

MINUTES
DICOM WG-06 Base Standard
August 30-September 3, 2021
Remote Meeting Replacing F2F

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

DICOM Secretariat: Shayna Knazik, MITA/NEMA

Summary of decisions from this meeting

- CPack-112 was approved for Final Text with 18 Correction Proposals (CPs).
- CPack-113 was approved for Letter Ballot with 17 CPs.
- Work Item 2020-04-A on Confocal Microscopy from WG-19 was presented for a First Read and assigned as Supplement 226.
- Work Item 2021-08-B on Elastography Structured Report from WG-12 was presented for a First Read and assigned as Supplement 227.
- Work Item 2020-12-B on DICOMweb API for Server-Side Volumetric Rendering from WG-27 was presented for a First Read and assigned as Supplement 228.
- Supplement 160: 2nd Gen RT – Patient Setup and Delivery Instruction was approved as amended for Final Text.

1. Administrative

- a. With a quorum present, the August/September WG-06 virtual meeting was called to order at 9:05AM US EDT on Monday, August 30, 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 June 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 160	14	0	2	4
CPack-112	17	0	0	6

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

- i. The official Letter Ballot was distributed to voting members of the DICOM Standard Committee (DSC) on June 30, 2021 and closed on August 18, 2021. The Sup160 Letter Ballot was **approved**.

b. CPack-112 (June Voting Package)

- i. The official ballot was distributed to voting members of the DICOM Standard Committee on July 9 and closed on August 27, 2021. CPack-112 included the following CPs (18 FTs):

CP #	Title
CP-2071	Clarify that Default Transfer Syntax can be rejected by an Association Acceptor
CP-2085	Revise Attribute description of Modality in Scheduled Procedure Step Module
CP-2099	Clarify JPIP and Resource Category in DICOM Web Services Context
CP-2100	Clarify SMPTE Transfer Syntaxes for DICOM Web Services
CP-2101	Clarify multiple frames used as tiles in planar ROI
CP-2102	Add Whole Slide Microscopy Image Flavor of THUMBNAIL and retire LOCALIZER
CP-2103	Add Lymphoid Tissue Segmentation Type
CP-2104	Estimated Fetal Weight Discordance
CP-2105	ROI measurements for UL Shearwave
CP-2106	Cleanup Delivery Rate Unit Description
CP-2107	Add repeated acquisition to TID 10003, 10013
CP-2108	Add software grid terminology to CID 10017
CP-2109	Fix issues in Figure A-20 “Performed Imaging Agent Administration SR IOD Template Structure”
CP-2110	Clarify value multiplicity of TID 11003 (“Imaging Agent Administration Activity”) throughout several instances of TID 11008 (“Imaging Agent Administration Phase”)
CP-2111	Replacement codes for Yttrium microspheres and 99Tc ECD
CP-2112	Update procedure codes for prostate MRI
CP-2113	Update Specific Character Set defined term descriptions and references
CP-2138	Refactoring and extending left ventricular segment models

- ii. **DECISION: A motion was made** by David Clunie and seconded by Kevin O’Donnell to approve CPack-112 for Final Text as amended. **APPROVED.**

3. Report on Correction Proposals

a. New CPs

Submitted file name	Title	New CP #
cp_dac589	Add indicator of control material on slide	CP-2165
cp_dac590	Update DICOM to reflect changes in IHTSDO SNOMED CT-DICOM Subset for JUL 2021 INT Release	CP-2166
cp_dac591	Add more brain segmentation labels	CP-2167
cp_jr19b	Abbreviated spelling of "SR Document IE"	CP-2168
cp_jr20	Move SCP rendering requirements from Part 3 to Part 4	CP-2169
cp_jr21	Fix inconsistent use of name "Blending Presentation State"	CP-2170
cp_jr22c	Define use of Pixel Padding Value for PALETTE COLOR images	CP-2171
cp_RT188	Explanations on RT Radiation Usage and Intent	CP-2172
cp_wc35	KOS Current Requested Procedure Evidence Sequence	CP-2173

