Deutsches Zentrum
für Luft- und Raumfahrt e.V.

German
Aerospace Center

German report for the 51th meeting of the ISO/Technical Committee 20/Subcommittee 13 (informal)
hosted by ESA/ESOC, Darmstadt, 14 November 2017, Tuesday (09:00-11:00)

ISO TC20 / SC13 status:
- published standards: 92 (92)
- standards under development: 11 (1)

Activities since the last ISO TC20/SC13 fomal meeting 14.6.2017
Votings on revisions of already existing standards

Reviews ongoing till beginning of November (3). DLR voted positiv:

ISO 26900:2012, Space data and information transfer systems — Orbit data messages (CCSDS 502.0-B-2: May 2012)

ISO 22641:2012, Space data and information transfer systems — TM (telemetry) synchronization and channel coding (CCSDS 131.0-B-2, August 2011)
(A version 3, September 2017, is already available)

ISO 14721:2012, Space data and information transfer systems — Open archival information system (OAIS) — Reference model (CCSDS 650.0-M-2, June 2012)

Systematic Review (6):

ISO 11104:2011 Ed 3, Space data and information transfer systems - Time code formats (CCSDS 301.0-B-4, November 2010)

ISO 15889:2011 (Ed. 3), Space data and information transfer systems -- The data description language EAST specification (CCSDS 644.0-B-3, June 2010)

ISO 16363:2012 Ed 1, Space data and information transfer systems - Audit and certification of trustworthy digital repositories (CCSDS 652.0-M-1, September 2011)

ISO 17107:2011 (Ed. 1), Space data and information transfer systems -- XML specification for navigation data messages (CCSDS 505.0-B-1, December 2010)

ISO 22671:2011 Ed 3, Space data and information transfer systems - Space link extension (SLE) - Forward communications link transmission unit (CLTU) service (CCSDS 912.1-B-3, July 2010)
(A version 4, August 2016, is already available)

ISO 22672:2011 Ed 3, Space data and information transfer systems - Space link Extension (SLE) - Forward space packet Service specification (CCSDS 912.3-B-3, August 2016)

On Revision Track:

ISO 21077:2016, Digital Motion Imagery, (CCSDS 766.1-B-2, August 2016)

On Fast Track (2):

CCSDS 922.1-B-1 "Space Link Extension – Cross Support Transfer Service – Monitored Data Service"

CCSDS 921.1-B-1 "Space Link Extension – Cross Support Specification Framework"

Withdrawls (8):

ISO 17214: 2011, Space data and information transfer systems — Spacecraft onboard interface services —Time access service (CCSDS 872.0-M-1-S)

ISO 18439:2013, Space data and information transfer systems - Space Communication Cross Support - Service Management - Service Specification (CCSDS 910.11-B-1-S)

ISO 20107:2015, Space data and information transfer systems - Spacecraft onboard interface services - Device virtualization service (CCSDS 871.2-M-1-S)

ISO 20211:20215, Space data and information transfer systems - Spacecraft Onboard Interface Services - Device Access Service (CCSDS 871.0-M-1-S)

ISO 20213:2015, Space data and information transfer systems - Spacecraft onboard interface services - Message transfer service (CCSDS 875.0-M-1-S)

ISO 20216:2015, Space data and information transfer systems - Spacecraft onboard interface services - Device data pooling service (CCSDS 871.1-M-1-S)

ISO 20217:2015, Space data and information transfer systems - Spacecraft onboard interface services - File and packet store services (CCSDS 873.0-M-1-S)

ISO 20618:2015, Space data and information transfer systems - Spacecraft onboard interface services - Device enumeration service (CCSDS 871.3-M-1-S)

Use of standards within DLR projects

All DLR space projects are forced to make use of the standards defined by CCSDS and ECSS (CEN), especially those standards, which are relevant for ground systems as coding and frequency standards, packet TM/TC, SLE services and Navigation Standards.
The new MIA standard is already in place for use of video communication between Spacestation and ground systems. Also current setting of the upcoming Voice standard is used in this are by DLR.
The DLR/CNES mission Merlin is using the new SDLS standard for secure up/downlink.

CEN/CLC/TC 5 Space

CEN/CLC/TC 5 Space Group met in Berlin for their 12th meeting on 22.6.2017. Minutes are available. Next meeting is planned for the 1.2.2018 at ESA headquarter, Paris. Roger Jegou was nominated bei ECSS as temporary Chairman for Mr. Veith because of his leave end 2017.

Osvaldo Peinado
DLR-GSOC
Oberpfaffenhofen, 5.11.2017