

MINUTES

DICOM WG-06 Base Standard

September 19-23, 2022
Hybrid (Face2Face & Remote) Meeting

Location: Santa Chiara Hospital, Trento, Italy

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-117 was approved for Final Text with 14 Change Proposals (CPs).
- CPack-118 was approved for Letter Ballot with 25 Change Proposals (CPs).
- A new Supplement on Patient Model Gender Enhancements was assigned the number 233.
- A new Supplement on DICOMweb Storage Commitment was assigned the number 234.
- A new Supplement on HTJ2K Transfer Syntax was assigned the number 235.
- A new Supplement on Structured Display for DICOM Waveforms was assigned the number 236.
- A new Supplement on High Resolution ECG was assigned the number 237.
- Supplement 226: Confocal Microscopy was approved for Public Comment.
- Supplement 230: Update BCP Secure Communications Profiles was approved for Letter Ballot.
- A Governance Revision Proposal to allow Public Comment and Letter Ballot periods to be 35 days was approved by the DSC and WG-06 has incorporated this into their procedures.

1. Administrative

- a. With a quorum present, the September WG-06 Hybrid Face2Face & Remote Meeting was called to order at 9:08AM US Eastern Time on Monday, September 19, 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 June 2022 WG-06 meeting were reviewed and approved without objection or abstention.

2. Report on Letter Ballots

DSC Ballot	Approve	Disapprove	Abstain	Comments
CPack-117	16	0	1	6

a. CPack-117

- The official ballot was distributed to voting members of the DICOM Standard Committee on July 6, 2022 and closed on August 24, 2022. CPack-117 included the following Change Proposals (15 CPs):

CP #	Title
CP-2148	Clarify audit trail messages
CP-2166	Update DICOM to reflect changes in IHTSDO SNOMED CT-DICOM Subset for JUL 2021 INT Release
CP-2190	Clarify origin server behavior when includefield=all is passed in a query
CP-2194	Add Specimen and Container Type to Preparation Template
CP-2195	Add seed point for purpose of region
CP-2196	Add FHIR Coding Scheme URL Type
CP-2197	Add Clinical Trial Time Point Type Code Sequence to Study Module and extend Value Set
CP-2198	Correct row reference in Content Item Description of TID 10003
CP-2199	Fixes to Part 5 for recently added VRs OV, SV and UV (and regarding inconsistent and incomplete definitions)
CP-2200	Fix inconsistent names of extended Storage Service features
CP-2201	Fix wrong term "Basic Worklist Management SCP"
CP-2202	Clarifications and examples for Value Set Constraint field
CP-2203	<i>Add References between 1st and 2nd Gen Rad IODs **Canon and WG-07 will work together on this and WG-06 will discuss in November**</i>
CP-2205	Correction of confusing statement regarding implementation of Pixel Aspect Ratio for icons
CP-2206	Correct the media types for video in PS3.18

- David Clunie made a motion to approve CPack-117 for Final Text as amended, with the exception of 2203 (which will be moved to the November meeting). Kevin O'Donnell seconded the motion. The motion was approved without objection or abstention.*
- DECISION:** CPack-117 was approved for Final Text as amended (14 CPs).

3. Report on Change Proposals

a. New CPs

Submitted file name	Title	New CP #
cp_dac617	Update DICOM to reflect changes in IHTSDO SNOMED CT-DICOM Subset for JUL 2022 INT Release	CP-2260
CP_hs_clarify	Clarify Inventory Production Rules	CP-2261
cp_kod_endocavitary	Add a code for Endocavity Transducer to CID 12035	CP-2262
cp_RT215	RT ROI Interpreted Type Section Clean Up	CP-2263
cp_RT217	Add Gen 2 Termination Codes to Gen 1 Treatment Records	CP-2264
cp_multiFrame	Clarify distinction between multi-frame and video media types	CP-2265
cp-SJN-addResources	Add missing Resources to PS3.18 Annex H	CP-2266
cp-SJN-correct	Correct inconsistencies in Mammography Image Type tables	CP-2267

b. CPack-118/September 2022 Voting Packet

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
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
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 Letter Ballot. Larry Tarbox seconded the motion. The motion was approved without objection or abstention.*
- **DECISION:** CPack-118 was approved for Letter Ballot (25 CPs).

c. **Assigned CPs**

The following CPs were reviewed and decisions reached as shown.

