

**SUBJECT:** Minutes of the 49<sup>th</sup> International Organization for Standardization (ISO) Technical Committee (TC) 20 Subcommittee (SC) 13 on Space data and information transfer systems (Formal) Meeting.

**LOCATION:** Hosted by ASI and promoted by UNI, Rome, Italy

**DATE:** 24 October 2016 (Monday, 10:00 – 11:30 h)

### **ATTENDANCE (HoDs, Delegates, Liaisons and Observers)**

#### **P-Member countries and attendance**

**SECRETARY:** James Afarin (ANSI/U.S.A.)

**CHAIRMAN:** Eduardo W. Bergamini (ABNT/BRAZIL)

BRAZIL (ABNT)	Eduardo Bergamini, HoD
CHINA (SAC)	Wang Weijia, SAC Delegate (CASI) Li Xiaolong, SAC Delegate (CASI) Wei Yonggang, SAC Delegate (CASI) Zhang Rusheng, CNSA/CMC-CCSDS Yonghui Huang, NSSC/CMC-CCSDS
FRANCE (AFNOR)	Jean-Marc Soula, HoD
GERMANY (DIN)	Oswaldo Peinado, HoD
INDIA (BIS)	
ITALY (UNI)	Massimo Calabrese (ASI/CCSDS, Observer)
JAPAN (JISC)	Tsutomu Shigeta, HoD
KHAZAKHSTAN (KASMEMST)	
RUSSIAN FEDERATION (GOST R)	Dmitry Barannikov (TsNIIMash)
UKRAINE (DSTU)	
UNITED KINGDOM (BSI)	Chris Perry, HoD
UNITED STATES (ANSI)	James Afarin, HoD (USTAG13) David Ross, Delegate (USTAG13)

*Legend:* HoD-Head of Delegation

#### **O-Member countries and attendance**

ARGENTINA (IRAM)  
CZECH REPUBLIC (UNMZ)  
FINLAND (SBS)  
IRAN, ISLAMIC REPUBLIC OF (ISIRI)

KOREA, REPUBLIC OF (KATS)

POLAND (PKN)

ROMANIA (ASRO)

SWEDEN (SIS)

### Liaisons

ESA-ISO TC20/SC13 Liaison

Juan Mirò (ESOC/ESA)

### NOTE:

ISO Official list of ISO TC20/SC13 PARTICIPATING COUNTRIES, as of 20 Oct. 2016, see **Attachment 01**.

### 1. Opening of the meeting

The Secretary of the Subcommittee, Dr. James Afarin, opened the meeting and thanked all the attendees for coming to ASI HQs in Rome where the meeting was hosted on behalf of UNI. Then, Dr. Afarin requested that the ISO TC 20 / SC 13 Chair, Dr. Eduardo Bergamini, to give sequence to the meeting, from the roll call. At the same occasion, thanks to the meeting attendees and to ASI were also expressed by Dr. Bergamini.

### 2. Roll call of delegates

Departing from the Participating Countries of the Subcommittee, the resulting LIST OF ATTENDANCE of the meeting is reproduced in **Attachment 02** of the minutes.

### 3. Appointment of the Drafting Committee

In his role as ANSI Delegate and as an active member of the Subcommittee Secretariat, Mr. David Ross was invited and accepted his appointment to act as the meeting draft committee.

### 4. Approval of the 49<sup>th</sup> Meeting Agenda (N1595)

As presented in **Attachment 03**, the AGENDA (N1595) was approved unanimously by the attendees, observing the following list of items:

1. (10:00) - *Opening of the meeting.*
2. (10:00-10:05) - *Roll call of delegates.*
3. (10:05-10:10) - *Appointment of the drafting committee.*
4. (10:10-10:15) - *Approval of the 49<sup>th</sup> meeting Agenda (N1595).*
5. (10:15-10:20) - *Approval of the previous, 48<sup>th</sup> Meeting Package (See [\*], Minutes - Ref. N1569).*
6. (10:20- 10:40) - *Presentation of (non-expected, in principle) Member Report by Delegates.*
7. (10:40-10:50) - *Report of the Secretary on the last version of the INTEGRATED Program of Work.*
8. (10:50-10:55) - *Update (if any) on the CCSDS-ISO TC20/SC13 and ISO TC20/SC14 cooperation.*
9. (10:55-11:05) - *Report on the updating of the roster of Members, Liaisons and Associates.*
10. (11:05-11:10) - *Discontinuation of the Subcommittee Working Groups (WGs)*
11. (11:10-11:25) - *Review and update of the Resolutions and Action Items.*
12. (11:25-11:30) - *Other Business and Planning for the (Formal) 50<sup>th</sup> meeting.*
13. (11:30) - *Adjourn*

