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MINUTES

DICOM WG-06 Base Standard

June 21-25, 2021

Remote Meeting Replacing F2F

Presiding Officers: Bjorn Nolte, Siemens Healthineers, Chair
 David Clunie, PixelMed, DICOM Editor

DICOM Secretariat: Shayna Knazik, MITA/NEMA

1. Administrative

- a. **With a quorum present, the June WG-06 virtual meeting was called to order** at 9:00AM US EDT on Monday, June 21, 2021.
- b. **Antitrust and patent statement reminder:** Per DICOM bylaws, all discussions in this meeting, including those in the chat window, must abide by DICOM’s antitrust and patent policies which are located on the DICOM website: <https://www.dicomstandard.org/patent>
- c. The agenda was reviewed and approved.
- d. The minutes from the March 2021 WG-06 meeting were reviewed and approved.

2. Report on Letter Ballots

<i>DSC Ballot</i>	<i>Approve</i>	<i>Disapprove</i>	<i>Abstain</i>	<i>Comments</i>
Supplement 222	14	0	5	3
CPack-111	19	0	1	5

- a. **Supplement 222: Microscopy Bulk Simple Annotations Storage SOP Class (WG-26)**
 - i. The official Letter Ballot was distributed to voting members of the DICOM Standard Committee (DSC) on April 9, 2021 and closed on May 28, 2021. The Sup222 Letter Ballot was **approved**.
- b. **CPack-111 (March Voting Package)**
 - i. The official ballot was distributed to voting members of the DICOM Standard Committee on April 8, 2021 and closed on May 27, 2021. CPack-111 includes the following CPs (17 FTs):

CP #	Title
CP-2020	Correct Directory Content Example
CP-2040	Fix DICOMweb DICOM Media Types
CP-2069	DICOM Communication Model needs to be extended with RTC
CP-2077	Description of De-Identification attributes inconsistent
CP-2079	Allow a Brachy Applicator to reference an ROI
CP-2080	RT Accessory Device Clarifications
CP-2081	Clarify Instance Coercion DateTime
CP-2083	Add uncompressed encapsulated Transfer Syntax for encoding very large pixel data sets
CP-2084	Allow CONTAINER HAS OBS CONTEXT children of CONTAINERS
CP-2085	Revise description of Attribute Modality in Scheduled Procedure Step Module Remains assigned in the Letter Ballot goes into Cpack-112
CP-2087	Institution Name may be present otherwise in Person Identification Macro
CP-2088	More modification and interpretation related Attributes require de-identification
CP-2089	Correct definitions of image quality concepts
CP-2091	Correct Medication Concept Name Description
CP-2092	Update MAC Algorithms
CP-2093	Move CT Protocol Reference to Image Level
CP-2094	Add Measurement Report Image Library Description
CP-2096	Equipment Module for Non-Patient Objects

- ii. **DECISION: A motion was made** by David Clunie and seconded by Kevin O’Donnell to approve CPack-111 for Final Text as amended, with the exception of CP-2085 which remains assigned. **APPROVED.**

3. Report on Correction Proposals

a. New CPs

Submitted file name	Title	New CP #
CP_JN	Corrected inconsistencies in JSON Data Model mapping from XML	CP-2139
CP_CIMCIS-BryanFan	Add basic and examination information of the patient for DICOM virtual film printing	CP-2140
cp_dac585	Add vertebra and intervertebral disk anatomy	CP-2141
cp_dac586	Relax requirement for evidence sequences in legacy converted images	CP-2142
cp_dac587	Correct code for microscope slide and add staining codes to example	CP-2143
cp_hb	Cleanup PS3.17 section AA to refer to IHE REM profile and figures	CP-2144
Cp_hs_Laterality	Add Laterality to MWL	CP-2145
Cp_hs_Procedure	Add Procedure Code Context Groups	CP-2146