Note: Please upload the VP version (candidates for the CPack-119/November 2022 Voting Package) in the [November 2022 meeting folder](#).

CP #	Title	Decision
CP-2217	<i>Add CID for Radiation Dose Imaging Procedures</i>	<i>Remains assigned</i>
CP-2218	Add Note in PS3.16 TID 10007 row 3	Moved to November Voting Packet
CP-2226	<i>Add Breast Segmentation Types Context Group</i>	<i>Remains assigned</i>
CP-2234	Remove retired OtherPatientIDs from ProposedStudySequence in Film Session	Moved to November Voting Packet
CP-2235	Deciduous dentition should use structure of not entire concept	Moved to November Voting Packet
CP-2236	Need to be able to select optical path in advanced blending presentation state	Moved to November Voting Packet
CP-2237	Propagate VOI and Palette Color support from blending to advanced blending presentation state	Moved to November Voting Packet
CP-2238	Add Reject Flag items in RDSR for X-Ray and CT	Moved to November Voting Packet
CP-2239	Institution Name is not Issuer of ID	Moved to November Voting Packet
CP-2240	Fix inconsistencies regarding Storage SOP Class names and Related General SOP Classes	Moved to November Voting Packet
CP-2241	Fix wrong reference to XML Schema for syntax of the Native DICOM Model	Moved to November Voting Packet
CP-2242	<i>Fix inconsistencies regarding IE names and add missing IE definitions</i>	<i>Remains assigned</i>
CP-2243	Add Source-based Reference Point to CID 10025	Moved to November Voting Packet
CP-2244	Clarification for Number of RT Beam Limiting Device Openings	Moved to November Voting Packet
CP-2245	Retire the Robotic Base Location Indicator	Moved to November Voting Packet
CP-2246	Correct Radiotherapy Common Instance Specification	Moved to November Voting Packet
CP-2247	Add Long Label to Ion Beam	Moved to November Voting Packet
CP-2248	Fix discussion of incomplete RT Treatment Fraction	Moved to November Voting Packet

CP-2249	Clarifications of Scan Spot Maps	Moved to November Voting Packet
CP-2250	Update De-Identifier profiles for Source Frame of Reference UID	Moved to November Voting Packet
CP-2253	<i>Image and Frame Type corrections to Enhanced MR Image Module</i>	<i>Remains assigned</i>
CP-2259	<i>Correct multi-frame image media types for web services</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 Patient Model Gender Enhancements (WG-06)

- Rob Horn led the group through a First Read of a Supplement on Patient Model Gender Enhancements.
- *Kevin O'Donnell moved to assign this Supplement a number and Larry Tarbox seconded. The motion was approved without objection or abstention.*

DECISION: This Supplement was assigned the number 233.

b. New Supplement on DICOMweb Storage Commitment (WG-27)

- Jerone Medema, Dieter Krotz, and Bill Wallace led the group through a First Read of a Supplement on DICOMweb Storage Commitment.
- *Larry Tarbox moved to assign this Supplement a number and Kevin O'Donnell seconded. The motion was approved without objection or abstention.*

DECISION: This Supplement was assigned the number 234.

c. New Supplement on HTJ2K Transfer Syntax (WG-04)

- Bill Wallace and Chris Hafey led the group through a First Read of a Supplement on HTJ2K Transfer Syntax and its accompanying PowerPoint. They would like time on the November agenda for this Supplement.
- *Kevin O'Donnell moved to assign this Supplement a number and Larry Tarbox seconded. The motion was approved without objection or abstention.*

DECISION: This Supplement was assigned the number 235.

d. New Supplement on Structured Display for DICOM Waveforms (WG-32)

- Silvia Winkler presented a new Supplement on Structured Display for DICOM Waveforms for First Read. The draft Supplement and its accompanying PowerPoint were reviewed.
- *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 236.

