**CMC Draft Minutes**

**Mid-Term Telecon**

**22 August 2018**

1. **Call to Order – Welcome/Opening Remarks**

J. Afarin, CMC Chair, called the meeting to order at 0800h and welcomed everyone to the CMC mid-term telecon. J. Afarin noted the efforts of O. Peinado as host in preparation for the fall 2018 meetings in Berlin. Dr. Afarin then initiated the roll call of delegates after the brief introduction.

1. **Roll Call of Delegates**

Introductions followed. CMC Attendees were:

1. ESA – Margherita di Giulio, Mike McKay

2. DLR – Osvaldo Peinado

3. JAXA – Hirokazu Hoshino

4. NASA - James Afarin, Wallace Tai, Peter Shames

5. INPE - Eduardo Bergamini

6. UKSA – Christopher Perry

7. CNES – Jean-Marc Soula

8. CSA – Siamak Tafazoli

9. ASI – Not present

10. CNSA – Yonghui Huang

11. ROSCOSMOS – Not present

12. Secretariat – Cal Ramos, Michael Blackwood, Thomas Gannett, Brian Oliver

1. **Agenda Review and Approval** ([August\_2018\_Draft\_CMC Agenda mid-term telecon-updated20180816](https://cwe.ccsds.org/cmc/Private/Mid-Term%20CMC%20Telecons/2018-08%20Aug%20Telecon/August_2018_Draft_CMC%20Agenda%20mid-term%20telecon-updated20180816.doc))

The CMC agenda was reviewed and approved without comment.

1. **CESG Chair Report** ([CESG Report to CMC mid term telecon 22nd Aug 2018\_V1](https://cwe.ccsds.org/cmc/Private/Mid-Term%20CMC%20Telecons/2018-08%20Aug%20Telecon/CESG%20Report%20to%20CMC%20mid%20term%20telecon%2022nd%20Aug%202018_V1.pptx))

The CESG Chair Report was presented by M. di Giulio.

* 1. **Progress since the last meeting (reviews, polls, etc.) (slides 2-4)**

M. di Giulio provided an overview of the polls and reviews that occurred since the meeting of the CMC in May 2018 in Beijing, China. M. di Giulio began with CMC polls. The Cloud-Based Interoperability Testing Report was recorded as a Yellow Book. Four (4) books were transitioned into Blue Book status, two (2) books transitioned to Green Book status and one (1) book to Orange, Experimental status. Additionally, six (6) Red Books and four (4) Pink Books/Sheets were submitted for Agency Review.

M. di Giulio also presented that One (1) Green Book, Data Transmission and PN Ranging for 2 GHz CDMA Link via Data Relay Satellite, was reconfirmed and one (1) book changed tracks – i.e., the Change Security Glossary from Green Book to Magenta Book. Additionally, M. Di Giulio reported that two new Cross Support Service Management Working Group Projects (CSS Area) were approved; Abstract Event Definition and Common Data Entities. The SEA Area also initiated a new Security Working Group Project - 350.6-G Key Management (5 Year Review).

M. di Giulio introduced the topic of CMC Polls with conditions that included the five (5) SANA features/requests that were to be discussed as a special topic later in the midterm telecon.

* 1. **Other CESG Topics (slide 5 - 6)**

M. di Giulio also presented the high priority CESG discussion topics to include the ICPA status and next steps, the Technical Note about MO services overlap, the relationship with OMG (discussion still on going at CESG), the future of the SANA registry, the Glossary of Terms, and the Document Status Queue.

With regards to ICPA updates, both existing and proposed projects should both be kept in the registry**.** M. di Giulio also shared additional context with respect to the Technical Note that will be submitted to the OMG. This will be discussed in more detail at the CESG telecon in early September. J. Afarin expressed a concern that the CMC was not a part of the vetting process prior to correspondence being sent to the OMG. He commented that 1) CCSDS cannot provide direction to an outside organization such as OMG and 2) it is not up to an individual to decide if CCSDS needs liaison with an organization. The CMC is responsible for determining if a liaison is required. M. di Giulio also remarked that there is a high reliance on the SANA registry and the Glossary of Terms also exists in the registry. She will work off-line with T. Gannett to discuss the Document Status Queue in more detail.

M. di Giulio also summarized CESG topics that were of a lower priority to include the RID Template, other improvements to the CWE to include content discovery, polling, and updating of the projects (draft and approved). Content discovery is the potential use of new software tools to improve search filters through more advanced algorithms.  The capability would be helpful in obtaining improved data searches. M. di Giulio also highlighted some of the shortcomings of the Excel RID template prototype (e.g. graphics not supported). J. Afarin stated that he supported an existing, off the shelf (OTS) software solution to collate and list RIDs rather than the development of a custom software tool. On the topic of other recommended improvements to the CWE that would aid standard development, B. Oliver stated that he had previously discussed the proposed updates with Nestor Peccia. M. di Giulio confirmed that she is also tracking the proposed updates and will continue to work with B. Oliver to develop requirements for the proposed updates.

