CCSDS Spring 2020 SLP WG Meeting Minutes - Draft

Via Telecon (in lieu of Huntsville AL USA)

May 4 AM – May 5 AM, 2020– Greg Kazz/Chairman

**Major Accomplishments at this Meeting:**

1. Consensus achieved for Publication of CCSDS 211.0-B-6 Prox-1 SDLP due to the addition of USLP frame.
2. Review of the accumulated changes to CCSDS 732.1 USLP and TC 232.0 to be handled as technical corrigenda planned for Fall 2020 Meeting.
3. WG Consensus to publish CCSDS 130.1-G-1 Overview of Space Communication Green Book pending WG and Area final check
4. Proposed Common List of SLS Terms provided to SLP WG for Internal WG review and thereafter joint meeting planned for Fall 2020
5. Consensus on two new CWE Projects to update a) 732.0 AOS SDLP and b) 132.0 TM SDLP adding SDLS Frame Status Report (FSR) within the Operational Control Field (OCF) and other pending corrigenda
6. Summary of Action Items
7. Planning for Next Meeting
8. Attendance Lists
9. Resolution requested to publish CCSDS 211.0-B-6 Prox-1 SDLP

There were 9 ESA RIDs and 4 NASA RIDs resolved at the meeting concerning the Prox-1 pink sheets due to the introduction of the USLP Transfer Frame PDU. No other agency supplied RIDs. Many of the RIDs were editorial. Some of them were technical facts (modulation is part of the physical layer for example) and some pointed out that the verification of the Version 3 and Version 4 frames was unclear in the pink sheets. All of these points were addressed and consensus was achieved. The chairman thanked and contacted both ESA and NASA RID autors and shared with them our resolutions of their RIDs.

Please see the filenames with the words, “version2\_final” in the CWE. See this URL: [**https://tinyurl.com/yafbs4uu**](https://tinyurl.com/yafbs4uu)

1. Review of accumulated changes to CCSDS 732.1 USLP and TC 232.0 to be handled as technical corrigenda planned for Fall 2020 Meeting.

The chairman provided page references at the top of the WG copy of 732.1 USLP SDLP so that we can easily find all of the pending changes in the document. The SLP WG went over each change and came to consensus that these changes are technical corrigenda that could wait until the Fall 2020 meeting for disposition. In addition, by waiting until then, Marco Rovatti (ESA) pointed out that he will receive feedback from ESA contractors concerning the USLP document and they may find additional comments that we can factor into the corrigenda.

In addition, during the discussion of the systematic retransmission changes to both TC and USLP, Matt Cosby voiced the concern that he believes there are inconsistencies in the way both protocol and user data frames are described in the COP/COP-P protocols which affects both TC and USLP books. Gian Paolo acknowledged it was regrettable that both AD and BC frames can be repeated. Matt takes exception that BC frames can be repeated by the protocol. BC frames could be repeated by the user. ACTION ITEM was assigned to Matt Cosby to present to the WG about the claim of inconsistency on the Type A, B, and AD, BD, and BC transfer frames text for COP and COP-P within Proximity-1, Telecommand (TC) and consequently USLP blue books for the Fall 2020 meeting.

URL for USLP Blue book changes: [**https://tinyurl.com/rcapvto**](https://tinyurl.com/rcapvto)

URL for TC Blue book changes: [**https://tinyurl.com/yc765ybm**](https://tinyurl.com/yc765ybm)

1. WG Consensus to publish CCSDS 130.1-G-1 Overview of Space Comm Protocols GB

The Chairman asked the WG to review the current version of this green book at the URL below. Final comments are to be provided to the chairman by June 1, 2020. Once I receive the final updates from the SLP WG, ACTION ITEM: Greg Kazz will share it with OPT, C&S, & RF&MOD for their comments as well by June 30. Thereafter the final copy will be sent on to Tom Gannett for editing and publication.

URL: [**https://tinyurl.com/v2tbgq3**](https://tinyurl.com/v2tbgq3)

1. Proposed Common List of SLS Terms provided to SLP WG for Internal WG review and thereafter joint meeting planned for Fall 2020

Chairman showed an excel spreadsheet of common terms within the SLP documents. The task is to reduce the multiple definitions down to a common set acceptable by all of the SLS area working groups. Note that optical comm terms were not include since the optical standards are still a work in progress except for the deep space case. ACTION ITEM is on the WG to review the glossary of terms spreadsheet and work together to come up with an agreed set of definitions for each term. Goal is at the fall meeting to meet with the other SLS Area working groups to come to consensus on a common set of definitions. Telecons will be required before the Fall meetings to gain consensus on the terminology.

SLS Glossary of Terms Draft Magenta Book – contains two files: An Excel spreadsheet (latest version has ‘Kazz’ in filename) with proposal for Green (accepted) and RED (suggested corrections to definitions and choice of preferred definition) and Word file containing the frequency in which these terms are contained within the SLS documents.