- e. **New Supplement on High Resolution ECG (WG-32)**
- Silvia Winkler presented a new Supplement on High Resolution ECG for First Read.
 - *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 237.
- f. **Supplement 209: DICOM Conformance Statement (WG-31)**
- Antje Schroder, Bruno Laffin, and Hervé Hoehn presented updates to the Supplement draft based on Letter Ballot comments received. The Supplement checklist was reviewed and all items have been completed.
 - **Action:** Larry Tarbox will do a final pass-through of the entire document for English grammar and spelling.
 - **Action:** Several vendors have been contacted to perform a quick dry-run trial implementation before the November meeting.
- g. **Supplement 224: Service Discovery and Control (WG-23)**
- Brian Bialecki presented the draft Supplement 224 and its accompanying PowerPoint, in preparation for Public Comment.
- h. **Supplement 226: Confocal Microscopy (WG-19)**
- Liam Caffrey presented Supplement 226: Confocal Microscopy in preparation for Public Comment. The group reviewed the draft Supplement and its accompanying PowerPoint.
 - *Kevin O'Donnell moved to approve for Sup226 for Public Comment as amended and Wim Corbijn seconded. The motion was approved without objection or abstention.*
 - **DECISION:** Supplement 226 was approved for Public Comment.
- i. **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 June WG-06 meeting.
- j. **Supplement 229: Photoacoustic Imaging IOD (WG-33)**
- Allison Bertrand, Brian Bialecki, and Bryan Clingman presented Supplement 229 in preparation for Public Comment. Major changes to the draft since WG-06's review at the June meeting were reviewed, as well as the accompanying PowerPoint.
 - One, two-hour slot was requested for the November meeting.

k. **Supplement 230: Update BCP Secure Communications Profiles (WG-14)**

- Larry Tarbox and Rob Horn led the group through a review of the Public Comments received on Supplement 230: Update BCP Secure Communications Profiles. The Supplement Checklist was reviewed and all items have been completed.
- The Letter Ballot period for this Supplement will be 35 days.
- *Wim Corbijn moved to approve for Sup230 for Letter Ballot as amended and Kevin O'Donnell seconded. The motion was approved without objection or abstention.*
- **DECISION:** Supplement 230 was approved for Letter Ballot.

l. **Supplement 231 on 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.

m. **Supplement 232: JPEG-XL Transfer Syntax (WG-04)**

- Bill Wallace led the group through a second read of Supplement 232 on JPEG-XL Transfer Syntax. He would like time on the November agenda for this Supplement.

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 group requested a 2-hour slot in November 2022 and January 2023.
- n. *Kevin O'Donnell moved to approve the submission of the IG proposal from the DICOM perspective and the motion was seconded by Brian Bialecki. The motion was approved without objection or abstention.*
- o. **DECISION:** The IG proposal is approved for submission.

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 **September 23, 2022**.
 - Submit **Letter Ballot** drafts to Shayna by **September 27, 2022**.

7. Upcoming WG-06 Meetings

- a. Next meeting:
 - November 14-18, 2022, NEMA HQ - Arlington, Virginia
- b. **2023 meetings: members discussed the 2023 meeting dates**

- January 9-13, 2023: Members determined that a conflict has arisen with this week. **Action:** Shayna will ask the group if January 16-20, 2023 works instead.
- March 20-24, 2023
- June 19-23, 2023
- August 28-September 1, 2023
- November 6-10, 2023

8. Old/New Business

a. Change to the Public Comment and Letter Ballot periods

- WG-06 proposed a governance change to permit shortening the minimum Public Comment and Letter Ballot periods to 5 weeks. The DICOM Standard Committee discussed this item at their September 2022 meeting and though it was approved, some members expressed concern over their ability to translate the documents and receive feedback in that period.
- Moving forward, WG-6 will assign a review/ballot period to each supplement approved for public comment or letter ballot. Typically, the period will be either 5 weeks or the traditional 7 weeks. Supplements would be eligible for a 5 week period if they are relatively short and simple. Short supplements may still be assigned a 7 week period if a significant number of supplements are being circulated at the same time, or if the supplement is expected to involve additional translations or review by external stakeholders. DICOM members are encouraged to inform WG-6 when such constraints are expected. During the initial implementation of this process, members may also reach out to Shayna in the first two weeks of a 5 week supplement period and she will extend the voting period towards the full 7 weeks.
- **Action:** Since this is the first Supplement to use the new Letter Ballot period, Shayna will reach out to CIMICS (JIRA was on the line) to ask if they need longer than 5 weeks for Sup230, and to note the new process described above.

