SLS Meeting Objectives: 1/2



RF & Modulation WG

401.0-B RF & Modulation:

- Turn-around ratios for EESS 7/8 GHz Red 2.6.11A Review of RIDs

Stations sweep specifications Pink 2.1.4A/B Review of RIDs

- Telemetry ranging Finalization of draft Recommenda

- Flexible turn-around ratios and MSPA Initial recommendation discussion

GMSK+PN ranging Recommendation update discussion

Station frequency stability Recommendation update discussion

- ACHIEVEMENTS: ; 401.0-B-28 Radio Frequency and Modulation Systems (updates to Turn-around ratios for EESS 7) & Stations sweep specifications). Issue 28. February 2018 Published; 413.0-G Bandwidth-Efficient Modulations: Summary of Definition, Implementation, and Performance" Issue 3 Published;

Space Link Code/Sync WG

Proximity-1 C&S Sublayer 211.2-B
Start update for USLP adaptation

VCM Blue Book 431.1-B
Check of the status (concept paper, simulations...) (with RFM)

SCCC Blue Book 131.2-B
Propose extension as part of 5-year review (with RFM)

DVB-S2X Orange Book 131.6-O
First draft to be presented to WG (with RFM)

SCCC Green Book 130.11-G
Start WG review to finalize draft for publication (with RFM)

Space Link Protocols WG

• USLP Final Updates to USLP Red book

Discuss progress on USLP Interoperability Testing (NASA and DLR)

Start work on updated Proximity-1 Coding Book (with C&S)

Review updated USLP Green Book

SDLP Books Discuss Corrigenda on TM, TC, AOS (Preparing for 5-year Review)

• SPP Revision Discuss Revision Plan & identify areas to be modified

6th Nov 2017 np

SLS Meeting Objectives: 2/2



Space Data Link Security (SDLS) WG

• Extended Protocol Blue Book 355.1 Review of last modifications introduced in draft RED Book v1

Review final interoperability testing results

• Extended Protocol Green Book 350.5 Review contributions

- ACHIEVEMENTS: 350.5-G SDLS Core Protocol Green Book: (Waiting CESG Poll to be) Published; 355.1-R DSLS Extended Procedures: (Waiting CESG Poll to) start Agency review;

Multispectral & Hyperspectral Data Compression (MHDC) WG

- CCSDS-123.0-B: Lossless/Near-Lossless Compression (Issue 2 Extension of CCSDS-123.0-B)
 - Review recent changes (Draft Pink Book queued to start Agency review)
 - Review cross-verification progress. Establish timeline to complete Yellow Book.
- CCSDS-124.0-B: Compression of "housekeeping-like" telemetry data
 - Establish selection criteria & Review and assess test data
- CCSDS-120.2-G: Update to issue 2 to cover additional features added in CCSDS-123.0-B-2
 - Establish topics to be updated / added, make writing assignments
- CCSDS-120.3-G, "Spectral Pre-processing Transform for Multispectral & Hyperspectral Image Compression"
 - Resolve for publication (book supports recently released 122.1-B)

Optical Communications WG

- Optical Communications "Physical Layer" and "Coding & Synchronization" Blue Books.
 - 1. <u>Deep Space Scenario</u>: High Photon Efficiency (HPE) Scenario Resolve Agency Reviews RIDs for Physical Layer book and finalize Draft Red Book for Coding Layer to submit for agency review.
 - 2. <u>Near Earth Scenario for Low Complexity (O3K) Systems</u>: Work towards reaching a consensus on Optical On-off Keying (O3K) physical layer.

High Data Rate (HDR) Near Earth Scenario: Agree on resolution for publication of ESA/DLR Orange Book

6th Nov 2017 np