**Resolutions from Meeting 44 of ISO TC 20/SC 13**

**Resolution 1 - 2024-11**

ISO/TC 20/SC 13  thanks the host  (UKSA) for holding TC 20/SC 13 meeting with excellent facilities and local support

**Resolution 2- 2024-11: Updates of ISO documents to align with CCSDS latest version**

ISO/TC 20/SC 13  notes that the CCSDS documents listed below have been revised since the most recent ISO issues were released and resolves to adopt these recently published CCSDS Documents as ISO Standards under the Fast Track Process.

The A4 Word files and editable graphics files for the following documents are available from <https://cwe.ccsds.org/sec/docs/Forms/AllItems.aspx?RootFolder=%2fsec%2fdocs%2f241027%5fISO%5fUpdate%5fDocuments&FolderCTID=0x0120001030F072FF81B0408D7B8CB95CDD9111>

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| CCSDS Document | Current ISO Issue |
| CCSDS 122.0-B-2,     Image Data Compression (Blue Book, Issue 2, September 2017) | ISO 26868:2009 |
| CCSDS 506.0-M-2,    Delta-Differential One Way Ranging (Delta-DOR) Operations (Magenta Book, Issue 2, February 2018) | ISO 17809:2014 |
| CCSDS 123.0-B-2,     Low-Complexity Lossless and Near-Lossless Multispectral and Hyperspectral Image Compression (Blue Book, Issue 2, February 2019) | ISO 18381:2013 |
| CCSDS 352.0-B-2,     CCSDS Cryptographic Algorithms (Blue Book, Issue 2, August 2019) | ISO 20215:2015 |
| CCSDS 211.2-B-3,     Proximity-1 Space Link Protocol—Coding and Synchronization Sublayer (Blue Book, Issue 3, October 2019) | ISO 21459:2015 |
| CCSDS 133.1-B-3,     Encapsulation Packet Protocol (Blue Book, Issue 3, May 2020) | ISO 10537:2016 |
| CCSDS 503.0-B-2,     Tracking Data Message (Blue Book, Issue 2, June 2020) | ISO 13526:2010 |
| CCSDS 133.0-B-2,     Space Packet Protocol (Blue Book, Issue 2, June 2020) | ISO 22646:2005 |
| CCSDS 727.0-B-5,     CCSDS File Delivery Protocol (CFDP) (Blue Book, Issue 5, July 2020) | ISO 17355:2007 |
| CCSDS 211.0-B-6,     Proximity-1 Space Link Protocol—Data Link Layer (Blue Book, Issue 6, July 2020) | ISO 22663:2015 |
| CCSDS 121.0-B-3,     Lossless Data Compression1:09:46 PM (Blue Book, Issue 3, August 2020) | ISO 15887:2013 |
| CCSDS 921.1-B-2,     Cross Support Transfer Service—Specification Framework (Blue Book, Issue 2, February 2021) | ISO 23103:2020 |
| CCSDS 766.1-B-3,     Digital Motion Imagery (Blue Book, Issue 3, April 2021) | ISO 21077:2021 |
| CCSDS 231.0-B-4,     TC Synchronization and Channel Coding (Blue Book, Issue 4, July 2021) | ISO 22642:2015 |
| CCSDS 132.0-B-3,     TM Space Data Link Protocol (Blue Book, Issue 3, October 2021) | ISO 22645:2016 |
| CCSDS 232.0-B-4,     TC Space Data Link Protocol (Blue Book, Issue 4, October 2021) | ISO 22664:2016 |
| CCSDS 414.1-B-3,     Pseudo-Noise (PN) Ranging Systems (Blue Book, Issue 3, January 2022) | ISO 18423:2015 |
| CCSDS 131.3-B-2,     CCSDS Space Link Protocols over ETSI DVB-S2 Standard (Blue Book, Issue 2, April 2022) | ISO 20207:2015 |
| CCSDS 355.0-B-2,     Space Data Link Security Protocol (Blue Book, Issue 2, July 2022) | ISO 21324:2016 |
| CCSDS 922.1-B-2,     Cross Support Transfer Services—Monitored Data Service (Blue Book, Issue 2, September 2022) | ISO 23104:2020 |
| CCSDS 131.2-B-2,     Flexible Advanced Coding and Modulation Scheme for High Rate Telemetry Applications (Blue Book, Issue 2, February 2023) | ISO 17854:2013 |
| CCSDS 912.1-B-5,     Space Link Extension—Forward CLTU Service Specification (Blue Book, Issue 5, July 2023) | ISO 22671:2021 |
| CCSDS 911.1-B-5,     Space Link Extension—Return All Frames Service Specification (Blue Book, Issue 5, July 2023) | ISO 22669:2021 |
| CCSDS 911.2-B-4,     Space Link Extension—Return Channel Frames Service Specification (Blue Book, Issue 4, July 2023) | ISO 22670:2021 |
| CCSDS 911.5-B-4,     Space Link Extension—Return Operational Control Fields Service Specification (Blue Book, Issue 4, July 2023) | ISO 26143:2021 |
| CCSDS 131.0-B-5,     TM Synchronization and Channel Coding (Blue Book, Issue 5, September 2023) | ISO 22641:2012 |
| CCSDS 521.0-B-3,     Mission Operations Message Abstraction Layer (Blue Book, Issue 3, March 2024) | ISO 18202:2015 |

