

MINUTES

DICOM WG-06 Base Standard

November 14-18, 2022
Hybrid (Face2Face & Remote) Meeting

Location: NEMA Headquarters, Arlington, Virginia, USA

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-118 was approved for Final Text with 22 Change Proposals (CPs).
- CPack-119 was approved for Letter Ballot with 17 Change Proposals (CPs).
- A new Supplement on Assertion Collection was assigned the number 238.
- Supplement 209: DICOM Conformance Statement was approved for Final Text.
- Supplement 213: Second Generation Radiotherapy - Enhanced RT Image and RT Patient Position Acquisition Instruction was approved for Final Text.
- Supplement 229: Photoacoustic Imaging was approved for Public Comment.
- Supplement 230: Update BCP Secure Communications Profiles was approved for Final Text.
- Supplement 237: High Resolution ECG was approved for Public Comment.

1. Administrative

- a. With a quorum present, the November WG-06 Hybrid Face2Face & Remote Meeting was called to order at 9:03AM US Eastern Standard Time on Monday, November 14, 2022.
- b. Antitrust and patent statement was reviewed: 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 September 2022 WG-06 meeting were reviewed and approved without objection or abstention.

2. Report on Letter Ballots

DSC Ballot	Approve	Disapprove	Abstain	Comments
Supplement 230	13	0	4	3
CPack-118	16	0	1	6

a. CPack-118

- The official ballot was distributed to voting members of the DICOM Standard Committee on October 5, 2022 and closed on November 9, 2022. CPack-118 included the following Change Proposals (25 CPs):

CP #	Title
CP-2118	Fix wrong sentence in introduction of part 14, chapter 7
CP-2185	Add Treatment Session UID to First Generation RT Objects and CT Image
CP-2189	Correct inconsistent Multi-Energy Image type conditions for Classic and Enhanced CT IODs
CP-2208	Include additional cardiovascular terms to Part 16
CP-2209	Correct Table C.11.1.1.2.1-1 Recommended Rescale Type Assignments for Multi-energy CT Image – returned to WG-21 for clarification regarding different intercept/slope for 16 bits for HU
CP-2210	Correction needed - CID 4231 Lens Status – Inactive SCT Code Value for Phakic
CP-2211	Add RPLD Glass dosimeter to Radiotherapeutic Dose Measurement device
CP-2212	Update PET Radiopharmaceuticals with SCT
CP-2213	Species Attributes conditions should be non-human not animal
CP-2214	Sub-pixel Resolution SCORD mapping to 3D RCS
CP-2215	Measurements and Categorical Statements on Patients, Studies and Series
CP-2216	Add Specimen Module to Presentation States
CP-2219	Add Note in PS3.16 to Table Position Codes – returned for further revision
CP-2221	Retirement of unused modules from RT Dose IOD
CP-2222	Add missing Treatment Site Modifier
CP-2223	Clarify Block Accessory Codes
CP-2224	Dose Calibration Conditions Verified Flag Clarification
CP-2225	Use correct IOD names in caption of their module tables
CP-2227	Add Application Entity Titles (AETs) to de-identification profile
CP-2228	Correct references to Content-Encoding and conditions arising from it
CP-2229	Support of new MLC types
CP-2230	Clarify uniqueness and labeling of Referenced Plan Overview
CP-2231	Fix Attribute wording for Brachy
CP-2232	Correct/add Body Part Examined Defined Terms in correspondence Table L-1
CP-2233	Switch to SNOMED CT code for Phantom

- *David Clunie made a motion to approve CPack-118 for Final Text as amended, with the exception of CP-2209, CP-2219, and CP-2222. Kevin O'Donnell seconded the motion. The motion was approved without objection or abstention.*
- **DECISION:** CPack-118 was approved for Final Text as amended (22 CPs).