**AI-CMC-A-2018-08-01: The CMC directs CCSDS Tech Support to address the proposed RID template with the CESG Chair and resolve the issue. Due Date: 31 December 2018**

1. **IOAG Liaison Report**

J. Afarin presented the IOAG Liaison Report. He attended the IOAG Meeting that occurred in Cleveland, Ohio, USA in June 2018. The topic of the ICPA was briefly discussed. Dr. Afarin stated that actions from the ICPA are reviewed weekly and he is currently waiting for the IAOG to conduct an E-vote with regards to the ICPA. Dr. Afarin confirmed the ICPA is up to date.

**AI-CMC-A-2018-08-02: The CMC directs the Secretariat to add an agenda item to the fall 2018 CMC meeting for J. Afarin to provide a report for the IOP presentation. The agenda item will be for one half hour. Due Date: 22 October 2018**

1. **CFDP Revisions Prototype Status**

M. di Giulio stated that there is a new version of the CFDP book and that two independent prototypes are needed and NASA has done one of the prototypes. CNSA was interested but their prototype will not be developed in time. Scott Burleigh was contacted for his test plan and will be inquiring to see if ESA can develop a prototype.

1. **SANA Registries** ([SEA-Report-to-CMC SANA Issues 21Aug18](https://cwe.ccsds.org/cmc/Private/Mid-Term%20CMC%20Telecons/2018-08%20Aug%20Telecon/SEA-Report-to-CMC%20SANA%20Issues%2021Aug18.pptx))

P. Shames reviewed CMC Action Item requesting the SEA Area Director provide a one-hour presentation to the CMC on the value of the SANA registries (slide 2). He also covered the SANA Objective defined in A02.1-Y-2 (dated April 2004) that specified SANA as the core registrar for the CMC’s activities and the SANA Procedures Yellow Book that identified the roles of the SANA Operator and SANA Steering Group (slides 3 and 4). P. Shames also discussed the criteria for setting up a new registry that is identified in the SANA Procedures Yellow Book; in particular, a new registry is created by the SANA operator based on a CCSDS-approved document where the instructions to create the registry and the registration rules to add new registrations are documented (slide 5).

P. Shames also discussed the motivation for the Registry Management Policy (RMP) was driven by a number of top level CCSDS registry issues (chart 6). For example, there were ten separate “organization” type registries with different levels of completeness and accuracy, four different “contacts” registries, and two different antenna and station registries. P. Shames reiterated that the CESG reviews requests for every new registry and that each registry document goes through technical review.

J. Afarin inquired about which body is responsible for approving new registries. P. Shames responded that the CSEG or the CMC can approve new registries. J. Afarin was not sure why the contact registries were needed and P. Shames responded the contacts registry provides much of the same data form the CCSDS Public website but in a database structure that can be referenced by other SANA registries and can be queried by third party applications. Since this registry is the primary data source for many users of CCSDS standards, it is important that the information contained be kept up to date.

J. Afarin asked about the value of the contact and organizational information contained in the Point of Contact registry considering that the information exists elsewhere on the CWE and imposes additional database management work. P. Shames replied that providing all information referenced in CCSDS publications is an expectation of users and is common practice for standard producing organizations and modern web design. P. Shames also suggested that the CCSDS public website could be developed to query SANA registries to display databases, as it currently does for the missions’ page, rather than text files requiring frequent updates.

P. Shames continued to discuss the process and level of effort for keeping information updated, potential additional costs of updating information, how the request for updates gets disseminated (spreadsheet or accessing the database), the role of the Secretariat in the process (vs Agency Representative) of updating information, the potential overlap between information in the CWE and SANA database, the user-friendliness of the SANA interface, what data is really needed in the databases and why, and the process for approving new registries. J. Afarin expressed concern that there are 16 new candidate registries on top of the existing number at the moment.

Among the benefits of SANA mentioned by P. Shames was the ability of independent computer programs to query the SANA databases and access the information contained within. It is very difficult to design programs to access the same data in text files. P. Shames also noted the transfer of information between the Secretariat and SANA has never been formalized or codified and often does not go smoothly. A single location for updates could improve this relationship.

Other information was presented by P. Shames including the purpose of the current format of the SANA registries, the SANA Steering Group Registry Management Policy, and SANA Registry Categories, “Agency Registries”, “Cross Cutting Registries”, and “Area/Local Registries” (slides 7-13).

