartman reported that the Canadian Space Agency's active participation in ISO standards development for space is at a very low level and is unfortunately currently constrained to individuals participating on a "volunteer" basis.

In Canada, the Canadian Standards Association (also referred to as CSA) is responsible for coordinating Canadian participation in ISO and, in particular, in SC13. The Canadian Space Agency is currently reviewing its participation in standards development and is in discussion with the Canadian Standards Association to coordinate our participation in SC13. The Canadian Standards Association normally makes a strong effort to involve Canadian industry in ISO standards development. The discussions between the two organizations will likely lead to a similar effort to recruit Canadian industry participation in SC13 and space standards development.

(The Report from Canada is <u>Attachment 4</u>.)

China - No representative from China was present, nor was a report provided.

France - Mr. Jean-Marc Soula reported that France will not support the creation of a dedicated TC on Space, mainly due to the current actions for a strengthening on the Aeronautics and Space industrial and normative activities. France recommends that SC-13

and SC-14 work together and identify any possibility of an improvement of their organization within TC-20.

All CNES satellites make use of CCSDS / SC13 standards, at least partially. Product lines Proteus and Myriades are included for Space Link Standards. The upcoming Pleiades mission will make use of the CCSDS standards and SLE transfer services. Parasol and Essaim satellites, all belonging to the Myriades series, were launched in December 2004.

The Provider Gateway for SLE transfer services is currently under qualification tests. This will be used in cross support configurations with other European agencies in 2005. Implementation of CCSDS standards (RF & Modulation, Packet TM&TC, OPM, SLE transfer services) are in progress (design phase) under an approved project on a global harmonization of CNES ground segments, from multi-mission through product lines (Proteus and Myriades). Other components of relevance in this project include a front end for management of external SLE Management interfaces.

(The Report from France is <u>Attachment 5</u>)

Germany – Mr. Martin Pilgram discussed the status of documentation reviews by DIN (German Standards Committee):

Concerning the ISO TC 999 issue, the German position is still open. There will be a statement for the upcoming 40th TC20 plenary June 7-8. The German position will be clarified before the 1st May. The current tendency of the German position is to vote positive for a new TC.

(The Report for Germany is <u>Attachment 6</u>.)

Italy

No report.

Japan

Mr. Kaneaki Narita reported the DIS disposition status:

The following DIS were polled (approved) on 14-Jan-05

22664, 22641, 22646, 22642, 22645, 22667 and 22666

Under review:

20652: Procedure – Archive Interface – Methodology Abstract Standard (PAIMAS)

22670: SLE – Return Channel Frame (RCF) Service Specification

Russia - Mr. Vladimir Grishin reported that the specialists of the Federal Space Agency (Roskosmos) conduct the analysis of the Recommendations CCSDS, with the purpose of their usage in the activity. FSA uses CCSDS Recommendations on telemetry, remote control, perspective orbital systems etc.

A structure of the representatives of firms of Federal Space Agency has been formed for participation in working groups of Committees CCSDS and ISO/TC20/SC13. They will be submitted to a management committee for consideration after the final statement.

Federal Space Agency offers to conduct CCSDS Management Council and ISO/TC20/SC13 meetings in Moscow in May 2006.

The Federal Space Agency supports the creation TC-999 that consists of SC13 and SC14. However final decision from Russia will accept Gosstandart.

(The Report for Russia is Attachment 7.)

Ukraine - No representative from Ukraine was present, nor was a report provided.

United Kingdom – Dr. Peter Allan reported that within the United Kingdom there is the British Standards Institute which considers national standards and adopting them from international standards. All of the internal workings of the organization are conducted electronically by web-based systems. The standards are in use on the national ground station facilities. The standards which are adopted by ISO (there are 29 which are adopted by CCSDS) are currently adopted as UK standards. There is no work at currently in adopting standards are at the ISO level but not yet at the British level. (The Report for the United Kingdom is <u>Attachment 8</u>.)

United States – Mr. Adrian J. Hooke, NASA-JPL (U.S. Representative to ISO-TC20-SC13) reported:

Meetings

- 1. The work of SC13 was presented by USTAG13 representatives at a "Range and Spaceport Technology Workshop" in Colorado Springs, USA on 11 January 2005. This was a useful opportunity to show our work to the communities who are studying the next generation of "spaceport" launch facilities, and their associated tracking range services during the launch ascent and landing phases.
- 2. USTAG13 held its semi-annual meeting in Columbia, MD, USA on 23-24 March 2005. The purpose was to develop the official US technical working group positions to be conveyed during the Spring 2005 CCSDS/SC13 meeting series.

Work Items

The US Air Force Satellite Control Network (AFSCN) is continuing on its path to adopt the CCSDS RAF and CLTU SLE transfer services as the basis for their future telemetry and command transport. Draft extensions of SLE standards have been developed for their application. One variant allows ground stations to use the RAF service to carry unframed telemetry out of the ground station so that the control center may meter out the telemetry at the same rate that it was received at the ground station. Another variant allows ground stations to receive AFSCN-formatted command data for uplinking using the CLTU service. It is planned to advance some or all of these AFSCN companion specifications to become ANSI standards. SC13 should track these standards to ensure that they do not conflict with the new work in generic CCSDS "Cross Support Transfer Services".