3. Report on Change Proposals

a. New CPs

Submitted file name	Title	New CP #
cp_dac618	Update Quantitative Diagnostic Imaging Procedure codes	CP-2268
CP_hs_clarifymatching	Clarify matching multiple values	CP-2269
CP_JN_Support	Support of Repository Query in DICOMWeb	CP-2270
cp_RT218	Add First Gen References to Treatment Preparation IOD	CP-2271
cp_RT220	Cleanup ROI Module	CP-2272

b. CPack-119/November 2022 Voting Packet

CP #	Title
CP-2121	Add codes for more gadolinium contrast agents
CP-2218	Add Note in PS3.16 TID 10007 row 3
CP-2234	Remove retired OtherPatientIDs from ProposedStudySequence in Film Session
CP-2235	Deciduous dentition should use structure of not entire concept
CP-2236	Need to be able to select optical path in advanced blending presentation state
CP-2237	Propagate VOI and Palette Color support from blending to advanced blending presentation state
CP-2239	Institution Name is not Issuer of ID
CP-2240	Fix inconsistencies regarding Storage SOP Class names and Related General SOP Classes
CP-2241	Fix wrong reference to XML Schema for syntax of the Native DICOM Model
CP-2243	Add Source-based Reference Point to CID 10025
CP-2244	Clarification for Number of RT Beam Limiting Device Openings
CP-2245	Retire the Robotic Base Location Indicator
CP-2246	Correct Radiotherapy Common Instance Specification
CP-2247	Add Long Label to Ion Beam
CP-2248	Fix discussion of incomplete RT Treatment Fraction
CP-2249	Clarifications of Scan Spot Maps
CP-2250	Update De-Identifier profiles for Source Frame of Reference UID

- *David Clunie made a motion to approve CPack-119 for Letter Ballot. Kevin O'Donnell seconded the motion. The motion was approved without objection or abstention.*
- **DECISION:** CPack-119 was approved for Letter Ballot (17 CPs).

c. Assigned CPs

The following CPs were reviewed and decisions reached as shown.

Note: Please upload the VP version (candidates for the CPack-120/January 2023 Voting Package) in the [January 2023 meeting folder](#).

CP #	Title	Decision
CP-1776	Quote in multipart media type parameter	Moved to January Voting Packet
CP-1964	<i>Improve the definition of Pixel Spacing</i>	<i>Remains assigned</i>
CP-1978	<i>Restore presentation state retrieval to PS3.18</i>	<i>Remains assigned</i>
CP-2203	Add References between 1 st and 2 nd Gen Rad IODs	<i>Remains assigned, unless WG-06 can hold a separate teleconference in December</i>
CP-2204	<i>Restore multipart bulkdata and clarify range requests</i>	<i>Remains assigned</i>
CP-2238	<i>Add Reject Flag items in RDSR for X-Ray and CT</i>	<i>Remains assigned</i>
CP-2255	Add Silver to X-ray Filtration Macro	Moved to January Voting Packet
CP-2258	<i>Add place to record date of manufacture of devices</i>	<i>Remains assigned</i>
CP-2261	<i>Clarify Inventory Production Rules</i>	<i>Remains assigned, unless WG-06 can hold a separate teleconference in December</i>
CP-2262	Add a code for Endocavitary Transducer to CID 12035	Moved to January Voting Packet
CP-2263	RT ROI Interpreted Type Section Clean Up	Moved to January Voting Packet
CP-2264	Add Gen 2 Termination Codes to Gen 1 Treatment Records	Moved to January Voting Packet
CP-2266	Add missing Resources to PS3.18 Annex H	Moved to January Voting Packet
CP-2267	<i>Correct inconsistencies in Mammography Image Type tables</i>	<i>Remains assigned</i>

4. Report on Supplements

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

a. New Supplement on Assertion Collection (WG-07)

- Christof Schadt led the group through a First Read of a Supplement on Assertion Collection, including accompanying PowerPoint presentation.
- *Kevin O'Donnell moved to assign this Supplement a number and Wim Corbijn seconded. The motion was approved without objection or abstention.*

DECISION: This Supplement was assigned the number 238.

