

German report for the 46th meeting of the ISO/Technical Committee 20/Subcommittee 13

Hosted by JAXA/Japan, Nagano, Japan, 20 May 2015, Wednesday (13:45-15:45 hs)

ISO TC20 / SC13 status:

- published standards: 68 (64)
- standards under development: 22 (9)
- withdrawn standards: 45 (45)

Activities since the last formal ISO TC20/SC13 meeting 8.4.2014

The votes for the 2014 systematic reviews (6) have been reported already during the last meeting. The ISO reporting was received in the reporting period. They included the following votings:

ISO 13764:1996 Space data and information transfer systems -- Standard formatted data units -- Control authority procedures

ISO 14962:1997 Space data and information transfer systems -- ASCII encoded English

ISO 20652:2006 Space data and information transfer systems -- Producer-archive interface -- Methodology abstract standard

ISO 21459:2006 Space data and information transfer systems -- Proximity-1 space link protocol -- Coding and synchronization sublayer

ISO 22643:2003 Space data and information transfer systems -- Data entity dictionary specification language (DEDSL) -- XML/DTD Syntax

ISO 26868:2009 Space data and information transfer systems -- Image data compression

One new vote for systematic review is pending (22.7.2015):

ISO17355, Space data and information transfer systems - CCSDS file delivery protocol

Votings on new standards:

Votings ISO CD/DIS/FDIS (21)

ISO-CD 18322, Space systems -- General requirements for accreditation of space test

centers and laboratories

ISO-FDIS 16919, Space data and information transfer systems - Requirements for bodies providing audit and certification of candidate trustworthy digital repositories (9/0/3)

ISO/DIS 22663, Space data and information transfer systems -- Proximity-1 space link protocol -- Data link layer (CCSDS 211.0-B-5: Dec 2013) (9/0)

ISO/DIS 21460, Space data and information transfer systems -- Proximity-1 space link protocol -- Physical layer (CCSDS 211.1-B-4: Dec 2013) (9/0)

ISO/DIS 21459, Space data and information transfer systems -- Proximity-1 space link protocol -- Coding and synchronization sublayer (CCSDS 211.2-B-2: Dec 2013) (9/0)

ISO/DIS 20104, Space data and information transfer systems -- Producer-Archive Interface Specification (PAIS) (CCSDS 651.1-B-1: Feb 2014) (9/0)

ISO/DIS 18423, Space data and information transfer systems -- Pseudo-Noise (PN) Ranging Systems (CCSDS 414.1-B-2: Feb 2014) (9/0)

ISO/DIS 20107, Space data and information transfer systems -- Spacecraft onboard interface services -- Device virtualization service (CCSDS 871.2-M-1: Mar 2014) (9/0)

ISO/DIS 20106, Space data and information transfer systems -- Mission operations common object model (CCSDS 521.1-B-1: Feb 2014) (9/0)

ISO/DIS 20105, Space data and information transfer systems -- Operation of CFDP over encapsulation service (CCSDS 722.1-M-1: Mar 2014) (9/0)

ISO/DIS 20217, Space data and information transfer systems -- Spacecraft onboard interface services -- File and packet store services (CCSDS 873.0-M-1: Sep 2012) (9/0)

ISO/DIS 20216, Space data and information transfer systems -- Spacecraft onboard interface services -- Device data pooling service (CCSDS 871.1-M-1: Nov 2012) (9/0)

ISO/DIS 20215, Space data and information transfer systems -- CCSDS cryptographic algorithms (CCSDS 352.0-B-1: Nov 2012) (8/0)

ISO/DIS 20214, Space data and information transfer systems -- Security architecture for space data systems (CCSDS 351.0-M-1: Nov 2012) (8/0)

ISO/DIS 20213, Space data and information transfer systems -- Spacecraft onboard interface services -- Message transfer service (CCSDS 875.0-M-1: Nov 2012) (9/0)

ISO/DIS 20211, Space data and information transfer systems -- Spacecraft Onboard Interface Services -- Device Access Service (CCSDS 871.0-M-1: Mar 2013) (9/0)

ISO/DIS 20210, Space data and information transfer systems -- Mission Operations Message Abstraction Layer - JAVA API (CCSDS 523.1-M-1: Apr 2013) (9/0)

ISO/DIS 20208, Space data and information transfer systems -- Delta-DOR Raw Data Exchange Format (CCSDS 506.1-B-1:Jun 2013) (9/0)

