

MINUTES

DICOM WG-06 Base Standard

August 28 - September 1, 2023
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-122 was approved for Final Text as amended (7 CPs), with the exception of CP-2270.
- CPack-123 was approved for Letter Ballot with 13 Change Proposals (CPs).
- A new Supplement on Ultrasound Fetal Cardiac Structured Report Extensions was presented for First Read and assigned the number 242.
- Supplement 238: Assertion Collection was approved for Public Comment as amended.

1. Administrative

- a. With a quorum present, the WG-06 Hybrid Face2Face & Remote Meeting was called to order on Monday, August 28, 2023 at 8:35AM US EDT.
- 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 2023 WG-06 meeting were reviewed and approved without objection or abstention.

2. Report on Letter Ballots

DSC Ballot	Ballot closed on	Approve	Disapprove	Abstain	Comments
CPack-122	August 29, 2023	14	0	1	4
Supplement 235	September 1, 2023	10	0	3	5
Supplement 226	August 31, 2023	9	0	4	4

a. CPack-122

- The official ballot was distributed to voting members of the DICOM Standard Committee on July 25, 2023 and closed on August 29, 2023. CPack-122 included the following Change Proposals (8 CPs):

CP #	Title
CP-2095	Add "Measurements" to various Echo CIDs
CP-2217	Add CID for Radiation Dose Imaging Procedures
CP-2270	Support of Empty and Multiple Value Matching Query in DICOMWeb
CP-2274	Correct the description of the storage commitment failure reasons
CP-2276	Update Interlock Codes for Ions
CP-2277	Remove Scan Spot Size from RT Ion Record
CP-2278	Support measurement of multiple amniotic sacs
CP-2279	Update text for Dimension Organization in Enhanced US Image Module usage

- CP-2270 requires further discussion with WG-33 and will return to WG-06 at the November meeting.
- David Clunie made a motion to approve CPack-122 for Final Text as amended with the exception of CP-2270. Kevin O'Donnell seconded the motion. The motion was approved without objection or abstention.*
- DECISION:** CPack-122 was approved for Final Text as amended (7 CPs), with the exception of CP-2270.

3. Report on Change Proposals

a. Approved for Final Text post-Letter Ballot: CP-2267

- Steve Nichols made a motion to approve CP-2267 for Final Text as amended. Kevin O'Donnell seconded the motion. The motion was approved without objection or abstention.*
- DECISION:** CP-2267 was approved for Final Text as amended.

b. New CPs

Submitted file name	Title	New CP #
cp_add_information	Add information about Vertex Distance to refraction correction parameters	CP-2324
cp_bj_correct	Correct DICOMDIR sample in table A.1-1	CP-2325
cp_bj_Former	Former existing coded-concept (F-10440,SRT,"Erect") in legacy data missing	CP-2326
cp_bj_Inconsistency	Inconsistency (113930,DCM,Size Specific Dose Estimate)	CP-2327
cp_dac623	Deidentification of Patient ID in Patient Group Macro	CP-2328
cp_dac624	Extend histology and microscopy imaging procedure protocol codes	CP-2329
cp_dac625	Add Spatial Information to Secondary Capture IOD	CP-2330
cp_dac626	Clarify Segment scan order for TILED_FULL	CP-2331
cp_dac627	Bulk data value is not intended for Sequences	CP-2332
cp_dac628	Retrofit Legacy MR Images with selected Enhanced MR Image Attributes	CP-2333
cp_dac629	Add [18F]DCFPyL (Piflufolastat) PSMA PET radiopharmaceutical	CP-2334
cp_dac630	Clinical Trial Identifiers need Issuers	CP-2335
cp_jr38	Harmonize use of Association-related terms	CP-2336
cp_jr39	Implementation Version Name shall contain version information	CP-2337
cp_kod_Antral	Add Antral Follicle Counts to OB/GYN SR	CP-2338
cp_rh-bb	Add W3C trace context attributes to audit message	CP-2339
cp_rjh54	Specify DICOMWeb security for conformance	CP-2340
cp_RT227	Add reference to Series in UPS Scheduled and Performed Procedure Information Modules	CP-2341
cp_RT230	Add Clinical Fraction Number to 1st Generation RT Objects	CP-2342
cp_RT231	Add Spacer and Device to RT ROI Interpreted Type	CP-2343
cp_RT239	Update RT Patient Setup Module	CP-2344
cp_RT242	Add Requirement for Selected Frames in Sparse MF Module	CP-2345
CP_WG9_Ocular	Ocular Region Imaged Module in Ophthalmic Tomography	CP-2346
CP_WG9_OPT	Clarify OPT Frame of Reference Coordinate System	CP-2347
cp-jm-Replace	Replace the terms Operations Statement and Notifications Statement	CP-2348
cp-sjn-relax	Relax Multi-energy CT Rescale Type constraint	CP-2349
cp-sw2	Remove duplicate CIDs expressing Time Relative to Procedure	CP-2350