P. Shames then raised the five (5) CMC resolutions relating to SANA that completed polling with too few votes to confirm:

* **CMC-P-2018 05-001**
  + Request that each CCSDS Agency and Observer ensure that they have at least one authorized Agency Representative (AR) for managing Agency information in the SANA, and that this information is updated
* **CMC-P-2018 05-002**
  + Require that each Agency Representative (AR) shall be asked to review the newly imported Mission / Spacecraft from the CCSDS Website and identify overlapping, aliased, missing, and/or retired entries
* **CMC-P-2018 05-003**
  + Approve controlled access to the SANA CCSDS Service Site and Aperture Registry (SS&A) for both read only and write operations
* **CMC-P-2018 05-004**
  + Approve the SANA Operator marking all Glossary entries (both Terms and Acronyms) that have a relevant, approved, document as “Approved” and not “Provisional”
* **CMC-P-2018 05-005**
  + Require that the CCSDS Secretariat (website operator) shall provide their current Organization, HoD, and PoC information in a form that can be ingested into the SANA Organization registry

The CMC discussed the proposed resolutions, but were unable to reach a consensus position on any. Questions included the level of effort required to review newly imported Mission / Spacecraft and whether it would be simpler to allow agency representatives to edit this information themselves, how to determine what information needs to be reviewed, exactly what data does SANA contain and how is each type of data used, what are the criteria for a new registry, and how are existing registries used and by whom?

The CMC agreed that an additional meeting prior to the October 2018 meeting of the CMC was required.

**AI-CMC-A-2018-08-03: The CMC directs the Secretariat to issue a poll to CMC members to determine the best date for a supplementary meeting on the subject of SANA. The meeting should be scheduled for the second half of the month of September. Due Date: 15 September 2018**

**AI-CMC-A-2018-08-04: The CMC directs the Secretariat to add an agenda item to the fall 2018 CMC meeting for further discussion of SANA. Due Date 22 October 2018**

1. **CCSDS Liaison Role and Responsibilities**

This topic was addressed during the CESG Chair Report.

1. **Secretariat Report**

C. Ramos and M. Blackwood presented the Secretariat report.

* 1. **Action Item Status (only open items)** ([Open\_CMC\_Action\_Items\_20180820](https://cwe.ccsds.org/cmc/Private/Mid-Term%20CMC%20Telecons/2018-08%20Aug%20Telecon/Open_CMC_Action_Items_20180820.pptx))
* CMC-A-2014-11-01 - The CMC requests Peter Shames draft a formal memorandum from CCSDS to ISO/TC 20/SC14 (Space Systems and Operations) to describe the coordination needed on RASDS. Ensure that SC13 is referenced in the draft memorandum.
  + Action Item still in progress.
* CMC-A-2017-06-07 - The CMC instructs the Secretariat to provide updated Yellow Book text to the CESG.
  + T. Gannett and M. di Giulio questioned which Yellow Book was being referenced. M. Blackwood replied that he would review the minutes of the meeting in question and reply with the book.
* CMC-A-2018-02-02 - The CMC directs the Secretariat to address how additional information can be requested when users request to be added to mailing lists.
  + A solution had been provided by B. Oliver to M. di Giulio. B. Oliver indicated he was awaiting a response.
* CMC-A-2018-02-04 - The CMC directs the Secretariat to add a flag for moving projects from Draft to Approved Status on the CWE so that when a project is approved it may be easily moved to Approved Status.
  + A status flag for projects currently exists allowing Draft, Pending, and Approved values. This status will be edited after a project has successfully completed polling and has been formally approved. This action item was agreed to be closed.
* CMC-A-2018-05-01 - The CMC requests that the SEA Area Director, Peter Shames, provide a one hour presentation to the CMC on the value of the SANA registries to the CCSDS community.
  + P. Shames presented at the 22 August 2018 CMC Mid-Term Telecon. This action item was agreed to be closed.
* CMC-A-2018-05-02 - The CMC requests that SOIS Area Director, J. Wilmot, correct the title of the High Data Rate Wireless Communications specification on the CWE to match the Proximity Wireless Communications title in the CESG presentation to the CMC.
  + This action item was completed by J. Wilmot 14 May 2018. This action item was agreed to be closed.
* CMC-A-2018-05-03 - The CMC requests that the CCSDS Secretariat conduct a review of the contact information for the list of Observers, Liaisons, and Associates on the CWE.
  + M. Blackwood stated that this task had not yet been started, but that it was expected to be completed by October 2018.
* CMC-A-2018-05-04 - The CMC requests that the NASA representative provide dates for the Spring 2019 technical meetings no later than the end of May 2018.
  + The Spring 2019 CCSDS Technical Meetings will be held at NASA Ames Research Center in Mountain view, California 6-9 May 2019. The CESG Meeting will be held on 10 May 2019 also at NASA Ames Research Center. The dates and location of the meetings was distributed to CCSDS members and the public website was updated with this information. This action item was agreed to be closed.
* CMC-A-2018-05-05 - The CMC instructs the Secretariat to draft a letter of thanks to CNSA for their hosting of the latest CCSDS Management Council (CMC) meetings.
  + A letter of thanks to CNSA for hosting the Spring 2018 CMC meetings was sent by 31 May 2018. This action item was agreed to be closed.
  1. **Status of IT projects** ([IT Update](https://cwe.ccsds.org/cmc/Private/Mid-Term%20CMC%20Telecons/2018-08%20Aug%20Telecon/ITUpdate.pptx))