b. CPack-113/August 2021 Voting Packet

CP #	Title	Decision
CP-1950	Add measurement codes for Cardiac Strain	Approved for CPack-113
CP-2115	Per-segment multiple algorithms and creators	Approved for CPack-113
CP-2116	More dates, times, datetimes and selector attributes need de-identification	Approved for CPack-113
CP-2117	Add ICD-O-3 and ICD-10-CM as Coding Schemes	Approved for CPack-113
CP-2119	PS3.7: Correct Annotation in (sub-)item negotiation figures	Approved for CPack-113
CP-2120	Clarifications to de-identification	Approved for CPack-113
CP-2122	Fix QIDO-RS user agent Query Parameter Requirement	Approved for CPack-113
CP-2124	Provide two meanings for some EEG lead codes	Approved for CPack-113
CP-2125	Add new EEG Leads	Approved for CPack-113
CP-2126	Extend Source Pixel Plane Characteristics	Approved for CPack-113
CP-2127	Clarify Origin of Device-Based FoR	Approved for CPack-113
CP-2128	UV Mapping Module Corrections	Approved for CPack-113
CP-2131	Correct Beam Modifier Coordinate System description	Approved for CPack-113
CP-2132	Correct Patient Position Order table name	Approved for CPack-113
CP-2133	Add CAD-RADS scores as coded values	Approved for CPack-113
CP-2134	Harmonize description and clarify usage of "Referenced Imaging Agent Identifier" within TID 11022 and TID 11023	Approved for CPack-113
CP-2137	PS3.18 Metadata is Dataset only and does not include Group 0002 File Meta Information	Approved for CPack-113

- i. **CPack-113 Voting Packet DECISION:** David Clunie made a motion to approve CPack-113 for Letter Ballot as amended (17 LBs). Paul Seifert seconded the motion.

Motion approved.

c. Assigned CPs

Note: Please upload the VP version (candidates for the CPack-114/November 2021 Voting Package) in the [Nov 2021 VP mtg folder](#).

CP #	Title	Decision
CP-2129	Extend RT Segment Characteristics With Metal Alloy Concepts used for Implants	Moved to CPack-114/ November Voting Packet
CP-2130	<i>Referencing from UV Mapping Module</i>	<i>Remains assigned</i>
CP-2140	<i>Add basic and examination information of the patient for DICOM virtual film printing</i>	<i>Remains assigned</i>
CP-2141	Add vertebra and intervertebral disk anatomy	Moved to CPack-114/ November Voting Packet
CP-2142	Relax requirement for evidence sequences in legacy converted images	Moved to CPack-114/ November Voting Packet
CP-2143	Correct code for microscope slide and add staining codes to example	Moved to CPack-114/ November Voting Packet
CP-2144	<i>Cleanup PS3.17 section AA to refer to IHE REM profile and figures</i>	<i>Remains assigned</i>
CP-2145	Add Laterality to MWL	Moved to CPack-114/ November Voting Packet
CP-2146	Add Procedure Code Context Groups	Moved to CPack-114/ November Voting Packet
CP-2147	Relax requirement on discriminators and XML IDs in CDA	Moved to CPack-114/ November Voting Packet
CP-2150	Add OAR to RT ROI Interpreted Type	Moved to CPack-114/ November Voting Packet
CP-2152	Add Plan Overview parameters to RT Dose	Moved to CPack-114/ November Voting Packet
CP-2153	Treatment Plan Update for 60601-2-1ED4 - Add Linac Calibration Parameters	Moved to CPack-114/ November Voting Packet
CP-2154	Treatment Record Update for IEC 60601-2-1 ED4	Moved to CPack-114/ November Voting Packet
CP-2155	Add Long Label to Beam	Moved to CPack-114/ November Voting Packet
CP-2156	Add Block Slab Sequence in RT Ion Beams Treatment Record	Moved to CPack-114/ November Voting Packet
CP-2157	Add Anatomic Region to RT Plan	Moved to CPack-114/ November Voting Packet
CP-2158	Correction of unit for Fixation Light Polar Angle Tolerance	Moved to CPack-114/ November Voting Packet
CP-2159	New Interlock Codes for RT	Moved to CPack-114/ November Voting Packet
CP-2161	<i>Photogrammetric Model Enhancement of VL IODs</i>	<i>Remains assigned</i>
CP-2162	<i>Clarification of waveform filter attributes</i>	<i>Remains assigned</i>
CP-2164	Add Research Resource Identifier (RRID) Coding Scheme	Moved to CPack-114/ November Voting Packet