<i>cp_jm-De</i>	<i>Extra note for de-identification</i>	<i>Rejected</i>
Cp_hs_Clarify	Clarify matching multiple values	CP-2351
Cp_hs_Floating	Clarify floating point Not a Number values	CP-2352
Cp_hs_Segment	Editorial move of Segment Number explanation	CP-2353
<i>CP_WG9_Confidence</i>	<i>Confidence Map for derived images</i>	<i>Rejected</i>
Cpxxxx_2023	Add new Chinese Character Set version GB18030-2022	CP-2354

c. **CPack-123 Letter Ballot**

CP #	Title
CP-2163	Add term to represent the local client copy buffer to CID 405 for Data Export
CP-2280	Relax requirement to provide default Transfer Syntax if uncompressed encapsulated Transfer Syntax image is too large
CP-2281	Remove references to retired IODs and other retired concepts
CP-2282	Add Note on handling C-FIND-CANCEL request in Query/Retrieve Service Class
CP-2283	Clarify use of Concept Name Code Sequence in Encapsulated Documents
CP-2284	Remove remaining references to retired Curves and suffix retired sections
CP-2286	Post-Coordinated Echo Property Code Fix
CP-2290	PositionMeasuringDeviceUsed Enumeration
CP-2293	Resolve Duplicate names for TIDs and a CID
CP-2297	Strengthen Dose Semantics of Dose References
CP-2298	Synchronize 1st Generation BLD definitions
CP-2299	Beam Hold Transition Trigger Source
CP-2300	Extend 1st Gen to 2nd Gen Tolerance Value Mapping

- *David Clunie made a motion to approve CPack-123 for Letter Ballot. Kevin O'Donnell seconded the motion. The motion was approved without objection or abstention.*
- **DECISION:** CPack-123 was approved for Letter Ballot (13 CPs).

d. **Assigned CPs**

The following CPs were reviewed and decisions reached as shown.

Note: Please upload the VP version (candidates for the CPack-124/November 2023 Voting Package) in the [November 2023 meeting folder](#).

CP #	Title	Decision
CP-1636	Examples of Specific Character Set in Worklist	Moved to November Voting Packet
CP-2220	Differentiate acquisition techniques for RT 3D CBCT imaging	Moved to November Voting Packet