b. Old Supplements

- The group reviewed Supplements that are 3 years or older and have had no activity.
 - Sup115: no word from David Clunie on the status of this one. **Action:** Shayna will email him and ask for an update before or at the November WG-06 meeting.
 - Sup177/178/179: WG-07 has requested to keep these active for now.
 - Sup182 – **Action:** Shayna will email Jonathan Whitby, Steve Nichols, Bill Wallace, and Dieter Krotz to ask if there is any chance a champion for this Supplement may surface in the near future or if they recommend cancellation.
 - Sup193: **Action:** Shayna will email WG-27 leaders to request a rationale for their recommendation to cancel this Supplement.

- Sup196: WG-07 has requested cancellation of this Supplement due to inactivity for several years.
 - Sup211 – **Action:** Shayna will email Bill Wallace, Dieter Krotz, and Brad Genereaux to obtain a rationale for WG-27’s request to cancel this Supplement. Brad will be included because Kevin recalled he had some interest in this Supplement.
- c. FDA issue with DICOM to be discussed with MITA
- FDA recognizes different medical imaging standards. Pre-market submission conformity. Now they are saying that they are not going to accept DICOM 2016, and instead 2021-E Publication. DICOM would prefer it to be worded something like 2021-E or later. When they say 2016, any later version is perfectly valid.
 - Their new rule that older publications can’t be used doesn’t work with DICOM’s backward compatibility.
 - Inside MITA itself, one of the ways around this may be, if conformance is declared and as long as documentation is updated, that software doesn’t need to be updated because DICOM doesn’t make breaking changes.
 - **Action:** Kevin will work with Zack Hornberger to get this on the MITA agenda so MITA can discuss with FDA and pull the specific rule that older publications can’t be used for DICOM.

9. Adjournment

- a. The September 2022 WG-06 meeting was adjourned at 12:28pm Central European Summer Time on Friday, September 23, 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	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	
CIMICS	Bryan Fan	Voting					
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
Leica Biosystems	Jean Desire	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		
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
Carl Zeiss Meditec	Detlev Hohmeier	Voting		X			X
CIMICS	Bryan Fan	Voting	X	X	X	X	X
Fairhaven Technologies	Rob Horn	Voting					X
Leica Biosystems	Jean Desire	Voting	X	X	X	X	X
PixelMed Publishing	David Clunie	Voting		X		X	X
Observers and Alternate Voting Members							

Company/ Organization	Represented by		Mon	Tue	Wed	Thu	Fri
Agfa	Bruno Laffin	Obs.	X	X	X		
Amazon Web Services	Chris Hafey	Obs.			X		
Brainlab	David Flade	Obs.	X	X			
Canon Medical Systems USA	Jonathan Whitby	Obs.				X	
Carl Zeiss Meditec	Marita Bergmann	Obs.	X				
CSImed	Uwe Tronnier	Obs.	X		X	X	
DICOM Usergroup Austria	Silvia Winkler	Obs.					X
GE Healthcare	Hervé Hoehn	Obs.		X	X		
Medical University of South Carolina	Jonathan Halford	Obs.					X
MITA/NEMA	Carolyn Hull	Alt. Voting				X	
Philips	Jeroen Medema	Obs.	X				
Philips	Yoga Selvarajan	Obs.	X				
Radical Imaging	Bill Wallace	Obs.	X		X		
Seno Medical	Allison Bertrand	Obs.		X		X	
Seno Medical	Bryan Clingman	Obs.		X		X	
Siemens Healthineers	Dieter Krotz	Obs.	X				
Siemens Healthineers	Antje Schroder	Obs.	X	X	X		
Siemens Healthineers	Ingo Wilkening	Obs.					

University of Arkansas for Medical Sciences	Azriel Stinson	Obs.	X		X		
University of Florida – Gainesville	Madhu Nair	Obs.		X			
University of Queensland	Liam Caffery	Obs.				X	

Prepared and submitted by Shayna Knazik

Legal Review by Bezalel Stern 11-14-22