**Resolution 3- 2024-11 on publications to be retired**

ISO/TC 20/SC 13  notes that

* CCSDS 912.3-B-3, Space Link Extension—Forward Space Packet Service Specification (Blue Book, Issue 3, August 2016) has been retired by the CCSDS and

resolves that the corresponding ISO publication (ISO 22672:2021) is to be withdrawn

* CCSDS 630.0-B-1, Standard formatted data units — Control authority procedures has been retired by the CCSDS and

resolves that the corresponding ISO publication (ISO 13764:1996) is to be withdrawn

**Resolution 4 - 2024-11 on New CCSDS Publications Submitted to ISO in August 2020 and Subsequently Deleted from SC13 Program of Work[[1]](#footnote-1)**

ISO/TC 20/SC 13  resolves to adopt the following CCSDS documents, which were submitted to ISO in August 2020 but subsequently deleted from the SC13 program of work, as ISO Standards under the Fast Track Process.

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| **CCSDS Document (see https://cwe.ccsds.org/sec/docs/Forms/AllItems.aspx?RootFolder=%2Fsec%2Fdocs%2F240924%5FDocuments%5Ffor%5FISO%5Fsubmission& )** | **ISO number[[2]](#footnote-2)** | **Deliverable Files** |
| CCSDS 122.1-B-1, Spectral Preprocessing Transform for Multispectral and Hyperspectral Image Compression (Blue Book, Issue 1, September 2017) | 24121 | 122x1b1\_ISO\_files.zip |
| CCSDS 356.0-B-1, Network Layer Security Adaptation Profile (Blue Book, Issue 1, June 2018) | 24129 | 356x0b1\_ISO\_files.zip |
| CCSDS 506.3-M-1, Delta-DOR Quasar Catalog Update Procedure (Magenta Book, Issue 1, February 2018) | 24126 | 506x3m1\_ISO\_files.zip |
| CCSDS 509.0-B-1, Pointing Request Message (Blue Book, Issue 1, February 2018) | 24127 | 509x0b1\_ISO\_files.zip |
| CCSDS 524.2-B-1, Mission Operations—Message Abstraction Layer Binding to TCP/IP Transport and Split Binary Encoding (Blue Book, Issue 1, November 2017) | 24125 | 524x2b1\_ISO\_files.zip |
| CCSDS 524.3-B-1, Mission Operations—Message Abstraction Layer Binding to HTTP Transport and XML Encoding (Blue Book, Issue 1, June 2018) | 24130 | 524x3b1\_ISO\_files.zip |
| CCSDS 766.2-B-1, Voice and Audio Communications (Blue Book, Issue 1, November 2017) | 24124 | 766x2b1\_ISO\_files.zip |
| CCSDS 881.1-B-1, Spacecraft Onboard Interface Services—RFID Tag Encoding Specification (Blue Book, Issue 1, October 2017) | 24122 | 881x1b1\_ISO\_files.zip |
| CCSDS 902.1-B-1, Cross Support Service Management—Simple Schedule Format Specification (Blue Book, Issue 1, May 2018) | 24128 | 902x1b1\_ISO\_files.zip |

Even though the deleted projects no longer show up on the “Deleted” tab on the SC13 program-of-work page, ISO still has Web pages for the deleted books:

<https://www.iso.org/standard/77852.html?browse=tc>

<https://www.iso.org/standard/77853.html?browse=tc>

<https://www.iso.org/standard/77856.html?browse=tc>

<https://www.iso.org/standard/77855.html?browse=tc>

<https://www.iso.org/standard/77858.html?browse=tc>

<https://www.iso.org/standard/77857.html?browse=tc>

<https://www.iso.org/standard/77859.html?browse=tc>

<https://www.iso.org/standard/77860.html?browse=tc>

<https://www.iso.org/standard/77861.html?browse=tc>

It is not clear if that means the numbers have not been recycled.

**Resolution 5- 2024-11 on new submissions to ISO**

ISO TC 20/SC 13 resolves to adopt the following documents as ISO Standards under the Fast Track Process.