### 5. Approval of the previous, 48th Meeting Package (Minutes – Ref. N1569)

The 48<sup>th</sup> Subcommittee Meeting Package, headed by the MINUTES (N1569), as presented in **Attachment 04** was approved, The meeting package comprises a set of Attachments that, among

other items, contains the RESOLUTIONS (N1567) and the ACTION ITEMS (N1568) of that meeting. The COMPLETE package (Minutes plus Attachments) can be consulted directly in one of the following two Web (clickable) URLs: 1) That of the Subcommittee in ISO Livelink Website, and; 2) In the ISO TC20/SC13 Subcommittee Web page of the CWE CCSDS Website.

## **6. Presentation of Member Report by Delegates**

As an INFORMAL Subcommittee Meeting, in principle, reports were not expected from the P-Members. However, in alphabetical order, by country, the reports that were presented are commented, as follows.

### **6.1 - Brazil/ABNT**

E. Bergamini presented ABNT/Brazil report as contained in **Attachment 05**, with comments on the related standards being utilized by Brazil. E. Bergamini indicated that there is an ABNT Commission of Study on Space Data and Information Transfer Standards in Brazil that: 1) works on the reviews of ISO TC20/SC13 documents; 2) Produces CCSDS-SC13 related Standards in Portuguese for ABNT, that also implies in periodical reviews each five years, naturally, also taking into account CCSDS document updates; 3) Also produces genuine Standards, also related to CCSDS-SC13 thematic as it is the case for both ABNT Standards: a) “System for Generation of IBI (Internet Based Identifier)”, already an ABNT Standard ; b) “System for Resolution of IBI (Internet Based Identifier)”, this last one, close to become an ABNT Standard. E. Bergamini expressed that CCSDS MOIMS DAI (Data Archive Ingestion) WG is being approached on the possibility of considering a relationship of the planned, new version of the OAIS (Open Archive Information System) MOIMS DAI Project with the principles associated to the IBI ABNT Standard, in view of its natural, far reaching potential of deployment beyond the border of Brazil.

### **6.2 - China/SAC (CASI)**

Mr. Weijia Wang presented a report by CASI, on behalf of SAC as reproduced in **Attachment 06**. The report went over the status of review of ISO TC20/SC13 documents by China, since the previous Subcommittee meeting. Comments by Mr. Wang were made on the monthly list of systematic ISO TC20/SC13 reviews, as made and under way, by CASI, including all ISO DIS documents, as well.

### **6.3 - France/AFNOR**

J.M. Soula provided a verbal report on behalf of AFNOR on the use of ISO standards in France, indicating that France continues to contribute to ISO TC20/SC13 Subcommittee, which also includes all the reviews of the related documents that are regularly submitted by ISO to AFNOR.

### **6.4 - Germany/DIN**

O. Peinado presented a report, as reproduced in **Attachment 07** on the review the list of ISO TC20/SC13 documents reviewed and updated, by DIN, since the previous Subcommittee meeting. O. Peinado had a question about the five-year review of ISO 17355, asking why the last five year review for this document was a review and a reconfirmation (approval) of version 3 of the CCSDS File Delivery Protocol text. **Action Item 2016-10-01: To review ISO 17355 to ensure that the text is using the revised version 4 from CCSDS publication 727.0-B-4 for the next review.** O. Peinado provided an overview of all DIN publications, mentioning that DLR discussed the ISO standards and their implementations within the DLR space agency.

### **6.5 - Japan/JISC**

Tsutomu Shigeta presented a report on behalf of JISC, as reproduced in **Attachment 08**. T. Shigeta provided a report of the progress in ISO from JISC/Japan. T. Shigeta reviewed recent activities by Japan, including activities between JAXA and JISC with the objective of opening a website to be dedicated to the introduction of CCSDS publications and related activities. T. Shigeta reviewed its documented activities, including a summary of ISO dispositions since May for DIS documents and Systematic Review Documents, as addressed to JISC, by ISO.

### **6.6 - Russia/GOST R**

D. Barannikov provided a report, as reproduced in **Attachment 09**. This report is mainly centered on the fact that ROSCOSMOS, the Russian Space Agency, will be hosting the coming CCSDS-ISO TC20/SC13 management meetings in St. Petersburg, Russia, coming Summer 2017. D. Barannikov commented that GOST R/Russia has voted for fifteen standards, most of which occurred in June and one in August (2016). D. Barannikov then commented on GOST R/Russia process of review in respect to Draft International Standards and to Systematic Review related Documents.

