

# **MINUTES**

## **DICOM WG-06 Base Standard**

January 13-17, 2025  
Hybrid (Face-to-Face & Remote) Meeting

Location: San Francisco, California

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

DICOM Secretariat: Shayna Knazik, NEMA/MITA

### **Summary of decisions from this meeting**

- CPack-129 was approved for Final Text amended as discussed (19 CPs).
- CPack-130 was approved for Letter Ballot (23 CPs).
- Supplement 233: Patient Model Gender Enhancements was approved for Letter Ballot amended as discussed.
- Supplement 236: Waveform Presentation State was approved for Final Text amended as discussed.
- Supplement 241: Structural Heart SR Template was approved for Letter Ballot amended as discussed.
- Supplement 244: Frame Deflate Transfer Syntax was approved for Final Text amended as discussed.
- Supplement 247: Eyecare Measurement Templates was approved for Public Comment amended as discussed.

#### **1. Administrative**

- a. The WG-06 Hybrid Face-to-Face & Remote Meeting was called to order on Monday, January 13, 2025, at 8:32am US Pacific Standard Time.
- b. Staff reminded members of the [DICOM Patent Disclosure Policy](#) and [guidelines for conducting NEMA meetings](#).
- c. The agenda was reviewed.

- d. The minutes from the November 2024 WG-06 meeting were reviewed and approved without objection or abstention.

## 2. Report on Letter Ballots

DSC Ballot	Ballot Closed	Approve	Disapprove	Abstain	Comments
CPack-129	December 23, 2024	17	0	0	5

### a. CPack-129

- The official ballot was distributed to voting members of the DICOM Standard Committee on November 18, 2024 and closed on December 23, 2024.
- CPack-129 included the following Change Proposals (19 CPs):

CP #	Title
CP-2406	Clarify Series and Frame of Reference relationship for Whole Slide Microscopy Images
CP-2408	CID Entries which are inconsistent or incomplete
CP-2410	Formally define Attribute Value
CP-2411	Clarify Point Coordinates origin in Microscopy Bulk Simple Annotations
CP-2412	Add flag to whole slide microscopy images indicating tiles are nonoverlapping
CP-2413	Clarify Admitting Diagnosis meaning and add other types of diagnosis
CP-2414	Clarify location of ICC Profile when Optical Path Sequence present
CP-2415	Add PAXgene fixation system
CP-2416	Add support for FLIO Ophthalmic Photography
CP-2417	Note for ordering tags in XML representation
CP-2418	Remove Partial Content status code from some Responses
CP-2419	Clarify some aspects of UPS
CP-2420	Add missing Status Codes to DIMSE Services and further improve consistency
CP-2423	Add missing abbreviation "MPPS" to various Parts
CP-2424	Correct the Relax NG Compact Schema for the Native DICOM Model
CP-2429	Update ROI DateTime and ROI Observation DateTime
CP-2430	Add Examples of Ion Control Point Sequence for Arc Treatment Techniques
CP-2431	Remove LUT restrictions for Ophthalmic Tomography Images
CP-2432	Clarify Support of Mandatory Query Parameters in DICOMweb

- *MOTION: David Clunie made a motion to approve CPack-129 for Final Text as amended. Rob Horn seconded the motion. The motion was approved without objection or abstention.*
- **DECISION:** CPack-129 was approved for Final Text amended as discussed.