B. Oliver presented the Status of IT projects. Recent accomplishments relayed by B. Oliver included the deployment of the Fall 2018 meetings registration on 8/6/2018 – there are currently 100+ Registrants to the Fall meeting. The Secretariat IT team also made enhancements to the Public Publication Pages that reflects a new layout and additional Working Group Information. B. Oliver shared several upcoming activities such as the Mailman Mailing Lists Upgrade (CAPTCHA), the upgrade to SharePoint 2016 for the CWE and public website and potential enhancements to the CMC and CESG Polling System depending on new features made available through SharePoint 2016.

* 1. **Status of documents** ([CCSDS Document Status20180820](https://cwe.ccsds.org/cmc/Private/Mid-Term%20CMC%20Telecons/2018-08%20Aug%20Telecon/CCSDS%20Document%20Status20180820.pdf))

T. Gannett presented the status of CCSDS documents and asked for any questions form attendees. No questions were presented.

1. **Meeting Planning**
   1. **Fall 2018 Tech Plenary & CMC (DLR, Berlin, Germany)**

O. Peinado stated that he had received a request for an additional meeting room at DIN, but there were no rooms available due to another meeting occurring 15-19 October 2018. O. Peinado continued that lunch will be served in a common area between meeting rooms and will be provided by DLR. 22-25 October, lunch will be provided in the DIN canteen. DLR has made special arrangements with DIN to allow meeting attendees to hold their visitor badges for the entire week rather than returning the badge each evening. Visitor badges should be returned to DIN the last day an attendee is at the meetings. O. Peinado confirmed that he had arranged to host a dinner at Maximillian’s in Berlin on the night of 23 October. The dinner will be at the attendees’ expense. Maximillian’s is located a short distance from DIN so the U-Bahn will be the most convenient method of transportation

* 1. **Spring 2019 Tech Plenary (NASA, Mountain View, CA, USA)**

J. Afarin confirmed that, as had previously been announced, the spring 2019 CCSDS technical meetings will be held at NASA Ames Research Center in Mountain View, California.

* 1. **Spring 2019 CMC (CSA, Montreal, Quebec, Canada)**

S. Tafazoli stated that while the spring 2019 CMC meetings are planned to be hosted at CSA Headquarters outside Montreal, he was looking at the possibility of hosting the meeting in Montreal at a location yet to be decided. S. Tafazoli also noted that Letters of Invitation for attendees can be provided as soon as they are requested.

* 1. **Fall 2019 Tech Plenary & CMC (ESA, Darmstadt, Germany)**

M. di Giulio reported that the fall 2019 technical plenary and CMC meetings would be held in Darmstadt, Germany and noted that this meeting cycle would be 4 days for the technical meetings with the CESG meeting on Friday. M. di Giulio provided the following dates for the meetings:

Technical Meetings (4 days) 21-24 October 2019

CESG Meeting 25 October 2019

Joint CMC/CESG Meeting 28 October 2019

CMC Meeting 29-30 October 2019

**AI-CMC-A-2018-08-05: The CMC directs the Secretariat to add the dates of the fall 2019 meetings to the public website. Due Date: 15 September 2018**

* 1. **Spring 2020 Tech Plenary (NASA, USA)**

J. Afarin stated that NASA Johnson Space Center in Houston, Texas and NASA Marshall Space Flight Center in Huntsville, Alabama are currently being considered, but the spring 2020 meeting location had not yet been finalized.

* 1. **Spring 2020 CMC (JAXA, Japan)**

H. Hoshino confirmed that the spring 2020 meeting of the CMC will be hosted in Tokyo, Japan by JAXA. Additional details will be presented at futre meetings.

1. **Action Item & Resolution Review**

C. Ramos provided an overview of the Action Items and Resolutions from the Mid-Term CMC Telcon.

1. **Any other business**

No other business was announced.

1. **Adjourn**

The meeting was adjourned at 1215h Eastern Daylight Time.