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**MINUTES**  
**DICOM WG-06 Base Standard**  
**November 9-13, 2020**  
**Remote Meeting Replacing F2F**

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

DICOM Secretariat: Shayna Knazik, MITA/NEMA

Voting Members Present	Represented by		Monday	Tuesday	Wednes- day	Thursday	Friday
			11/9	11/10	11/11	11/12	11/13
ACR	Brian Bialecki	Voting	X	X	X	X	
Agfa	Paul Seifert	Voting	X	X	X	X	
Canon	Kevin O'Donnell	Voting	X	X	X	X	X
Fairhaven Technologies	Robert Horn	Voting	X	X	X	X	X
GE Healthcare	Steven 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	X
Siemens Healthineers	Björn Nolte	Voting	X	X	X	X	X

Voting Members Absent							
ACR	Brian Bialecki	Voting					X
Agfa	Paul Seifert	Voting					X
Others Present (Alternate Voting Members, Observers, Guests)							
Company/ Organization	Represented by		Monday 11/9	Tuesday 11/10	Wednes- day 11/11	Thursday 11/12	Friday 11/13
AAPM	Nick Bevins	Obs.			X	X	
AAPM	Donald Peck	Obs.		X	X	X	
Agfa	Bruno Laffin	Obs.				X	
Agfa	Bill Wallace	Obs.		X			
Ambra Health	Daniel Ostrow	Obs.			X		
Argentix	Elliot Silver	Obs.	X	X	X	X	
Bracco Diagnostics Inc.	Siju Koshy	Obs.	X				
Brainlab	Christof Schadt	Obs.	X	X			X
CSImed	Uwe Tronnier	Obs.		X			X
DICOM Usergroup Austria	Silvia Winkler	Obs.		X			X
Elekta	Jim Percy	Obs.	X				X
European Federation of Organisations for Medical Physics	Alberto Torresin	Obs.			X		
GE Healthcare	Herve Hoehn	Obs.				X	X
GE Healthcare	Chris Lindop	Obs.	X				
GE Healthcare	Francisco Sureda	Obs.		X		X	

Grafmedia	Pantelis Georgiadis	Obs.			X		
Harvard University	Andrey Fedorov	Obs.	X			X	
Healthcare Tech Solutions	Keith Eklund	Obs.			X		
KaVo Kerr Group	Chris Bope	Obs.					
Laitek	Fred Behlen	Obs.		X	X		
Laitek	Harry Solomon	Obs.	X	X	X		X
Individual	Majid Bagheri	Obs.	X				
Individual	Ulrich Busch	Obs.	X		X		X
Individual	Erin Macdonald	Obs.			X		
Individual	Stephen Vastagh	Obs.			X	X	
Mayo Clinic	Kenneth Persons	Obs.	X				
MITA/NEMA	Carolyn Hull	Alt. Voting	X			X	
Philips India	Yogalakshmi Selvarajan	Obs.				X	
Siemens Healthineers	Thomas Mangold	Obs.		X		X	
SIIM	Matt Bishop	Obs.			X		
SIIM	Cheryl Carey	Obs.			X		
SIIM	Anna Zawacki	Obs.			X		
Softtek	Luiza Kowalczyk	Obs.			X		
University of Queensland	Liam Caffery	Obs.		X	X		
Vital Images/Canon	Jonathan Whitby	Obs.	X				

## 1. Administrative

- a. The meeting was called to order. A quorum was present.
- b. The agenda was reviewed and approved.
- c. DICOM Antitrust and Patent policies were reviewed.

d. The minutes from the August/September 2020 WG-06 meeting were reviewed and approved.