The A4 Word files and editable graphics file are available from <https://cwe.ccsds.org/sec/docs/Forms/AllItems.aspx?RootFolder=%2Fsec%2Fdocs%2F241027%5FISO%5FNew%5FDocuments&>

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| **CCSDS Document** | **ISO number** | **Deliverable Files** |
| CCSDS 124.0-B-1, Robust Compression of Fixed-Length Housekeeping Data (Blue Book, Issue 1, February 2023) | not assigned | 124x0b1\_ISO\_files.zip |
| CCSDS 141.1-M-1, Atmospheric Characterization and Forecasting for Optical Link Operations (Magenta Book, Issue 1, January 2022) | not assigned | 141x1m1\_ISO\_files.zip |
| CCSDS 350.8-M-3, Information Security Glossary of Terms (Magenta Book, Issue 3, February 2024) | not assigned | 350x8m3\_ISO\_files.zip |
| CCSDS 354.0-M-1, Symmetric Key Management (Magenta Book, Issue 1, December 2023) | not assigned | 354x0m1\_ISO\_files.zip |
| CCSDS 355.1-B-1, Space Data Link Security Protocol—Extended Procedures (Blue Book, Issue 1, February 2020) | not assigned | 355x1b1\_ISO\_files.zip |
| CCSDS 357.0-B-1, CCSDS Authentication Credentials (Blue Book, Issue 1, July 2019) | not assigned | 357x0b1\_ISO\_files.zip |
| CCSDS 431.1-B-1, Variable Coded Modulation Protocol (Blue Book, Issue 1, February 2021) | not assigned | 431x1b1\_ISO\_files.zip |
| CCSDS 508.1-B-1, Re-entry Data Message (Blue Book, Issue 1, November 2019) | not assigned | 508x1b1\_ISO\_files.zip |
| CCSDS 522.0-B-1, Mission Operations—Common Services (Blue Book, Issue 1, May 2020) | not assigned | 522x0b1\_ISO\_files.zip |
| CCSDS 523.2-M-1, Mission Operations Message Abstraction Layer—C++ API (Magenta Book, Issue 1, December 2018) | not assigned | 523x2m1\_ISO\_files.zip |
| CCSDS 524.4-B-1, Mission Operations—Message Abstraction Layer Binding to ZMTP Transport (Blue Book, Issue 1, October 2019) | not assigned | 524x4b1\_ISO\_files.zip |
| CCSDS 732.1-B-3, Unified Space Data Link Protocol (Blue Book, Issue 3, June 2024) | not assigned | 732x1b3\_ISO\_files.zip |
| CCSDS 734.3-B-1, Schedule-Aware Bundle Routing (Blue Book, Issue 1, July 2019) | not assigned | 734x3b1\_ISO\_files.zip |
| CCSDS 876.1-M-1, Spacecraft Onboard Interface Services—Specification for Dictionary of Terms for Electronic Data Sheets (Magenta Book, Issue 1, March 2024) | not assigned | 876x1m1\_ISO\_files.zip |
| CCSDS 883.0-B-2, Spacecraft Onboard Interface Services—High Data Rate Wireless Proximity Network Communications (Blue Book, Issue 2, May 2024) | not assigned | 883x0b2\_ISO\_files.zip |
| CCSDS 901.3-M-1, Functional Resource Model (Magenta Book, Issue 1, February 2024) | not assigned | 901x3m1\_ISO\_files.zip |
| CCSDS 902.13-M-1, Abstract Event Definition (Magenta Book, Issue 1, February 2021) | not assigned | 902x13m1\_ISO\_files.zip |
| CCSDS 902.2-B-1, Cross Support Service Management—Communications Planning Information Format (Blue Book, Issue 1, March 2022) | not assigned | 902x2b1\_ISO\_files.zip |
| CCSDS 921.2-M-1, Guidelines for the Specification of Cross Support Transfer Services (Magenta Book, Issue 1, March 2019)not assigned | not assigned | 921x2m1\_ISO\_files.zip |
| CCSDS 922.2-B-2, Cross Support Transfer Service—Tracking Data Service (Blue Book, Issue 2, February 2023) | not assigned | 922x2b2\_ISO\_files.zip |
| CCSDS 922.3-B-1, Cross Support Transfer Service—Forward Frame Service (Blue Book, Issue 1, April 2021) | not assigned | 922x3b1\_ISO\_files.zip |
| CCSDS 927.1-B-1, Terrestrial Generic File Transfer (Blue Book, Issue 1, November 2021) | not assigned | 927x1b1\_ISO\_files.zip |

**Resolution 6- 2024-11**

ISO/TC 20/SC13 thanks Monica Ibido, the ISO TPM, for her continuing assistance, particularly for her work on resolving the status of the CCSDS SANA

**Resolution 7 - 2024-11**

45th Plenary Meeting will be held the Spring 2025, Montreal, date to be confirmed.

1. SC13 resolutions to submit these documents existed at the time. They were probably generated either at the fall 2019 meeting or at a virtual meeting conducted in 2020. [↑](#footnote-ref-1)
2. ISO number assigned to original submission as CD, prior to deletion. New number may need to be assigned. [↑](#footnote-ref-2)