(The Report for the United States is <u>Attachment 9</u>.)

7. Report of delegates regarding SC 13 liaison activities

No Liaison representatives present at the meeting, nor were any Liaison reports provided.

8. Consideration of new projects/endorsements of existing standards from non-ISO bodies

None

9. Report of TC 999 activities

Dr. Allan reported that various telecons have been held for coordinating the new Technical Committee proposing the merger of SC 13 and 14. The TC-999 Business plan was revised last year and submitted to ISO. We are expecting their view back this June. At that point, we'll know the outcome as to whether there will be the new Technical Committee by June 2005.

10. New Business

Mr. Jean-Marc Soula reported on the Translation to French of CCSDS documents:

CNES position is as follows:

a) In the majority of the cases, French translations are not required at the time when CCSDS documents are submitted to ISO TC-20, SC-13. However, it is ISO practice to request a translation to French and CNES will confirm as required, each time a new document is submitted through SC-13; such confirmation may be during or in between SC-13 meetings;

- b) Whenever a translation of an already published CCSDS and ISO document becomes available:
 - CNES will submit it to CCSDS for publication on the open web site; maintenance of later evolutions and versions will also be by CNES;
 - The French delegate will propose it to ISO as an official translation to French; BNAE is the French authority to validate such translations; SC-13 will be informed of the process but there is no need it is involved.

11. Future Meetings

The Russian delegation has expressed an interest in hosting the 2006 Spring meeting. The next meeting will be in 2005 Fall. Earlier today CCSDS agreed to meet with OMG in Atlanta, Georgia, USA in September. The CCSDS Working Groups will meet on 12-16 September in Atlanta, Georgia.

The CCSDS Management Council agreed to meet in Washington, DC on 25, 26 and 27 October 2005. That motion was passed in the Management Council

The next meeting of the TC20/SC13 is scheduled 1:00 pm to 4:00 pm, on 28 October 2005 in Washington, DC, in conjunction with the CCSDS Management Council meeting.

12. Review and approval of Resolutions and Action Items

The resolutions and action items were read and approved. They are included at the end of these minutes.

13. Adjournment

Dr. Bergamini adjourned the TC20/SC13 meeting.

ISO TC20/SC13

Draft Resolutions 13 April 2005 Athens, Greece

SC-R-0504-001

In compliance with the ISO requirement to appoint a draft committee, TC20/SC13 resolves that Ms. Debbie Ronning will be responsible for drafting and distributing the 13 April 2005 meeting minutes.

SC-R-0504-002

ISO TC20/SC13 resolves to forward the following CCSDS documents to ISO:

- CCSDS 502.0, Orbit Data Messages
- CCSDS 912.3-B-1, Space Link Extension--Forward Space Packet Service Specification

SC-R-0504-003

ISO TC20/SC13 resolves to thank the Federal Space Agency for their invitation to host the 2006 Spring Meeting.

SC-R-0505-004

ISO TC 20/SC13 resolves to thank the European Space Agency (ESA) and the Greek Space Agency for hosting the 2005 Spring Meeting.

ISO TC20/SC13 Draft Action Items – 13 April 2005 Athens, Greece

SC-F04-A01

Mr. Andrew Dowen and the SC13 Secretariat Support Office will investigate how the U.S. National Archives and Records Administration (NARA) can be invited into a formal ISO liaison relationship with SC13 with the understanding that ISO Central governs liaisons with Technical Committees and subcommittees. NARA has recently formed a Liaison with CCSDS. Mr. Dowen will report his findings to the Secretariat.

Actionee: Andrew Dowen/SC13 Secretariat Support Office

Due Date: April 2005 Status: Open

SC-A-0504-001

Coordinate the 2006 Spring meeting with the Federal Space Agency (FSA). The FSA extended a cordial invitation to the ISO TC20/SC13 members to hold the meeting in Russia, with the FSA as the host for the 2006 Spring meeting.

Assignee: SC 13 Secretariat **Due Date**: 30 July 2005

Status: Open

SC-A-0504-002

Communicate results of the voting to members of ISO TC20/SC13 on the outcome of TC-999. Send a copy of the information on the stages for the transition to the ISO TC20/SC13 members.

Assignee: SC 13 Secretariat

Due Date:

Status: Open

SC-A-0504-003

Consolidate a Business Plan for the new TC after the voting has taken place.

Assignee: SC 13 Secretariat

Due Date:

Status: Open

SC-A-0504-004

Forward the CCSDS 502.0, *Orbit Data Messages* and CCSDS 912.3-B-1, *Space Link Extension--Forward Space Packet Service Specification* to ISO. (Refer to Resolution SC-R-0504-002)

Assignee: SC 13 Secretariat **Due Date:** 13 May 2005

Status: Open