Cp_hs_PS3.20	Relax requirement on discriminators and XML IDs	CP-2147
cp_JIRA	Clarify audit trail messages	CP-2148
cp_jr18d	Add SV and UV to list of VRs for relative value Constraint Types	CP-2149
cp_RT174	Add OAR to RT ROI Interpreted Type	CP-2150
cp_RT176	Align RT Structure Set Codes with Segmentations	CP-2151
cp_RT177	Add Plan Overview parameters to RT Dose	CP-2152
cp_RT178	Treatment Plan Update for 60601-2-1ED4 - Add Linac Calibration Parameters	CP-2153
cp_RT179	Treatment Record Update for IEC 60601-2-1 ED4	CP-2154
cp_RT180	Add Long Label to Beam	CP-2155
cp_RT181	Add Block Slab Sequence in RT Ion Beams Treatment Record	CP-2156
cp_RT182	Add Anatomic Region to RT Plan	CP-2157
cp_RT183	Correction of unit for Fixation Light Polar Angle Tolerance	CP-2158
cp_RT186	New Interlock Codes	CP-2159
cp_vanWijk	Move duplicate Code Meaning for Code Value 65801008 to list of synonyms	CP-2160
CP_WG24	Photogrammetric Model Enhancement of VL IODs	CP-2161
cp_WG32	Clarification of waveform filter attributes	CP-2162
cp_sjn	Add "localhost" to CID 405	CP-2163
cp_dac588	Add Research Resource Identifier (RRID) Coding Scheme	CP-2164
cp2105spinoff_kod	Elastography SR Template for Ultrasound Shear Wave	Not accepted as a CP: Kevin will submit as a New Work Item Proposal at the August DICOM Standard Committee meeting.
Cp_wc34	Part 16 inconsistencies	Not given a number: handled as an editorial change.

a. **CPack-112**

CP #	Title	Decision
CP-2071	Clarify that Default Transfer Syntax can be rejected by an Association Acceptor	Approved for CPack-112
CP-2085	Revise Attribute description of Modality in Scheduled Procedure Step Module	Approved for CPack-112

CP-2099	Clarify JPIP and Resource Category in DICOM Web Services Context	Approved for CPack-112
CP-2100	Clarify SMPTE Transfer Syntaxes for DICOM Web Services	Approved for CPack-112
CP-2101	Clarify multiple frames used as tiles in planar ROI	Approved for CPack-112
CP-2102	Add Whole Slide Microscopy Image Flavor of THUMBNAIL and retire LOCALIZER	Approved for CPack-112
CP-2103	Add Lymphoid Tissue Segmentation Type	Approved for CPack-112
CP-2104	Estimated Fetal Weight Discordance	Approved for CPack-112
CP-2105	ROI measurements for UL Shearwave	Approved for CPack-112
CP-2106	Cleanup Delivery Rate Unit Description	Approved for CPack-112
CP-2107	Add repeated acquisition to TID 10003, 10013	Approved for CPack-112
CP-2108	Add software grid terminology to CID 10017	Approved for CPack-112
CP-2109	Fix issues in Figure A-20 "Performed Imaging Agent Administration SR IOD Template Structure"	Approved for CPack-112
CP-2110	Clarify value multiplicity of TID 11003 ("Imaging Agent Administration Activity") throughout several instances of TID 11008 ("Imaging Agent Administration Phase")	Approved for CPack-112
CP-2111	Replacement codes for Yttrium microspheres and 99Tc ECD	Approved for CPack-112
CP-2112	Update procedure codes for prostate MRI	Approved for CPack-112
CP-2113	Update Specific Character Set defined term descriptions and references	Approved for CPack-112
CP-2138	Refactoring and extending left ventricular segment models	Approved for CPack-112

CPack-112 Voting Packet DECISION: David Clunie made a motion to approve CPack-112 for Letter Ballot as amended (18 LBs). Kevin O'Donnell seconded the motion. **Motion approved.**

b. Assigned CPs

Note: Please upload the VP version (candidates for the August 2021 Voting Package/CPack-113) in the [Aug 2021 VP mtg folder](#).