4. 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: Confocal Microscopy (WG-19)**
 - i. Liam Caffrey presented a First Read for a new Supplement on Confocal Microscopy, pursuant to DICOM Work Item 2020-04-A. Both the PowerPoint and Supplement draft were reviewed and discussed.
 - ii. Kevin O'Donnell made a motion to assign this new Supplement a number. Paul Seifert seconded the motion.
 - iii. **DECISION:** Assigned as Supplement 226.

- b. **Supplement NNN: Elastography Structured Report (WG-12)**
 - i. Kevin O'Donnell led the group through a First Read for a new Supplement on Elastography Structured Report, pursuant to DICOM Work Item 2021-08-B. The scope was reviewed and a few items were added to the open issues.
 - ii. Kevin O'Donnell made a motion to assign this new Supplement a number. David Clunie seconded the motion.
 - iii. **DECISION:** Assigned as Supplement 227.

- c. **Supplement NNN: DICOMweb API for Server-Side Volumetric Rendering (WG-27)**
 - i. Steve Nichols led the group through a First Read for a new Supplement on web services for DICOM, pursuant to Work Item 2020-12-B. The group reviewed the draft Supplement including scope and open issues.
 - ii. Kevin O'Donnell made a motion to assign this new Supplement a number. David Clunie seconded the motion.
 - iii. **DECISION:** Assigned as Supplement 228.

- d. **Supplement 160: Second Generation Radiotherapy – Patient Setup and Delivery Instruction (WG-07)**
 - i. Christof Schadt, Jim Percy, and Uli Busch, presented Supplement 160 in preparation for Final Text. Letter Ballot comments were reviewed and incorporated and WG-06 did a final pass through the document.
 - ii. Robert Horn made a motion to approve Supplement 160 for Final Text. Akihiro Yomoda seconded the motion.
 - iii. **DECISION:** Supplement 160 was approved as amended for Final Text.

- e. **Supplement 209: DICOM Conformance Statement (WG-31)**
 - i. The authors of Supplement 209 requested additional time to incorporate and respond to Public Comments received, so their sessions this week were cancelled. Sup209 will return to WG-06 in November.

- f. **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 picked up with their line-by-line review of the draft since the June WG-06 meeting.
 - ii. Two, 2-hour slots were requested at the November meeting to continue review before Letter Ballot.
- g. Supplement 218: MR Protocol Storage (WG-16)**
- i. Wim Corbijn provided an overview of the current state of Supplement 218. The work is progressing slower than authors hoped, but continue to develop the Supplement as time constraints permit.
 - ii. A one-hour slot was requested for the November meeting to flesh out any more questions than may come up as drafting continues in the monthly WG-16 teleconferences.
- h. 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 and the group was in agreement on the following additions:
 Agree that we need an IOD *and* a query supporting inventory production
 - Minimal feature – handling partial responses and resuming
 - Minimal feature – repository management attributes (access paths, object deprecation)
 - Minimal feature – “get all attributes”
 - Optional feature – advanced attribute matching (could be supported by client-side filtering, but perhaps not as efficiently)
 - Consistency between IOD and query
 - ii. WG-33’s plan is to finish by late September, after which it will be up to WG-06 to decide whether the addition constitutes a significant technical change (which requires a full 45-day re-Public Comment) or it’s small enough to proceed to a Letter Ballot approval at the WG-06 November meeting.
 - iii. WG-33 requested a teleconference with WG-06 in early October to determine how to proceed. Regardless, WG-33 requests 4-6 hours (depending on time availability) on the WG-06 November agenda.
 - iv. **Action:** Shayna to circulate a Doodle poll to WG-06 to identify a time for a tcon to discuss this, aiming for October 4-6, 2021 from 11am-1pm Eastern.
- i. Supplement 225: Multi-Fragment Video Transfer Syntax (WG-04)**
- i. Bill Wallace presented Supplement 225 and the Public Comments that were received. WG-06 reviewed these comments but there was not enough time to finalize the draft for Letter Ballot.
 - ii. Two, 2-hour slots were requested at the November WG-06 meeting.

