

# SLS Meeting Objectives: 1/2

## • RF & Modulation WG

### • 401.0-B RF & Modulation:

- Flexible turn-around ratios, multi-carrier operation, BW-Efficient modulations for SRS, and Telemetry ranging of RIDs to 401.0-RP-28.1 (rec. 2.4.17A, 2.4.22A & B, 2.4.24, and 3.1.7)
- MSPA Implementation In-depth discussion of draft recommendations
- Station frequency stability In-depth discussion of recommendation for update
- 22/26 GHz turn-around ratios In-depth discussion of first draft recommendation
- VCM, High Data Rate randomizers, and evolution of HOMs (SCCP, S2X) Discussion (with C&S)

## • Space Link Code/Sync WG

- VCM Blue Book 431.1-B (new colour) Check Performances & Protocols (with RFM) & Wait Polls for AR
- Proximity-1 C&S Sublayer 211.2-B Progress on USLP adaptation & Reliability Testing (with SLP)
- AOS Uplink with TM Codes Discuss NASA reply to former action item and propose new CWE project
- DVB-S2X Orange Book 131.6-O Progress to be presented to WG (with RFM)
- SCCC-X Orange Book (Proposal) Discuss SCCC Extension towards 128- and 256-APSK (with RFM)
- **ACHIEVEMENTS:** 130.11-G "TM Channel Coding for SCCC" Green Book: (Waiting CESG/CMC Poll to be) Published;

## • Space Link Protocols WG

- USLP Finalize CCSDS 700.1-G USLP Green book
- SPP Revision NASA Proposal for SPP Issue 2 (CCSDS 133.0-B)  
Potential need for a SPP GB (CCSDS 130.3-G)
- Review proposed revisions to Overview of Space Comm. Protocols (OSCP) Green Book (CCSDS 130.0-G)
- **ACHIEVEMENTS:** 732.0-B-1 Unified Space Data Link Protocol Blue Book: (Undergoing CMC Poll to be) Published;

To be updated by Gippo

# SLS Meeting Objectives: 2/2

- **Space Data Link Security (SDLS) WG**

- Extended Protocol Blue Book 355.1 Disposition RIDs for **RED-1** Book & Review interoperability testing
- Extended Protocol Green Book 350.5 Contributions – finalize 1<sup>st</sup> complete draft
- **ACHIEVEMENTS:** 350.5-G-1 SDLS Core Protocol Green Book

- **Multispectral & Hyperspectral Data Compression (MHDC) WG**

- CCSDS-123.0-B Lossless/Near-Lossless Compression (Issue 2 E. Review RIDs from A.Review
- CCSDS-124.0-B Compression of “housekeeping-like” telemetry data Review White Book
- CCSDS-121.0-B “Lossless Data Compression” Review proposed corrigenda
- CCSDS-120.0-G “Lossless Data Compression” Reconfirmation Review
- CCSDS-120.2-G: Update to issue 2 to cover additional features added in CCSDS-1 Review latest draft Green Book, identify sections in need of revision or additional material
- **ACHIEVEMENTS:** 120.3-G “Spectral Pre-Processing Transform for Multispectral & Hyperspectral Image Compression” Green Book (supporting CCSDS 122.1-B-1): (Waiting CESG/CMC Poll to be) Published;

- **Optical Communications WG**

- Optical Communications “Physical Layer” and “Coding & Synchronization” Blue Books.
  1. Deep Space Scenario: High Photon Efficiency (HPE) Scenario – Resolve Agency Reviews RIDs for Coding Layer RB.
  2. Near Earth Scenario for Low Complexity (O3K) Systems: Review the draft section(s) for Optical On/Off Keying (O3K) Physical Layer recommendation and try to reach consensus on it.
- Review the 1st white book on Atmospheric Characterization for Optical Link Operations (future Magenta)
- Review draft Optical High Data Rate (HDR) Communication 1550 nm (NASA/CNES/JAXA/NICT) Orange Book
- **ACHIEVEMENTS:** 141.11-O-1 Optical High Data Rate (HDR) Communication 1064 nm (ESA/DLR) Orange Book: (Waiting CESG/CMC Poll to be) Published;

To be updated by Gippo