CP #	Title	Decision
CP-1950	Add measurement codes for Cardiac Strain	Moved to August 2021 Voting Packet/CPack-113
CP-2115	Per-segment multiple algorithms and creators	Moved to August 2021 Voting Packet/CPack-113
CP-2116	More dates, times, datetimes and selector attributes need de-identification	Moved to August 2021 Voting Packet/CPack-113
CP-2117	Add ICD-O-3 and ICD-10-CM as Coding Schemes	Moved to August 2021 Voting Packet/CPack-113
CP-2119	PS3.7: Correct Annotation in (sub-)item negotiation figures	Moved to August 2021 Voting Packet/CPack-113
CP-2120	Clarifications to de-identification	Moved to August 2021 Voting Packet/CPack-113
CP-2122	Fix QIDO-RS user agent Query Parameter Requirement	Moved to August 2021 Voting Packet/CPack-113
CP-2124	Two meanings for some EEG lead codes	Moved to August 2021 Voting Packet/CPack-113

CP-2125	New EEG Leads	Moved to August 2021 Voting Packet/CPack-113
CP-2126	Extend Source Pixel Plane Characteristics	Moved to August 2021 Voting Packet/CPack-113
CP-2127	Clarify Origin of Device-Based FoR	Moved to August 2021 Voting Packet/CPack-113
CP-2128	UV Mapping Module Corrections	Moved to August 2021 Voting Packet/CPack-113
CP-2129	Extend RT Segment Characteristics With Metal Alloy Concepts used for Implants	<i>Remains assigned</i>
CP-2130	Referencing from UV Mapping Module	<i>Remains assigned</i>
CP-2131	Adjust changed text of CP 2058	Moved to August 2021 Voting Packet/CPack-113
CP-2132	Correct Patient Position Order table name	Moved to August 2021 Voting Packet/CPack-113
CP-2133	Add CAD-RADS scores as coded values	Moved to August 2021 Voting Packet/CPack-113
CP-2134	Harmonize description and clarify usage of “Referenced Imaging Agent Identifier” within TID 11022 and TID 11023	Moved to August 2021 Voting Packet/CPack-113
CP-2135	Add Acquisition Entity and UID to Information Model	<i>Remains assigned</i>
CP-2136	Templates used as root sometimes	<i>Remains assigned</i>
CP-2137	PS3.18 Metadata is Dataset only and does not include Group 0002 File Meta Information	Moved to August 2021 Voting Packet/CPack-113

2. Report on Supplements

NOTE: All documents are uploaded to the FTP server in the directory of WG-06. Please refer to those documents for more technical details. Contact the Secretariat for help accessing the FTP.

a. Supplement NNN: Service Discovery and Control (WG-23)

- i. Brian Bialecki led the group through a First Read for a new Supplement on Service Discovery and Control, pursuant to DICOM Work Item 2020-08-A. The group reviewed the draft Supplement and its accompanying PowerPoint and agreed it is ready to be assigned a number.
- ii. Kevin O’Donnell made a motion to approve the new Supplement and assign it number 224. Wim Corbijn seconded the motion.
- iii. **DECISION:** Approved as Supplement 224.

b. Supplement NNN: Multi-Fragment Video Transfer Syntax (WG-04)

- i. Bill Wallace presented a First Read for a new Supplement on Multi-Fragment Video Transfer Syntax, pursuant to DICOM Work Item 2021-04-A. Performed line-by-line review for Public Comment. The document’s scope and open/closed items were reviewed. The accompanying PowerPoint was reviewed. This is not a very in-depth Supplement so the group agreed to send it out for Public Comment.
- ii. Robert Horn made a motion to approve the new Supplement and assign it number 225. Wim Corbijn seconded the motion.

- iii. **DECISION:** Approved for Public Comment as Supplement 225.

b. Supplement 160: Second Generation Radiotherapy – Patient Setup and Delivery Instruction (WG-07)

- i. Christof Schadt, Uli Busch, and Jim Percy presented Supplement 160 in preparation for Letter Ballot.
- ii. Kevin O'Donnell made a motion to approve Supplement 160 for Letter Ballot. Wim Corbijn seconded the motion.
- iii. **DECISION:** Supplement 160 was approved as amended for Letter Ballot.

c. Supplement 209: DICOM Conformance Statement (WG-31)

- i. Antje Schroeder, Bruno Laffin, and Hervé Hoehn led the group through an overview review of Supplement 209 and its remaining open items in preparation for Public Comment.
- ii. The group discussed how this Supplement found many places in other parts that require documentation of a detail in the DICOM Conformance Statement but currently have no clear place for that. In the future, WG-06 will be responsible for consistency between the Standard and Conformance Statement. When WG-06 identifies or requests to see that, someone should take an action item to make sure there is a place in Part 2.
- iii. Because of the volume of the Supplement, and since it wasn't fully reviewed line-by-line as a whole, the Letter Ballot review will be more of a line-by-line versus usual page-by-page LB review.
 - **Action:** WG-06 to perform a line-by-line review of Supplement 209 when it returns to WG-06 after the Public Comment period.
- iv. Wim Corbijn made a motion to approve Supplement 209 for Public Comment. Björn Nolte seconded the motion.
- v. **DECISION:** Supplement 209 was approved as amended for Public Comment.