## 2. Report on Letter Ballots

### a. CPack-108 (September Voting Package)

- i. The official ballot was distributed to voting members of the DICOM Standard Committee on September 22, 2020 and included the following CPs:
- ii. CPACK108 approved for final text

CP #	Title
<del>1614</del>	<del>Add a bulkdata subresource to study, series and instance WADO-RS</del>
<del>2006</del>	<del>Unattached Contours</del>
2017	Update PS3.15 Table E.3.10-1 for list of Philips safe private elements
2021	Clarify Implementation Version Name Character Repertoire
2022	Correct ratio units
2024	De-identify Scheduled Procedure Step ID
2025	Require Whole Slide OVERVIEW images to be single frame
2026	Clarify private block assignment
2027	Correct OCT En Face figure legends
2029	Add abdominopelvic vascular section
2030	Include additional Radiopharmaceuticals and Isotopes utilized in NM
2031	Add Frame of Reference Module to Surface Scan Mesh and Point Cloud IODs
2035	Reference RT Structure Sets for Planar and Volumetric ROIs in DICOM SR TID 1500
2036	Add optional Source Concept Name for otherwise anonymous image, waveform and coordinate Content Items in SR
2037	Inner and Outer Contours of RT Structure Set ROIs
2038	Add RT Attributes to Confidentiality Profiles
2039	Enhanced Specification of the Beam Limiting Device Offset
<del>2040</del>	<del>Fix DICOMweb DICOM Media Types</del>
2041	Add Table Value Type for DICOM SR
2042	Add SV and UV Selector Attributes

DSC Ballot	Approve	Disapprove	Abstain	Comments
CPack-108	12	1	2	5

## 3. Report on Correction Proposals

### a. CPack-108

2010	Omit Additional X-Ray Source Sequence	CP-2010 is not ready for LB until fixed by Till/WG-21. The extracted remnants of CP-2010 were made into a new CP for Jan 2021. This was assigned as CP-2097: New ImageType(s) for Multi-energy CT Acquisition: ENERGY_VRPROP_WT.
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- b. **CPack-108 - DECISION:** CPack-108 was approved for Final Text as amended, with the exception of CP-1614, CP-2006, and CP-2040 (17 FTs).
- i. Not approved for Final Text:
    - 1. CP-1614 – Add a bulkdata subresource to study, series and instance WADO-RS
    - 2. CP-2040 – Fix DICOMweb DICOM Media Types
      - a. **Action:** Kevin will send suggested revisions back to WG-27 for rework.
    - 3. CP-2006 – Unattached Contours
      - a. **Action:** WG-07 to rework and clarify rationale and use cases and possible renaming of attribute.
      - b. **Action:** Shayna to schedule a call with WG-07 and WG-06 to discuss CP-2006 in December.
- c. **CPack 109 - DECISION:** CPack-109 was approved for Letter Ballot Voting as amended (24 LBs).

CP #	Title
1916	The grammar for the “quality” Query Parameter is wrong
1917	Clarify Character Set handling
1975	Active image region overlay
2014	Correct condition in TID 11020 row 11
2023	Clarify missing numeric measurement value in SR
2043	Update code for Procedure DateTime
2044	Clarify spatial extent and inclusion of slices in Volumetric ROIs in SR
2045	Use Content Item with Modifier Macro in Acquisition Context
2046	Extend CID 7601 Head and Neck Cancer Anatomic Sites
2047	Add Couinaud Liver Segments
2048	Harmonize Accession Number descriptions
2049	Add Biliary Tract Code
2050	More Deidentification Data Elements
2051	Add more prostate anatomic concepts
2053	Mammography CAD SR Value Types
2054	Add role to 'shall also support'
2055	Improve the description of service class specification
2056	Replace deprecated LOINC codes, correcting typos, new fetal codes.
2057	Device Alternate Identifier has wrong conditions
2058	Enhance specification of Base Beam Coordinate System
2061	Factor out Spacing Between Slices into Image Plane Module
2063	Add code for geometric centerline
2065	Update Part 10 definitions
2066	Part 18 lacks DICOM Communication Model

d. **Assigned CPs**

Note: Please upload the VP version (candidates for the January 2021 Voting Package/CPack-110) in the [January 2021 VP mtg folder](#).