**b. CPack-130 Letter Ballot**

CP #	Title
CP-1570	Add dental visible light acquisition context information
CP-2340	Specify DICOMWeb security for conformance
CP-2409	Multiple Inconsistencies of DCM CodeMeanings in PS3.16 table D-1 versus CIDs
CP-2421	Fix inconsistent spelling and use of terms in Part 4
CP-2425	Generalize CTDI phantom options
CP-2433	Correct PS 3.3 section C.20.3.1.3 Vector Grid Data memory layout
CP-2434	Add new IOL calculation formulas to Part16 CID 4236
CP-2436	Inconsistency in reference to RT Structure Sets for Planar ROI in TID 1410
CP-2437	Various Context Group corrections
CP-2438	Update DICOM to reflect changes in IHTSDO SNOMED CT-DICOM Subset for JUL 2024 INT Release
CP-2439	Update DICOM to reflect changes in SNOMED Imaging Procedures
CP-2441	Remove the word 'codes' from diagrams
CP-2442	Harmonize the meaning of Failure Reasons
CP-2443	Add missing details to the definition of Template tables
CP-2447	Pregnancy Status correct mismatch of VR and defined terms
CP-2448	Adapt SR Template Properties
CP-2450	Remove Table 10.41-1 from X-Ray Image Modules
CP-2451	Add Attending Physician to Visit Admission Module
CP-2452	Add Estimated Delivery Date to TID 5008
CP-2453	Add FHIR canonical for DICOM UID Registry
CP-2454	Correct Studies Service tables in PS3.2 and PS3.18
CP-2455	Ethnic Group SH VR too short
CP-2456	General handling of known safe private data elements within private sequences

- *MOTION: Kevin O'Donnell made a motion to approve CPack-130 for Letter Ballot. Björn Nolte seconded the motion. The motion was approved without objection or abstention.*
- **DECISION:** CPack-130 was approved for Letter Ballot (23 CPs).

### 3. Report on Change Proposals (CPs)

#### a. New CPs

Submitted file	Title	New CP #
cp_dac664	Clarify application/octet-stream can only contained uncompressed data	CP-2480
cp_dac665	Clarify odd number of 8-bit palette color LUT entries	CP-2481
cp_dac666	Correct inclusion of TID 300 with additional rows	CP-2482
cp_dac667	Correct duplicate rows in TID 3913 Aneurysm Properties	CP-2483
cp_dac668	Analysis Peformed content item in TID 3905 should have HAS CONCEPT MOD relationship with Finding parent	CP-2484
cp_dac669	Finding Site content item in TID 3925 should have HAS CONCEPT MOD relationship with Finding parent	CP-2485
cp_dac670	Children of CODE Late Contrast Enhancement in TID 3926 Myocardial Perfusion Analysis have illegal HAS ACQ CONTEXT Relationship	CP-2486
cp_dac671	Clarify de-identification of Requesting Service	CP-2487
cp_dac672	Replace DCM code for Margin with SCT code	CP-2488
cp_dac673	Add anatomic concepts for middle and inner ear	CP-2489
cp_iw_Changes	Changes from Sup190 are not fully reflected in PS3.17 samples	CP-2490
cp_iw_Clarification	Clarification of inconsistent values of Pixel Presentation	CP-2491
cp_iw_reference	PS3.3 10.40.1 correct reference to non-existing TID 175001	CP-2492
cp_jm27	Improve definition of Rescale Type	<i>Rejected</i>
cp_jr55	Add missing abbreviation "RDSR" to various Parts	CP-2493
cp_jr56b	Include TID 1002 in TID 3700 with correct Relationship Type	CP-2494
cp_jr57	Add missing references to retired definitions	CP-2495
cp_mo	Clarify Concatenation Shared Functional Groups and Instance Creation Date	CP-2496
cp_rjh57	Clarify Normalized Support terminology	CP-2497
cp_sw2	Correct code attribute names	<i>Rejected</i>
cp_czm_adjustDesc	Adjust Description According Figure for 3D Ultrasound Source and Derived Images	CP-2498