d. Supplement 213: Second Generation Radiotherapy – Enhanced RT Image and Acquisition Instruction (WG-07)

- i. Christof Schadt, Jim Percy, and Uli Busch led the group in a review of Supplement 213 in preparation for Letter Ballot. The group was not able to get through much of the document before the session ended so Supplement 213 will return to WG-06 in August.

e. Supplement 220: Prostate MRI Structured Reporting (WG-08)

- i. Andrey Fedorov led the group through a review of Supplement 220 in preparation for Final Text. Comments received during the Letter Ballot period were reviewed and closed.
- ii. David Clunie made a motion to approve Supplement 220 for Final Text. Wim Corbijn seconded the motion.
- iii. **DECISION:** Supplement 220 was approved as amended for Final Text.

a. **Supplement 222: Microscopy Bulk Simple Annotations Storage SOP Class (WG-26)**

- i. David Clunie led the group through a review of version 18 of Supplement 222 and its accompanying slides. All Letter Ballot comments were reviewed and resolved.
- ii. Kevin O'Donnell made a motion to approve Supplement 222 for Final Text. David Clunie seconded the motion.
- iv. **DECISION:** Supplement 222 was approved as amended for Final Text.

b. **Supplement 223: Inventory IOD and Related Services (WG-33)**

- i. Harry Solomon led the group through a review of Supplement 223 in preparation for Letter Ballot. Comments received during the Public Comment period were reviewed.
- ii. There was one substantive comment regarding modifying the existing C-FIND versus creating a new C-FIND SOP class. The group decided to keep Supplement 223 as it is for now, but in parallel investigate what to do with a query mechanism. This may require a new SOP calls that is probably closely modeled on the existing C-FIND but with more rigorous requirements on returns.
- iii. The group decided to finish reviewing Supplement 223 at the August WG-06 meeting, reserving two 2-hour slots.

3. Deadlines for action items from this meeting

- a. Items ready for **Public Comment** must be submitted to Shayna by **June 28, 2021**. The 45 day PC period would open on June 30th close and close on August 14th which would leave two and a half weeks before the next WG-06 meeting starting August 30th.
- b. Items ready for **Letter Ballot** would need to be submitted to Shayna by **June 28, 2021** in order to meet the 49 days requirement (plus ~1 week buffer for legal review) before the next WG-06 meeting in March 2021. The LB would open on July 8th and close on August 20th, which leaves only a week and a half until the next WG-06 meeting starting August 30th.

4. Reports from stakeholders

a. **Update from WG-20 and HL7 Imaging Integration (Whitby/Lindop)**

- i. WG-20/HL7 holds [teleconferences](#) roughly every two weeks (11am ET every other Tuesday). Their next meeting will take place in September 2021.
- ii. FHIR ImagingStudy resource: Continuing to organize a FHIR Connectathon with the goal of testing FHIR Imaging Resources and integration with DICOMweb in coordination with DICOM WG-27. Draft use cases available here: <https://confluence.hl7.org/display/IMIN/Connectathon+Scenarios>
- iii. For information on other WG-20/HL7 II projects, visit: <http://www.hl7.org/special/Committees/projman/searchableProjectIndex.cfm?FilterProjectSponsor=Imaging+Integration+Work+Group&FilterStatus=notArchived>

5. Upcoming WG-06 Meetings

a. **2021 meetings –**

- i. August 30-September 3, 2021
 - 1. The agenda plan will be posted in the Aug/Sept 2021 meeting folder.
 - 2. **Action:** Shayna will send out the calendar appointment for this meeting.

ii. November 8-12, 2021

b. **2022 meetings –**

- i. January 10-14, 2022
- ii. March 21-25, 2022
- iii. June 20-24, 2022
- iv. September 12-16, 2022
- v. November 14-18, 2022

6. Old/New Business

a. Public Comment and Letter Ballot Timing: Shayna drafted an “ideal timeline” for an average 9-week meeting cycle.