### **6.7 - United Kingdom/BSI**

C. Perry provided a BSI/U.K. report, as reproduced in **Attachment 10** with an overview of the UK standards approvals undertaken since the Brazil meeting, noting that all standards of the period were approved as a part of the BSI review process. .

## **7. Report of the Secretary on the last version of the INTEGRATED Program of Work**

It was reminded by E. Bergamini that the Program of Work (PoW) that is being regularly posted each month in the associated folder of both Subcommittee Websites (in ISO Livelink and in CCSDS-CWE) observes a concept based in the principle of conveniently “adding-up” the input of two types of information. One type of information input is the SECRETARIAT PoW, naturally, originated from the Subcommittee Secretariat. The other input of information is that originated from ISO CS, and is named ISO CS PoW. The convenient add-up of both information input result in the Subcommittee PoW, named INTEGRATED PoW. The INTEGRATED PoW is the one posted each month, in the associated folder of both Subcommittee Websites. To illustrate a resulting INTEGRATED PoW, its most recent version was presented at the meeting, as reproduced in **Attachment 11**.

## **8. Update (if any) on the CCSDS - ISO TC20/SC13 and ISO TC20/SC14 cooperation**

A brief discussion was held amongst the committee members on the cooperation between ISO TC20/SC 13 and ISO TC20/SC 14 Subcommittees. D. Ross indicated that interactions between D. Ross and N. Tongson (ISO SC 14) have occurred, which keeps ISO SC 13 abreast of activities in SC 14.

In October 19, 2016, concerning the ongoing technical cooperation between ISO TC20 SC13 and SC 14, Mr. Peter Shames (CCSDS SEA AD and SA WG Chair) addressed Mr. Nick Tongson, Secretary to ISO TC2/SC14, under the following terms and suggesting, reviewed text, in response to Mr. Tongson proposed text for describing this cooperation on behalf of his (SC14) Subcommittee:

*... Since the subject matter of SC 13 & SC 14 is largely distinct, I would suggest a modification to this text, as noted (below).*

*Thanks, Peter*

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*SC14 and SC13/CCSDS agree there is a common, complimentary basis for standards development. From that basis, they agree to the evolution of a common **reference architecture representation**. They agree to exchange information on the evolution of architecture elements such as **reference architecture documents**, where relevant. They agree to the continued collaboration on standards with common interests.*

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Under the technical point of view, for the next, 50<sup>th</sup> meeting of ISO TC20/SC13 Subcommittee, E. Bergamini will be requesting a brief report to:

1) Mr. Peter Shames (CCSDS SEA SA WG) on the status of the work between both Subcommittees in view of his above addressing to Mr. Nick Tongson and on the Liaison technical role in terms of SYSTEMS ARCHITECTURE, as available, in his interaction with Mr. Fred Slane, on the side of ISO TC20/SC14 Subcommittee;

2) Mr. David Berry, Chairman of CCSDS CESC MOIMS NAV Working Group (WG) is ISO TC20/SC13 on the status of the Liaison work ISO TC20/SC14/WG4 on NAVIGATION.

### **9. Report on the updating of the roster of Members, Liaisons and Associates**

E. Bergamini indicated the work being conducted with M. Blackwood on an overall review of the P & O Members, Liaisons, and Associates of the Subcommittee. Regarding CEN as a liaison it is reminded that ISO does not recognize an official liaison with CEN because that are not a national body. E. Bergamini agreed to address the issue of having CEN as a liaison with Andy Dryden of the ISO Central Secretariat. It was also reminded, after a clarification with CCSDS Secretariat, that, concerning “CCSDS Only Liaisons”, so far, only IOAG and CMC are confirmed and respectively represented in CCSDS side by Nestor Peccia (CESG/CCSDS) and Mario Merri (MOIMS/CESG/CCSDS). E. Bergamini mentioned that an updated list of ISO TC20/SC13 Members, Liaisons an Associates is issued each month and placed in the two Subcommittee Websites, publicly, without e-mails and privately, including e-mails.

### **10. Discontinuation of the Subcommittee Working Groups (WGs)**

E. Bergamini discussed the elimination of the WG’s and indicated that ISO Central Secretariat has made no questions about the removal of these working groups. A copy of the formal request by ISO TC20/S13 to ISO CS (Central Secretariat) can be found in **Attachment 12**. It is opportune to remind that the purpose of the elimination of the working groups (WGs) was not to discontinue any review of documents. The purpose was, rather, to reflect the working status of these WGs within the ISO community, considering that they were unnecessary, non-functional virtual duplication mirrors of their CCSDS counterparts. It is opportune to remind that P-Members regularly review documents of the Subcommittee, to say the least.