URL: [**https://tinyurl.com/y9j9hp89**](https://tinyurl.com/y9j9hp89)

1. Consensus on two new CWE Projects to update a) 732.0 AOS SDLP and b) 132.0 TM SDLP adding SDLS Frame Status Report (FSR) within the Operational Control Field (OCF) and other pending corrigenda

It turns out that we had already done the work of integrating the SDLS Frame Status Report (FSR) pink sheets into both AOS and TM. Gian Paolo did the follow on research by adding the remaining corrigenda already discussed and agreed to from previous   
SLP WG meetings to the following two files loaded into the CWE. Two new projects were created in the frame work and sent to the CMC for polling for acceptance. To view the AOS and TM file updates look for the filenames with dates 0505 and 0506 in them. See URL: [**https://tinyurl.com/yb4a78rt**](https://tinyurl.com/yb4a78rt)

1. **Summary of Action Items**

Action items assigned during this meeting are:

Action 1: Matt Cosby to present to the WG about the claim of inconsistency on the Type A, B, and AD, BD, and BC transfer frames text for COP and COP-P within Proximity-1, Telecommand (TC) and consequently USLP blue books for the Fall 2020 meeting.

Action 2: Greg Kazz will share the result of the SLP WG internal review on CCSDS 130.1-G (OSCP GB) with OPT, C&S, & RF&MOD for their comments as well by June 30. Thereafter the final copy will be sent on to Tom Gannett for editing and publication.

Action 3:SLP WG to review the glossary of terms spreadsheet and work together to come up with an agreed set of definitions for each term. Telecons will be set up by the chairman to discuss. To take place in the summer of 2020.

1. **Next SLP WG Meeting**

The technical meetings are scheduled to be held in Toulouse, France 26 – 30 October, 2020 (note 5 day meeting). Of course in lieu of actually physically meeting in Toulouse, due to the COVID-19 pandemic, we may again meet by teleconference. Stay tuned to messages from the CCSDS secretariat.

1. **List of Attendees (May 4-5, 2020)**

**May 4, 2020 Session**

"All sessions in Pacific Daylight Time (San Francisco, GMT-07:00)"

Session detail for Day 1 of 'Spring CCSDS 2020 SLP WG Meeting':

Participant Name Email Date Invited Registered Start time End time Duration Company Title Phone Number Address 1 Address 2 City State/Province Zip/Postal Code Country/region Network joined from:

1 Marco Rovatti marco.rovatti@esa.int 5/4/20 No N/A 7:01 AM 9:03 AM 122 mins External

2 Gilles gilles.moury@cnes.fr 5/4/20 No N/A 7:05 AM 9:03 AM 119 mins External

3 Eric Pitts eric.l.pitts@nasa.gov 5/4/20 No N/A 7:02 AM 9:03 AM 122 mins External

4 Christian Stangl (DLR/GSOC) christian.stangl@dlr.de 5/4/20 No N/A 7:00 AM 9:03 AM 123 mins External

5 Stefan Veit Stefan.Veit@dlr.de 5/4/20 No N/A 7:01 AM 9:03 AM 122 mins External

6 Greg Kazz greg.j.kazz@jpl.nasa.gov 5/4/20 No N/A 6:57 AM 9:03 AM 127 mins 1 External

7 Matt matt.cosby@goonhilly.org 5/4/20 No N/A 6:59 AM 9:03 AM 124 mins External

8 gian paolo gian.paolo.calzolari@esa.int 5/4/20 No N/A 7:00 AM 9:03 AM 124 mins External

9 Tomaso de Cola tomaso.decola@dlr.de 5/4/20 No N/A 7:03 AM 9:03 AM 120 mins External

10 Amanuel Geda amanuel.geda@dlr.de 5/4/20 No N/A 7:06 AM 9:03 AM 117 mins External

**May 5, 2020 Session**

"All sessions in Pacific Daylight Time (San Francisco, GMT-07:00)"

Session detail for 'Day 2 of CCSDS Spring SLP WG Meeting':

Participant Name Email Date Invited Registered Start time End time Duration Company Title Phone Number Address 1 Address 2 City State/Province Zip/Postal Code Country/region Network joined from:

1 Amanuel Geda amanuel.geda@dlr.de 5/5/20 No N/A 7:03 AM 7:04 AM 2 mins External

2 Amanuel Geda amanuel.geda@dlr.de 5/5/20 No N/A 7:05 AM 7:13 AM 8 mins External

3 Gilles gilles.moury@cnes.fr 5/5/20 No N/A 7:03 AM 8:03 AM 61 mins External

4 Greg Kazz greg.j.kazz@jpl.nasa.gov 5/5/20 No N/A 6:56 AM 8:03 AM 67 mins 1 External

5 Eric Pitts eric.l.pitts@nasa.gov 5/5/20 No N/A 6:57 AM 8:03 AM 66 mins External

6 gian paolo gian.paolo.calzolari@esa.int 5/5/20 No N/A 7:00 AM 8:03 AM 63 mins External

7 Matt matt.cosby@goonhilly.org 5/5/20 No N/A 6:57 AM 8:03 AM 66 mins External

8 Christian Stangl (DLR/GSOC) christian.stangl@dlr.de 5/5/20 No N/A 7:03 AM 8:03 AM 61 mins External

9 Marco Rovatti marco.rovatti@esa.int 5/5/20 No N/A 6:57 AM 8:03 AM 66 mins External

10 Stefan Veit Stefan.Veit@dlr.de 5/5/20 No N/A 7:02 AM 8:03 AM 62 mins External

End of Report