ISO/DIS 20207, Space data and information transfer systems -- CCSDS Space Link Protocols over ETSI DVB-S2 Standard (CCSDS 131.3-B-1:Mar 2013) (9/0)

ISO/DIS 20206, Space data and information transfer systems -- IP over CCSDS space links (CCSDS 702.1-B-1:Sep 2012) (9/0)

ISO/DIS 20205, Space data and information transfer systems -- Spacecraft Onboard Interface Systems -- Low Data-Rate Wireless Communications for Spacecraft Monitoring and Control (CCSDS 882.0-M-1:May 2013) (9/0)

Ongoing Voting for New Standards (2, 15.7.2015)

ISO/DIS 18202, Space data and information transfer systems -- Spacecraft Onboard Interface Systems – Mission Operations Message Abstraction Layer. (CCSDS 521.0-B-2 March 2013)

ISO/DIS 22642, Space data and information transfer systems -- Spacecraft Onboard Interface Systems -- Technical Corrigendum 1 to CCSDS 231.0-B-2, Cor. 1, April 2013.(CCSDS 231.0-B-2 Cor. 1)

Voting for New Work Item Proposals (17)

This are CMC votings coming with the insertion of Blue/Magenta Books into the ISO process to our knowledge. We never saw the new work item proposals before voting.

New Work Item Proposal on Producer-Archive Interface Specification (PAIS) (CCSDS 651.1-B-1: February 2014)

New Work Item Proposal on Mission Operations Common Object Model (CCSDS 521.1-B-1: February 2014)

New Work Item Proposal on Operation of CFDP Over Encapsulation Service (CCSDS 722.1-M-1:March 2014)

New Work Item Proposal on Spacecraft Onboard Interface Services - Device VirtualizationService (CCSDS 871.2-M-1: March 2014)

New Work Item Proposal on IP over CCSDS space links (CCSDS 702.1-B-1:September 2012)

New Work Item Proposal on CCSDS Space Link Protocols over ETSI DVB-S2 Standard (CCSDS 131.3-B-1:March 2013)

New Work Item Proposal on Delta-DOR Raw Data Exchange Format (CCSDS 506.1-B-1:June 2013)

New Work Item Proposal on Mission Operations Message Abstraction Layer — JAVA API (CCSDS 523.1-M-1:April 2013)

New Work Item Proposal on Spacecraft Onboard Interface Services — Device Access Service (CCSDS 871.0-M-1:March 2013)

New Work Item Proposal on Spacecraft Onboard Interface Services — Low Data-Rate Wireless Communications for Spacecraft Monitoring and Control (CCSDS 882.0-M-1:May 2013)

New Work Item Proposal on Security Architecture for Space Data Systems

New Work Item Proposal on CCSDS Cryptographic Algorithms

New Work Item Proposal on Spacecraft Onboard Interface Services - Device Data Pooling Service

New Work Item Proposal on Spacecraft Onboard Interface Services - File and Packet Store Services

New Work Item Proposal on Spacecraft Onboard Interface Services - Message Transfer Service

New Work Item Proposal on Space data and information transfer systems — Radio Frequency and Modulation Systems — Part 1: Earth Stations and Spacecraft

New Work Item Proposal on Space data and information transfer systems — Spacecraft Onboard Interface Services — Device Enumeration Service (ISO 20618)

DIN publication

New ISO standards are published automatically as DIN standards.

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.

Beside the already in use standards DLR is implementing the upcoming Voice and MIA already in the development status of the standard.

CEN/CLC/TC 5 Space

For the meetings of the CEN/CLC/TC 5 Space Group during the reporting period (2) only written liaison statements were submitted.

Organizational

Since the beginning of this year we are able to use the ISO login with our DIN account.

Oswaldo Peinado
DLR-GSOC
Oberpfaffenhofen, 18.5.2015

The following (5) standards are listed as 2014 standards:

ISO 16919:2014 Space data and information transfer systems -- Requirements for bodies providing audit and certification of candidate trustworthy digital repositories

ISO 17808:2014 Space data and information transfer systems -- Telemetry (TM) channel coding profiles

ISO 17809:2014 Space data and information transfer systems - Delta-differential one-way ranging (Delta-DOR) operations

ISO 17810:2014 Space data and information transfer systems -- Data transmission and pseudo-random noise (PN) ranging for 2 GHz code division multiple access (CDMA) link via data relay satellite

ISO 19389:2014 Space data and information transfer systems -- Conjunction data message