		Action: WG-21 to review
CP-2269	Clarify matching multiple values	Moved to November Voting Packet
CP-2275	<i>JSON Value Representation for Infinity and NaN Floating Point Numbers</i>	<i>Remains assigned</i>
CP-2285	Harmonize description of Directory Records and clarify their applicability	Moved to November Voting Packet Action: David Clunie to clarify requirement for Study Instance UID
CP-2287	Update mammography dose reference point code meaning	Moved to November Voting Packet
CP-2288	Table timing description for Enhanced RDSR	Moved to November Voting Packet
CP-2289	Update to TID 10048 Description	Moved to November Voting Packet
CP-2296	Extend RT Structure Set Definitions	Moved to November Voting Packet
CP-2301	Clarify applicability of RLE and JPEG 2000 Transfer Syntax to single bit images such as binary segmentations	Moved to November Voting Packet
CP-2302	Clarify absence of padding between frames applies to single BitsStored multi-frame images encoded in Native format	Moved to November Voting Packet
CP-2303	Clarify Frame Pixel Data Retrieve Response for single BitsStored multi-frame images encoded in Native format	Moved to November Voting Packet
CP-2304	Use the Group Number term correctly	Moved to November Voting Packet
CP-2309	Add channel obstruction to Treatment Termination reasons	Moved to November Voting Packet
CP-2310	Wording improvement for C.8.8.5.4 and use of Study in RTSS references	Moved to November Voting Packet

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. Supplement NNN: Ultrasound Fetal Cardiac Structured Report Extensions (WG-01/12)

- Kevin O'Donnell led the group through a First Read of Supplement NNN on Fetal Heart.
- *Björn Nolte moved to assign this Supplement a number and Wim Corbijn seconded the motion.*
- **DECISION:** A new Supplement on Ultrasound Fetal Cardiac Structured Report Extensions was presented for First Read and assigned the number 242.

b. Supplement 224: Service Discovery and Control (WG-23)

- Brian Bialecki provided a recap of the last several WG-06 meetings and recent WG-23 discussions regarding Supplement 224: Service Discovery and Control. Based on feedback from WG-06, the initial intent of the supplement seems to have caused unanticipated, broader scope changes. WG-06 and WG-23 agreed on a path forward and work will continue on Supplement 224.
- Supplement 224 will return to WG-06 in November 2023.

c. Supplement 226: Confocal Microscopy (WG-19)

- Liam Caffery presented Supplement 226: Confocal Microscopy in preparation for Final Text. The draft Supplement and its accompanying PowerPoint were reviewed. There were some late Letter Ballot comments so Supplement 226 will return to WG-06 in November 2023.
- **Action to the group for the November meeting:** please review digital signature and directory records.

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 Letter Ballot, along with a PowerPoint presentation. Public Comments were reviewed.
- Supplement 228 will return to WG-06 in November 2023.

e. Supplement 233: Patient Model Gender Enhancements (WG-06 Ad Hoc on Gender and Sex Encoding)

- Rob Horn presented Supplement 233: Patient Model Gender Enhancements in preparation for Public Comment. The accompanying PowerPoint was also reviewed. Sup233 will return to WG-06 in November, at which point it may be ready to be circulated for Public Comment.
- Rob requested two, 2-hour slots on the November WG-06 schedule.

- The current draft is available here: <https://github.com/rjhorniii/dicom-sup233-wip>
- f. **Supplement 234: DICOMweb Storage Commitment Service (WG-27)**
- Jeroen Medema and Dieter Krotz led the group through a review of Supplement 234 on DICOMweb Storage Commitment and its accompanying PowerPoint presentation, in preparation for Letter Ballot. Public Comments were reviewed and incorporated.
 - Supplement 234 will return to WG-06 at the November meeting.
- g. **Supplement 235: HTJ2K Transfer Syntax (WG-04)**
- Bill Wallace led the group through review of Supplement 235: HTJ2K Transfer Syntax, along with its accompanying PowerPoint, in preparation for Final Text. The group reviewed all Letter Ballot comments received. However, more editing is needed so Sup235 will return to WG-06 in November. The group has requested two, 1-hour slots.
- h. **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.
 - This Supplement will return to WG-06 in November 2023.
- i. **Supplement 238: Assertion Collection (WG-07)**
- Christof Schadt and Jim Percy presented the draft Supplement 238: Assertion Collection and its accompanying PowerPoint in preparation for Public Comment.
 - *Kevin O'Donnell moved to approve for Supplement 238 for Public Comment as amended. The motion was seconded by Wim Corbijn. The motion was approved without objection or abstention.*
 - **DECISION:** Supplement 238: Assertion Collection was approved for Public Comment as amended.
- j. **Supplement 239: Waveform Annotations SR (WG-32)**
- Silvia Wikler presented Supplement 239 on Waveform Annotations SR. The document and its accompanying PowerPoint were reviewed.
 - Supplement 239 will return to WG-06 in November 2023.
- k. **Supplement 240: Heightmap Segmentation IOD and SOP Class (WG-09)**

