**Draft Minutes**

**3 September 2015 CMC Mid-Term Telecon**

The meeting was called to order by the CMC Chairman, James Afarin, at 0815h (ET – US). Attendees were:

J.-M. Soula – CNES

S. Tafazoli – CSA

O. Peinado – DLR

J. Miro – ESA

N. Peccia – ESA

E. Bergamini – INPE

T. Shigeta – JAXA

J. Afarin – NASA

W. Tai – NASA

P. Allan – UKSA

N. Tongson – Secretariat

Not in attendance were ASI (Italy), CNSA (China), and FSA (Russia).

**Agenda Review and Approval** ([2015-09-03 CMC Agenda mid-term telecon v1](http://cwe.ccsds.org/cmc/Private/Mid-Term%20CMC%20Telecons/2015-09%20Sep%20telecon/2015-09-03%20CMC%20Agenda%20mid-term%20telecon%20v1.pdf))

The draft agenda was approved as proposed.

**CESG Chair Report** ([CESG-Report-to-CMC Sept 15 webex](http://cwe.ccsds.org/cmc/Private/Mid-Term%20CMC%20Telecons/2015-09%20Sep%20telecon/CESG-Report-to-CMC%20Sept%2015%20webex.pptx))

N. Peccia provided his report for the CESG activities since the May 2015 CMC meeting in Nagano, Japan.

It was noted that clarification was needed on the activities of the Telerobotics WG. The WG is doing a Blue Book in addition to a Green Book. It was also noted that the MIA WG will most likely need 2-3 more meetings to resolve the JPEG 2000 issue as well as DTN testing.

**Discussion of WG Chair and Deputy Chair selection**

J. Afarin introduced the topic and the CMC discussed the selection process for nominating a WG Chair and Deputy Chair. J. Afarin will propose a change to the procedures to allow other agencies to nominate an individual and have the CESG decide on the appropriate individual (if more than one nominee). It was suggested that the right time to nominate experts is during the formation of the BoF. Everyone agreed that clear procedures are needed.

The CMC agreed to add an agenda item in the Darmstadt meeting on the selection process for WG Chair and Deputy Chair and the revised procedures.

**Coordination of Future Lunar Missions**

W. Tai introduced the topic and provided some background information based on the May 2015 Nagano meeting discussions. The CMC agreed to coordinate future lunar missions using the topic of communication, instead of the science behind the missions. He further added that Earth stations provide the physical link and that the IOAG might be the more appropriate forum for this coordination. W. Tai added that SLE forward return (cross-support) might be an appropriate document with satellites serving as relay (cross-support relay).

CCSDS should provide input into the International Space Station (ISS) Capability Study Team (a subset of ISEC). This team is looking at various relay options:

1 – GEO satellite (existing commercial GEO satellite)

2 – relay satellite on Earth moon L1 or L2

3 – direct link to and from the Earth ground stations

4 – hybrid (L2 then relying on Orion)

W. Tai suggested that CCSDS should notify these missions about CCSDS standards (maybe make recommendations on what cross-support standards need to be used). J.-M. Soula had suggested to the IOAG to add lunar mission coordination for their next IOAG WebEx. Some CMC members asked if there was a list of all lunar missions. NASA informed the group that its lunar cube-sat missions are CCSDS compliant.

**Action Item:** J.-M. Soula will distribute the IOAG lunar mission model to the CMC members while Nestor Peccia will also bring up this topic as the CCSDS liaison to the IOAG. [NOTE: This was circulated by J.-M Soula immediately after the mid-term telecon.]

**Alternative resources for supporting CCSDS projects**

J. Miro provided some background information based on the discussions in Nagano. O. Peinado informed the CMC that the idea was not well received at DLR because of the issue of continuity.

**Secretariat Report** ([Open Action Items - CMC - Aug2015v1](http://cwe.ccsds.org/cmc/Private/Mid-Term%20CMC%20Telecons/2015-09%20Sep%20telecon/Open%20Action%20Items%20-%20CMC%20-%20Aug2015v1.pdf); [ITDevPriorites-08012015](http://cwe.ccsds.org/cmc/Private/Mid-Term%20CMC%20Telecons/2015-09%20Sep%20telecon/ITDevPriorites-08012015.xlsx))

The CMC reviewed the action items. Action Items: 2015-05-02 (the CMC agreed for one final appeal with a 15 September 2015 deadline); 2015-05-07 (deadline changed to Fall 2015 CMC meeting); and 2015-05-09 (deadline changed to Fall 2015 CMC meeting).

N. Tongson provided an update on the status of the online registration (will be uploaded by mid-September). The IT project update with deadlines was circulated to the CMC.

P. Allan informed the CMC that he was stepping down as UKSA representative because of a new job.

**Meeting Planning**

J. Miro reminded everyone about the social events for the Darmstadt meeting. N. Tongson will re-send the notice about social events at the Darmstadt meeting from Marita Roth with a 15 September 2015 deadline and determine if there will be companions attending.

J. Afarin provided some information about the Spring 2016 technical meetings in Cleveland, Ohio, USA.

E. Bergamini confirmed the Spring 2016 (April) CMC meeting in Sao Jose dos Campos, Brazil (at INPE). He added that he will make a presentation in Darmstadt about his preparations.

**Other Business**

The CMC agreed that the lunar mission coordination will not require a new WG and that it will probably not require a big effort. However, the coordination will need a concentrated effort from all agencies.

J. Afarin reminded everyone that CMC meetings will be business casual.

**Adjourn**

There being no other business to discuss, the telecon was adjourned at 10:03 ET (US).