cp_czm_adjustOP	Adjust Ophthalmic Photography Image Module Attribute Description for Referenced Image Sequence	CP-2499
cp_jm28	Correct inconsistent Final State Requirement	CP-2500
cp_kod_add	Add More Fetal Cardiac Codes	CP-2501
cp_RT264	Add Clinical Fraction Number to RT Treatment Summary Record Module	CP-2502
cp_RT265	Add Dose Value to Dose Calibration Conditions	CP-2503
cp_RT266	Add Scan Spot Gantry and Patient Support Angle to Ion Beam Record	CP-2504
cp_RT253	Unified Procedure Step and Machine Verification Services Clarifications	CP-2505
cp_dac674	Length limit of Detector ID	CP-2506
cp_sjn	Add Key Object Selection for withdrawal of rejection term to CID7010	CP-2507
cp-sw-correct	Correct Waveform Module attribute descriptions	CP-2508
cp_rjh58	Clarify that X eliminates sequence	CP-2509
CP_hs_Pixel	Add reference imaged without frame of reference to parametric map	CP-2510
CP_hs_parametric	Add labeled pixels to parametric map	Rejected

**b. Assigned CPs**

The following CPs were reviewed and decisions reached as shown. Note: Please upload the VP version (candidates for the March 2025 Voting Packet/CPack-131) to the [March 2025 meeting folder](#).

CP #	Title	Decision
CP-1982	Add mechanism for handling sensitive images	Remains assigned
CP-2395	UPS-RS - Add Requesting AE Path Parameter	Remains assigned
CP-2427	Add RT specific plan approvals	Moved to March 2025 Voting Packet
CP-2428	Add Algorithm Identification to RT Dose Module	Remains assigned
CP-2445	Add State of Definition to RT Structure Set	Moved to March 2025 Voting Packet
CP-2449	Add Description to TID 10002 Row 18	Remains assigned

CP-2457	Add more neurodegenerative PET radiopharmaceuticals	Moved to March 2025 Voting Packet
CP-2458	De-identification of Group 0004 data elements and DICOMDIR	Moved to March 2025 Voting Packet
CP-2459	More data elements to de-identify	Moved to March 2025 Voting Packet
CP-2460	Add more CID 4031 Common Anatomic Region concepts	Moved to March 2025 Voting Packet
<i>CP-2461</i>	<i>Add rows to intended use of dose calibration in RDSR</i>	<i>Remains assigned</i>
<i>CP-2462</i>	<i>Harmonize definition of MPPS Retrieve SOP Class with MPPS SOP Class</i>	<i>Remains assigned</i>
<i>CP-2464</i>	<i>Clarify empty Value in multi-valued Data Element</i>	<i>Remains assigned</i>
<i>CP-2465</i>	<i>Unclear constraints on measurement units for Real World Value Mapping</i>	<i>Remains assigned</i>
CP-2466	Remove footnotes from Relationship Content Constraints tables	Moved to March 2025 Voting Packet
CP-2468	Clarification of UN Usage in RT Objects	Moved to March 2025 Voting Packet
<i>CP-2469</i>	<i>Salvage Details in RT Treatment Record and RT Ion Treatment Record</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 Pixel Aligned Parametric Map (WG-09)

- Harry Solomon initially intended to present a draft supplement on Pixel Aligned Parametric Map (pursuant to Work Item 2023-11-A) for a First Read. However, as the draft developed, he determined that splitting it into two separate CPs would be more effective than proceeding with a full Supplement. The group reviewed the two draft CPs, which were subsequently discussed in greater detail with David Clunie during the

Thursday CP Session.

**b. Supplement 233: Patient Model Gender Enhancements (WG-06)**

- Rob Horn presented Supplement 233: Patient Model Gender Enhancements in preparation for Letter Ballot. The group reviewed the public comments received, draft document, PowerPoint, and Supplement Checklist.
- The current draft is available here: <https://github.com/rjhorniii/dicom-sup233-wip>
- *MOTION: Wim Corbijn moved to approve Supplement 233 for Letter Ballot as amended and Björn Nolte seconded the motion. The motion was approved without objection or abstention.*
- **DECISION:** Supplement 233: Patient Model Gender Enhancements was approved for Letter Ballot amended as discussed.