- Harry Solomon presented Supplement 240 on Heightmap Segmentation IOD and SOP Class in preparation for Public Comment.
- WG-09 requested two, 2-hour Q4 slots for the November meeting.

I. Supplement 241: Structural Heart SR Template (WG-01/WG-12)

- Steve Nichols presented Supplement 241 on Structural Heart SR Template for in preparation for Public Comment. It will return to WG-06 in November 2023.

5. 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 18, 2023**.
 - Submit **Letter Ballot** drafts to Shayna by **September 11, 2023**.

6. WG-06 Meeting Schedule

a. Next meeting:

- November 6-10, 2023

b. **2023 meetings:**

- January 16-20, 2023
- March 20-24, 2023
- June 19-23, 2023 (note: June 19th will be remote, the rest of the week will be at Arlington)
- August 28-September 1, 2023
- November 6-10, 2023
 - **Action:** Björn and Shayna will continue to investigate possible European locations.

c. **2024 meetings:**

- January 8-12, 2024
- March 18-22, 2024
- June 3-7, 2024
- August 26-30, 2024
- November 4-8, 2024

7. Old/New Business

- None at this time

8. Adjournment

- The meeting was adjourned at 12:05pm US EDT on Friday, September 1, 2023.

9. 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			
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	Detlev Hohmeier	Voting		X	X	X	
Fairhaven Technologies	Rob Horn	Voting	X	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	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		
Carl Zeiss Meditec	Detlev Hohmeier	Voting	X				
CIMICS	Bryan Fan	Voting	X	X	X	X	X
PixelMed Publishing	David Clunie	Voting				X	
Observers and Alternate Voting Members Present							
Company/ Organization	Represented by		Mon	Tue	Wed	Thu	Fri
AAPM	Nick Bevins	Obs.			X		
ACR	Neil Tenenholtz	Obs.		X			
American Academy of Ophthalmology	Harry Solomon	Obs.		X	X	X	
Blackford Analysis	Keith Houston	Obs.		X			
Brainlab	Christof Schadt	Obs.		X	X		X
Canon Medical Systems USA	Alan Pinder	Obs.		X			
Carl Zeiss Meditec	Patrick Nast	Obs.		X	X		
CSImed	Uwe Tronnier	Obs.	X	X	X	X	
DICOM Usergroup Austria	Silvia Winkler	Obs.			X	X	
Elekta	Jim Percy	Obs.		X	X		X
Individual	Ulrich Busch	Obs.	X		X		X
MITA	Carolyn Hull	Obs.	X				

NVIDIA	Brad Genereaux	Obs.		X			
Philips	Jeroen Medema	Obs.	X			X	
Radical Imaging	Bill Wallace	Obs.	X				
RefleXion	Michael Owens	Obs.		X			
Seno Medical	Allison Bertrand	Obs.		X			
Siemens Healthineers	Dieter Krotz	Obs.				X	
Siemens Healthineers	Gianluca Paladini	Obs.		X			
tops Software	Toni Magni	Obs.		X	X		
University of Maryland	Andrew Casertano	Obs.		X	X		
University of Queensland	Liam Caffery	Obs.	X				

Prepared and submitted by Shayna Knazik
Approved by Patrick Hope