### **11. Review and update of the Resolutions and Action Items**

Departing the RESOLUTIONS and ACTION ITEMS derived from the 48<sup>th</sup> meeting, the 49<sup>th</sup> meeting resulting RESOLUTIONS (Ref. **N1600**), are presented in **Attachment 13**, and resulting ACTION ITEMS (Ref. **N1599**), are presented in **Attachment 14**.

### **12. Other Business and Planning for the (Formal) 50<sup>th</sup> Meeting**

E. Bergamini mentioned that the ISO TC20/SC13 Subcommittee Annual Report, as found in **Attachment 15** was prepared and effectively submitted to ISO TC20 Technical Committee for inclusion in the minutes of the 50<sup>th</sup> Plenary Meeting of ISO TC20 held in Moscow, in October 2016.

The committee agreed that the next meeting will be the 50<sup>th</sup> ISO TC 20 SC 13 meeting to be held in Saint-Petersburg, Russia. In the sequence, the next, 50<sup>th</sup> meeting will be a FORMAL one.

### **13. Adjourn**

With the AGENDA fully covered, the meeting was adjourned at approximately 11:30 h.

### **ATTACHMENTS**

Find below the **LIST OF ATTACHMENTS** to the Minutes of the meeting. Each item of the list bears the name of the corresponding file name.

### **ACKNOWLEDGEMENT**

The Chairman, Eduardo Bergamini expresses his thanks to Mr. David Ross, ANSI (NASA) member of the Secretariat of the Subcommittee, for the valuable notes he provided in his role as the Rapporteur of the 49<sup>th</sup> Informal ISO TC20/SC13, for the benefit of the Minutes and of the Meeting Package which was compiled and organized by the Chairman of the Subcommittee.

### **OBSERVATION**

The complete 49th ISO TC20/SC13 Informal MEETING PACKAGE, composed by the MINUTES and by the associated ATTACHMENTS, as prepared by E. Bergamini, were reviewed by the Secretary of the Subcommittee, Dr. James Afarin and by the members of the Secretariat, Mr. David Ross and Mr. Michael Blackwood.

#### **JAMES AFARIN**

Secretary, ISO TC20/SC13

#### **EDUARDO W. BERGAMINI**

Chairman, ISO TC20/SC13

### **LIST OF ATTACHMENTS TO THE MINUTES (by file names)**

- Att. 01 <01.Att.01.ISO\_TC20 SC13.PARTICIPATING.COUNTRIES.as.of.20.Oct.2016>**
- Att. 02 <02.Att.02.ATTENDANCE.LIST.I.Meet.49th.SC13.24.Oct.16.Rome.It>**
- Att. 03 <03.Att.03.AGENDA.N1595.49th.SC13.I.Meet.24.Oct.16.Rome.It>**
- Att. 04 <04.Att.04.MINUTES.N1569.to.48th.SC13.F.Meet.27.Apr.2016.S.J.Campos.Br>**
- Att. 05 <05.Att.05.BRAZIL-ABNT.REPORT.I.49th.SC13.Meet.24.Oct.16.Rome.It >**
- Att. 06 <06.Att.06.CHINA-CASI.REPORT.I.49th.SC13.Meet.24.Oct.16.Rome.It>**
- Att. 07 <07.Att.07.GERMANY-DIN.REPORT.I.49th.SC13.Meet.27.Oct.16.Rome.It>**
- Att. 08 <08.Att.08.JAPAN-JISC.REPORT.I.49th.SC13.Meet.24.Oct.16.Rome.It>**
- Att. 09 <09.Att.09.RUSSIA-GOST R-ROSCOSMOS.I.49th.SC13.Meet.24.Oct.16.Rome.It>**
- Att. 10 <10.Att.10.UK-BSI.REPORT.I.49th.SC13.Meet.24.Oct.16.Rome.It>**
- Att. 11 <11.Att.11.ISO\_TC20-SC13.INTEGRATED.PLAN.OF.WORK-PoW.Illustr.Example>**
- Att. 12 <12.Att.12-REQ.ISO.CS.FOR.ELIM.ISO\_TC20-SC13.SIX.WGs.N1593.17.Aug.16>**
- Att. 13 <13.Att.13.RESOLUTIONS.N1600.49th.SC13.I.Meet.24.Oct.16.Rome.It>**
- Att. 14 <14.Att.14.ACTION.ITEMS.N1599.49th.SC13.I.Meet.24.Oct.16.Rome.It>**
- Att. 15 <15.Att.15.ISO\_TC20SC13.ANNUAL.REPORT.to.ISO\_TC20.50th.Plenary.Meet.  
Moscow.Ru.Oct.16>**