**c. Supplement 236: Waveform Presentation State (WG-32)**

- Silvia Winkler presented Supplement 236: Waveform Presentation State in preparation for Final Text. The group reviewed the supplement draft, PowerPoint, and the Supplement Checklist.
- *MOTION: Wim Corbijn moved to approve Supplement 236 for Final Text as amended and Björn Nolte seconded the motion. The motion was approved without objection or abstention.*
- **DECISION:** Supplement 236: Waveform Presentation State was approved for Final Text amended as discussed.

**d. Supplement 241: Structural Heart Procedural SR Template (WG-01/WG-12)**

- Steve Nichols presented Supplement 241: Structural Heart SR Template for in preparation for Letter Ballot. The PowerPoint, draft supplement, and Supplement Checklist were reviewed.
- *MOTION: Kevin O'Donnell moved to approve Supplement 241 for Letter Ballot amended as discussed. The motion was seconded by Björn Nolte. The motion was approved without objection or abstention.*
- **DECISION:** Supplement 241: Structural Heart SR Template was approved for Letter Ballot amended as discussed.

**e. Supplement 244: Frame Deflate Transfer Syntax (WG-04)**

- David Clunie presented Supplement 244: Frame Deflate Transfer Syntax in preparation for Final Text. The PowerPoint, draft document, Letter Ballot comments, and Supplement Checklist were reviewed.
- *MOTION: Kevin O'Donnell moved to approve Supplement 244 for Final Text as amended and Björn Nolte seconded the motion. The motion was approved without objection or abstention.*
- **DECISION:** Supplement 244: Frame Deflate Transfer Syntax was approved for Final Text amended as discussed.

f. **Supplement 245: RDSR Informative Annex (WG-28)**

- Nick Bevins and Francisco Sureda presented Supplement 245: RDSR Informative Annex in preparation for Public Comment. The group reviewed changes since their last visit in November 2024.
- Supplement 245 will return to WG-06 for one, 2-hour slot in March 2025.

g. **Supplement 246: DICOMweb Modality Services (WG-27)**

- Jeroen Medema and Dieter Krotz presented Supplement 246: DICOMweb Modality Services in preparation for Public Comment. The draft document and accompanying PowerPoint were reviewed. It has been decided not to base these services on UPS-RS, but create new modality workflow services instead.
- Supplement 246 will return to WG-06 in March 2025.

h. **Supplement 247: Eyecare Measurement Templates (WG-09)**

- Harry Solomon presented Supplement 247: Eyecare Measurement Templates in preparation for Public Comment. The draft document, PowerPoint, and Supplement Checklist were reviewed.
- *MOTION: Rob Horn moved to approve Supplement 247 for Public Comment as amended and Steve Nichols seconded the motion. The motion was approved without objection or abstention.*
- **DECISION:** Supplement 247: Eyecare Measurement Templates was approved for Public Comment amended as discussed.

5. **WG-20/HL7 Report**

- a. Jonathan Whitby and Brian Bialecki presented brief updates from the DICOM WG-20/HL7 II group. For details on this report, their PowerPoint can be accessed in this meeting's folder on the FTP.
- b. Confluence Page: <https://confluence.hl7.org/display/IMIN/>

- c. Meeting cadence: January (virtual only), May (in-person only) and September (in-person only). They also hold biweekly teleconferences.
  - Their next meeting will take place on January 27-31, 2025.
- d. The group is planning on adding a third Co-Chair, Ana Kostadinovska (Philips), which is allowable in HL7 and the concept was approved by the DICOM Standards Committee at their last meeting on December 5, 2024. Nomination is currently open and the result will be formalized at the upcoming virtual meeting.
- e. FHIR Release 6 is aiming for 2026. The intent is for almost all resources to be normative in this release. WG-20/HL7 II is aiming for both ImagingStudy and ImagingSelection IGs to be normative in R6.
- f. The DICOM SR to FHIR Observation Mapping IG
  - Ballot comments are being worked through.
  - The final text version is likely to wait on FHIR R6 to include ImagingSelection improvements.
- g. Imaging ServiceRequest Profile
  - The Project Scope Statement (<https://jira.hl7.org/browse/PSS-2135>).
  - This was reviewed by Orders and Observations WG and more work to follow DICOM SR IG STUI publication.
- h. Radiation Dose Report Summary IG Update: All requested AAPM changes have been agreed upon and applied. Still working with AAPM to confirm changes and withdraw their negative vote.