- b. **Supplement 209: DICOM Conformance Statement (WG-31)**
- Antje Schroeder, Bruno Laffin, Hervé Hohen, and Yogalakshmi Selvarajan presented updates to the Supplement draft based on proofreading edits provided by Larry Tarbox, in preparation for Final Text. It was noted that the document has not been through a full line-by-line Final Text reading, so the committee discussed that the accepting this as Final Text as is would mean that the group would need to agree on a policy that invalidating existing Conformance Statements would not be a rationale to not fix issues in this Part 2.
 - *Wim Corbijn moved to approve for Sup209 for Final Text as amended and Björn Nolte seconded. The motion was approved without abstention, however, Kevin O'Donnell was opposed to the motion.*
 - **DECISION:** Supplement 209 was approved for Final Text.
- c. **Supplement 213: Second Generation Radiotherapy - Enhanced RT Image and RT Patient Position Acquisition Instruction (WG-07)**
- Ulrich Busch and Christof Schadt presented Supplement 213 in preparation for Final Text.
 - *Kevin O'Donnell moved to approve for Sup213 for Final Text as amended and Wim Corbijn seconded. The motion was approved without objection or abstention.*
 - **DECISION:** Supplement 213 was approved for Final Text.
- d. **Supplement 228: DICOMweb API for Server Volumetric Rendering (WG-27)**
- Steve Nichols presented Supplement 228: DICOMweb API for Server Volumetric Rendering in preparation for Public Comment, along with a PowerPoint presentation of the high-level changes made since the September WG-06 meeting.
- e. **Supplement 229: Photoacoustic Imaging IOD (WG-33)**
- Allison Bertrand and Brian Bialecki presented Supplement 229 in preparation for Public Comment. The Supplement Checklist was reviewed to ensure the document and PowerPoint are ready for Public Comment circulation.
 - *Wim Corbijn moved to approve for Sup229 for Public Comment as amended and Paul Seifert seconded. The motion was approved without objection or abstention.*
 - **DECISION:** Supplement 229 was approved for Public Comment.
- f. **Supplement 230: Update BCP Secure Communications Profiles (WG-14)**
- Larry Tarbox and Rob Horn led the group through a review of the Letter Ballot Comments received on Supplement 230: Update BCP Secure Communications Profiles.

- *Wim Corbijn moved to approve for Sup230 for Final Text as amended and Kevin O'Donnell seconded. The motion was approved without abstention or objections was opposed to the motion.*
- **DECISION:** Supplement 230 was approved for Final Text.

g. Supplement 231: Adaptive Dynamic Range Softcopy Presentation State (WG-03)

- Steve Nichols led the group through review of Supplement 231 on Adaptive Dynamic Range Softcopy Presentation State, along with its accompanying PowerPoint, in preparation for Letter Ballot.

h. Supplement 234: DICOMweb Storage Commitment (WG-27)

- Jeroen Medema and Dieter Krotz led the group through a review of the draft Supplement on DICOMweb Storage Commitment and its accompanying PowerPoint presentation, in preparation for Public Comment.
- Supplement 234 will return to WG-06 in January 2023.

i. Supplement 236: Structured Display for DICOM Waveforms (WG-32)

- Silvia Winkler presented Supplement 236 on Structured Display for DICOM Waveforms in preparation for Public Comment. The draft Supplement and its accompanying PowerPoint were reviewed. More work is needed before Public Comment circulation, so Sup236 will return to WG-06 in January.

j. Supplement 237: High Resolution ECG (WG-32)

- Silvia Winkler presented Supplement 237 on High Resolution ECG in preparation for Public Comment. The draft Supplement and its accompanying PowerPoint were reviewed and the group felt that both are ready for Public Comment.
- *Kevin O'Donnell moved to approve for Sup237 for Public Comment as amended and Wim Corbijn seconded. The motion was approved without objection or abstention.*
- **DECISION:** Supplement 237 was approved for Public Comment.

5. WG-20/HL7 II Report

- a. Jonathan Whitby and WG-20 members joined the call to provide an update about WG-20/HL7 II activities. The DICOM SR to FHIR Resource Mapping IG was also reviewed.
- b. They would like more than 2 hours in March, and will reach out to Shayna if they'd like time in January 2023.

6. Deadlines for action items from this meeting

- a. For any supplements going out for comment/ballot that are also on the agenda for next meeting, the comment/ballot window of 5 weeks results in the following deadlines. (Submit earlier if you want any time to resolve comments)

- Submit **Public Comment** drafts to Shayna by **November 30, 2022**.
- Submit **Letter Ballot** drafts to Shayna by **November 23, 2022**.