5. Deadlines for action items from this meeting

- a. Items ready for **Public Comment** must be submitted to Shayna by **September 8, 2021**. The 45-day PC period would open by September 10th and close on October 25th which would leave about two and a half weeks before the next WG-06 meeting starting November 8, 2021.
- b. Items ready for **Letter Ballot** should be submitted to Shayna by **September 7, 2021**. Counsel review would take place from September 8-15th. The LB would open by September 16, and with the current 49-day requirement, would close on November 4th, which leaves less than a week before the next WG-06 meeting starting November 8th.

6. Upcoming WG-06 Meetings

- a. **2021 meetings –**
 - i. November 8-12, 2021
 - 1. The agenda plan will be posted in the November 2021 meeting folder.
 - 2. Tentatively planning for a face-to-face meeting.
 - 3. **Action:** Shayna will send out the calendar appointment for this meeting and reserve a conference room at NEMA HQ.
- 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

7. Old/New Business

- a. None at this time.

8. Adjournment

- a. The August/September WG-06 virtual meeting was adjourned at 12:35pm US EDT on Friday, September 3, 2021.

9. Meeting Participants

Voting Members Present							
Company/ Organization	Represented by		Mon	Tue	Wed	Thu	Fri
ACR	Brian Bialecki	Voting	X	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
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	X
JIRA	Shinichi Nakano	Voting	X				
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	
Siemens Healthineers	Björn Nolte	Voting	X	X	X	X	X
Voting Members Absent							
Company/ Organization	Represented by		Mon	Tue	Wed	Thu	Fri
Carl Zeiss Meditec AG	Régis Deshayes	Voting	X	X	X	X	X
CIMICS	Bryan Fan	Voting	X				X
JIRA	Shinichi Nakano	Voting		X	X	X	
Konica Minolta Healthcare Americas	Michael Laconti	Voting	X	X	X	X	X
PixelMed Publishing	David Clunie	Voting	X				X
Others Present (Alternate Voting and Observers)							
Company/ Organization	Represented by		Mon	Tue	Wed	Thu	Fri
Agfa	Bill Wallace	Obs.		X			X
Brainlab	Christof Schadt	Obs.	X	X	X		

Caliber Imaging and Diagnostics	Paul Hemmer	Obs.			X		
CIMICS	Denan Lin	Alt. Voting	X				
CIMICS	Victoria Wang	Obs.	X				
CSImed	Uwe Tronnier	Obs.		X	X		
DICOM Usergroup Austria	Silvia Winkler	Obs.		X	X		
Elekta	Jim Percy	Obs.	X	X	X	X	X
Fraunhofer Heinrich Hertz Institute	Jean-Claude Rosenthal	Obs.			X		
GE Healthcare	Jouke Numan	Obs.	X		X	X	
IBA	David Wikler	Obs.			X		
ICT Group	Toine Van Wijk	Obs.	X	X	X	X	X
Individual	Heinz Blendinger	Obs.		X	X		
Individual	Ulrich Busch	Obs.	X	X	X	X	X
JIRA	Akihiro Yomoda	Alt. Voting	X	X	X	X	X
Laitek	Harry Solomon	Obs.	X		X	X	
Mevion Medical Systems	Bruce Rakes	Obs.			X		
MITA/NEMA	Carolyn Hull	Alt. Voting		X	X		X
SIIM	Matthew Bishop	Obs.	X				
Siemens Healthineers	Klaus Donath	Obs.				X	
Siemens Healthineers	Thomas Mangold	Obs.				X	
SUNY	Melissa Gill	Obs.			X		

University Leipzig	Richard Bieck	Obs.			X		
University of Queensland	Liam Caffery	Obs.			X		
VISUS	Marc Kaemmerer	Obs.		X	X		

Prepared and submitted by Shayna Knazik
Reviewed by Counsel 10/25/21