i. Current Public Comment cycle example:

PC

June						
Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

July						
Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

August						
Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	

ii. Current Letter Ballot cycle example:

LB

June						
Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

July						
Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

August						
Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	

iii. Alternate Letter Ballot timeline of 35 days versus 49 (plus legal buffer):

Suggested LB Timeline

June						
Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

July						
Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

August						
Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	

- iv. WG-06 decided that the current PC cycle leaves enough time for comment incorporation but that the Letter Ballot cycle is too long since it has to factor in a week buffer for Counsel review. The current timeline is 7 weeks which only leaves less than a week to respond to comments before the next WG-06 meeting.
- v. **DECISION:** It was determined that a 42 day/6-week period would allow for authors to respond Letter Ballot comments received. It was also noted that some shorter Supplements may only need 5 weeks.
- vi. **Action:** WG-06 recommends updating the DICOM Standard Committee bylaws regarding the length of Letter Ballots to read “a minimum of 5 weeks”. Shayna will add this to the August DSC meeting agenda.

7. Adjournment

- a. The June WG-06 virtual meeting was adjourned at 1:40pm US EDT on Friday, June 25, 2021.

8. Meeting Participants

Voting Members Present	Represented by		Mon	Tue	Wed	Thu	Fri
ACR	Brian Bialecki	Voting	X	X		X	X
Agfa	Paul Seifert	Voting	X	X	X	X	X
Canon Medical Systems USA	Kevin O'Donnell	Voting	X	X	X	X	X
Carl Zeiss Meditec AG	Régis Deshayes	Voting					
CIMICS	Bryan Fan	Voting	X	X	X		
Fairhaven Technologies	Robert Horn	Voting	X	X	X	X	X

GE Healthcare	Steven Nichols	Voting		X	X	X	X
JIRA	Akihiro Yomoda	Alt. Voting	X	X	X	X	X
Konica Minolta Healthcare Americas	Michael Laconti	Voting					
MITA/NEMA	Shayna Knazik	Voting	X	X	X	X	X
Philips	Wim Corbijn	Voting	X	X	X	X	X
PixelMed Publishing	David Clunie	Voting	X	X	X	X	X
Siemens Healthineers	Björn Nolte	Voting	X	X	X	X	X
ACR	Brian Bialecki	Voting			X		
Carl Zeiss Meditec AG	Régis Deshayes	Voting	X	X	X	X	X
CIMICS	Bryan Fan	Voting	X	X	X	X	X
GE Healthcare	Steven Nichols	Voting	X				
Konica Minolta Healthcare Americas	Michael Laconti	Voting	X	X	X	X	X
Company/ Organization	Represented by						
Agfa	Bruno Laffin	Obs.	X			X	
Agfa	Bill Wallace	Obs.					X
Argentix	Elliot Silver	Obs.	X	X	X	X	X
Brainlab	Christof Schadt	Obs.	X		X	X	

CIMICS	Denan Lin	Alt. Voting	X	X	X		
CIMICS	Jing Zheng	Obs.		X	X		
CSImed	Uwe Tronnier	Obs.		X	X	X	
DICOM Usergroup Austria	Silvia Winkler	Obs.		X	X	X	
Elekta	Jim Percy	Obs.	X	X	X	X	
GE Healthcare	Hervé Hoehn	Obs.	X			X	
GE Healthcare	Chris Lindop	Obs.	X	X	X	X	X
GE Healthcare	Jouke Numan	Obs.	X				
Harvard University	Andrey Fedorov	Obs.		X			
Individual	Heinz Blendinger	Obs.		X		X	
Individual	Ulrich Busch	Obs.	X	X	X	X	X
JIRA	Masao Murata	Obs.		X			
Laitek	Harry Solomon	Obs.	X	X	X	X	X
Leica Microsystems	Toine Van Wijk	Obs.		X	X	X	
MITA/NEMA	Carolyn Hull	Alt. Voting	X	X	X	X	
Philips	Yogalakshmi Selvarajan	Obs.	X			X	
Siemens Healthineers	Antje Schroeder	Obs.	X			X	
SIIM	Matthew Bishop	Obs.	X				
Vital Images/Canon	Jonathan Whitby	Obs.		X			

Prepared and submitted by Shayna Knazik
Reviewed by Counsel 8/2/21