7. Upcoming WG-06 Meetings

- a. Next meeting:
 - January 16-20, 2023, NEMA HQ - Arlington, Virginia
 - **Action:** Shayna will circulate the calendar appointments for all meetings in 2023.
- b. **2023 meetings: members discussed the 2023 meeting dates**
 - January 16-20, 2023
 - March 20-24, 2023
 - June 19-23, 2023
 - August 28-September 1, 2023
 - November 6-10, 2023
- c. **2024 meetings: members identified the 2024 meeting dates**
 - January 8-12, 2024
 - March 18-22, 2024
 - June 3-7, 2024
 - August 26-30, 2024
 - November 4-8, 2024

8. Old/New Business

- a. Wim brought up the topic of the lack of members who are participating in-person. Now that things are returning to pre-COVID conditions, it would be good to get members back in the meeting room. Steve Nichols noted that he hopes to be in-person for 2023 meetings, pending budgetary decisions. Steve suggested that DICOM leadership send an email to MITA groups to encourage their DICOM and regulatory staff to attend DICOM meetings in-person. Carolyn suggested that Kevin mention this during the MITA March Meeting. The group will continue to consider ways to encourage participation.
- b. **Action:** Björn, Shayna and Carolyn will review the list of Supplements planned to be worked on in 2023 and other activity like AI, Security, Clinical, etc., then work to target MITA groups for an email update.

9. Adjournment

- a. The November 2022 WG-06 meeting was adjourned at 12:21pm US Eastern Standard Time on Friday, November 18, 2022.

10. Meeting Participants

Voting Members Present							
Company/ Organization	Represented by		Mon	Tue	Wed	Thu	Fri
AAPM/University of Arkansas for Medical Sciences	Lawrence Tarbox	Voting		X	X	X	
ACR	Brian Bialecki	Voting	X	X			
Agfa	Paul Seifert	Voting	X	X	X	X	
Canon Medical Systems USA	Kevin O'Donnell	Voting	X	X	X	X	X
Carl Zeiss Meditec	Detlev Hohmeier	Voting	X	X	X	X	
Fairhaven Technologies	Rob Horn	Voting	X	X	X	X	
GE Healthcare	Steve Nichols	Voting	X	X	X	X	X
JIRA	Akihiro Yomoda	Alt. Voting	X	X	X	X	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	
Siemens Healthineers	Björn Nolte	Voting	X	X	X	X	X
Voting Members Absent							
Company/ Organization	Represented by		Mon	Tue	Wed	Thu	Fri
AAPM/University of Arkansas for Medical Sciences	Lawrence Tarbox	Voting	X				X
ACR	Brian Bialecki	Voting			X	X	X

Carl Zeiss Meditec	Detlev Hohmeier	Voting					X
CIMICS	Bryan Fan	Voting	X	X	X	X	X
Fairhaven Technologies	Rob Horn	Voting					X
PixelMed Publishing	David Clunie	Voting	X	X			X
Observers and Alternate Voting Members							
Company/ Organization	Represented by		Mon	Tue	Wed	Thu	Fri
AAPM	Nick Bevins	Obs.			X	X	
AAPM	Bruce Curran	Obs.			X		
Agfa	Bruno Laffin	Obs.		X			
Brainlab	Christof Schadt	Obs.	X		X	X	
Canon Medical Systems USA	Jonathan Whitby	Obs.				X	
Carl Zeiss Meditec	Marita Bergmann	Obs.					
CSImed	Uwe Tronnier	Obs.	X		X	X	
DICOM Usergroup Austria	Silvia Winkler	Obs.	X		X	X	X
GE Healthcare	Hervé Hoehn	Obs.		X		X	
GE Healthcare	Jouke Numan	Obs.		X		X	
Individual	Ulrich Busch	Obs.	X		X	X	
iThera	Patrick Leisching	Obs.				X	
Medical University of South Carolina	Jonathan Halford	Obs.					X
MITA/NEMA	Carolyn Hull	Alt. Voting	X	X		X	X

Nihon Kohden Corporation	Andrew Ehrenberg	Obs.					X
Philips	Jeroen Medema	Obs.		X		X	
Philips	Yoga Selvarajan	Obs.		X		X	
Seno Medical	Allison Bertrand	Obs.		X		X	
Seno Medical	Bryan Clingman	Obs.		X			
Siemens Healthineers	Dieter Krotz	Obs.		X		X	
Siemens Healthineers	Antje Schroeder	Obs.		X		X	
University College London	Ben Cox	Obs.		X		X	

Prepared and submitted by Shayna Knazik
 Legal Bezalel Stern 1-13-23