## 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. Note to authors: please submit earlier if you want any time to resolve comments prior to the next WG-06 meeting.
  - Submit **Letter Ballot** drafts to Shayna by **January 27, 2025**.
  - Submit **Public Comment** drafts to Shayna by **February 3, 2025**.

## 7. WG-06 Meeting Schedule

- a. **2025 meetings:**
  - March 24-28, 2025: NEMA HQ
  - June 16-20, 2025: Europe – location TBD
  - September 1-5, 2025: NEMA HQ
  - November 3-7, 2025: NEMA HQ

- b. As the January meeting in San Francisco was even less convenient for European participants than the usual Eastern Time Zone, the group agreed that one 2025 meeting will still take place in Europe. The June meeting was preferred for a meeting in Europe.
- c. **Action:** Björn, Shayna, and Laura will investigate the following possibilities: Prague (Shayna), Barcelona (Björn), or The Hague/Amphia/Breda (Laura).

**8. Old/New Business**

- None at this time.

**9. Adjournment**

- a. The meeting was adjourned at 12:00pm on Friday, January 17, 2025.

**10. Meeting Participants**

Voting Members Present							
Company/ Organization	Represented by		Mon	Tue	Wed	Thu	Fri
ACR	Brian Bialecki	Voting			X		
Agfa HealthCare	Laura Peters	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	
Carl Zeiss Meditec	David Flade	Alt. Voting	X				X
Cincinnati Children's Hospital	Stephen Clark	Voting	X	X	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
NEMA/MITA	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
<b>Voting Members Absent</b>							
<b>Company/ Organization</b>	<b>Represented by</b>		<b>Mon</b>	<b>Tue</b>	<b>Wed</b>	<b>Thu</b>	<b>Fri</b>
ACR	Brian Bialecki	Voting	X	X		X	X
Agfa HealthCare	Laura Peters	Voting					X
Carl Zeiss Meditec	Detlev Hohmeier	Voting	X		X		X
PixelMed Publishing	David Clunie	Voting	X				X
<b>Observers Present</b>							
<b>Company/ Organization</b>	<b>Represented by</b>		<b>Mon</b>	<b>Tue</b>	<b>Wed</b>	<b>Thu</b>	<b>Fri</b>
AAPM	Nick Bevins	Obs.	X			X	
AAPM	Jim Percy	Obs.		X	X		
American Academy of Ophthalmology	Harry Solomon	Obs.	X			X	X
Brainlab	Christof Schadt	Obs.		X	X		
Canon Medical Systems USA	Jonathan Whitby	Obs.			X		
Case Western Reserve University	Toni Magni	Obs.				X	
CSImed	Uwe Tronnier	Obs.		X	X	X	X

Dental Radiology QA	Peter Mah	Obs.				X	
DICOM Usergroup Austria	Silvia Winkler	Obs.		X	X		
GE HealthCare	Francisco Sureda	Obs.				X	
JIRA	Kinoshita Go	Obs.	X	X	X	X	X
Medical Communications	Wolfgang Schultz	Obs.	X				
Philips	Jeroen Medema	Obs.		X		X	
Private Practice	Holly Moon	Obs.				X	
Self	Heinz Blendinger	Obs.		X	X		
Self	Ulrich Busch	Obs.			X		
Siemens Healthineers	Dieter Krotz	Obs.		X		X	
Siemens Healthineers	Ingo Wilkening	Obs.	X	X	X		
Stanford Health Care	Godwin Tseng	Obs.	X				
University of Maryland	Andrew Casertano	Obs.				X	

Prepared and submitted by Shayna Knazik  
Reviewed by Karin Moore 03/27/2025