CP #	Title	Decision
1227	Fix Estimated Dose Saving attribute	Moved to January 2021 Voting Packet
1926	Remove Source Image Region from error conditions in 9.5.2.3	Moved to January 2021 Voting Packet
1927	Patient Sex and Gender clarifications	Remains assigned – waiting for HL7 work
1990	Clarify Semantics of CID 62 Imaging Agent Administration Phase Type concepts	Moved to January 2021 Voting Packet
2016	Handling of injector events for entering / resuming from a programmed / manual hold state could not be protocolled within the Injector Event TID 11022	Moved to January 2021 Voting Packet
2032	Casing of Bulkdata URI element name inconsistent for DICOM XML	Moved to January 2021 Voting Packet
2059	Definition of an Acquisition Context Template for Routine Scalp EEG	Moved to January 2021 Voting Packet
2060	Use of different Private Creators in different Data Sets (Sequence Items) in the same Instance	Moved to January 2021 Voting Packet
2067	Add more specific tumor graft histologic types and sites	Moved to January 2021 Voting Packet
2070	GSPS can only reference monochrome images	Moved to January 2021 Voting Packet
2073	Clarify requirements for TLS in BCP195 Profile	Moved to January 2021 Voting Packet
2074	Incorrect Action Code for Treatment Machine Name	Moved to January 2021 Voting Packet
2075	RT Radiation Record Set Corrections	Moved to January 2021 Voting Packet
2078	Update DICOM to reflect changes in IHTSDO SNOMED CT-DICOM Subset for JUL 2020 INT Release	Moved to January 2021 Voting Packet

e. New CPs

Submitted file name	Title	New CP #
Cp_RT161_01	Allow a Brachy Applicator to reference an ROI	CP-2079 (Feedback to WG-07: distinguish between two ROI's before January meeting)
Cp_RT164_01	RT Accessory Device Clarifications	CP-2080
CP_hs_Coercion	Clarify Instance Coercion DateTime	CP-2081
cp_dac564	Add acquisition codes and template for fluorescence and immunohistochemistry in microscopy	CP-2082
cp_dac_565	Add uncompressed encapsulated Transfer Syntax for encoding very large pixel data sets	CP-2083
cp_dac566	Allow CONTAINER HAS OBS CONTEXT children of CONTAINERS	CP-2084
cp_jr17	Revise description of Attribute Modality in Scheduled Procedure Step Module	CP-2085
cp_dac567	Relax requirement for Slice Thickness for Whole Slide Microscopy LABEL images	CP-2086
cp_dac568	Institution Name may be present otherwise in Person Identification Macro	CP-2087

cp_dac569	More modification and interpretation related Attributes require de-identification	CP-2088
cp_dac570	Correct definitions of image quality concepts	CP-2089
Factored out of Sup220	Prostate Biopsy Pathology Results	CP-2090
HB_Correct_DT	Correct Medication Concept Name definitions (DateTime is not an Identifier)	CP-2091
cp_rjh48	Update MAC Algorithms	CP-2092
cp_kod_MoveProtocolReference	Move CT Protocol Reference to Image Level	CP-2093
Cp_kod_MeasurementReport	Add Measurement Report Image Library Description	CP-2094
Kod_Echo	Add "Measurements" to various Echo CIDs	CP-2095
CP_hs_Equipment	Equipment Module for Non-Patient Objects	CP-2096
Extracted from remnants of CP-2010	New ImageType(s) for Multi-energy CT Acquisition: ENERGY_VRPROP_WT	CP-2097

#### 4. Report on Supplements

NOTE: All documents are uploaded on the ftp server in the directory of WG-06. Please refer to documents for more technical details.

##### a. Supplement XXX: Whole Slide Microscopy Bulk Annotations (WG-26)

- i. David Clunie led the group through a first read for a new Supplement on Whole Slide Images (WSI). The group requested two, 2-hour timeslots at the WG-06 meeting in January 2021.
- ii. **DECISION:** Approved as Supplement 222.

##### b. Supplement XXX: Archive Migration (WG-33)

- i. Harry Solomon led the group through a first read for a new Supplement on Archive Inventory. The group requested 6 hours if possible at the January 2021 meeting.
- ii. **DECISION:** Approved as Supplement 223.

##### a. Sup209: DICOM Conformance Statement (WG-31)

- i. Antje Schroeder first led the group through changes to the document since its last visit to WG-06. Then the document was reviewed from start to end. WG-33 will incorporate the suggested changes in preparation for the next step which is Public Comment. The group requested two, 2-hour slots for January 2021.

##### b. Sup211: DICOMweb Retrieve via ZIP (WG-27)

- i. The group performed a line-by-line review of Supplement 211 (version 21 of the document) at the last meeting, but wasn't able to get the security section finalized before the deadline. The next step for this Supplement is Letter Ballot.
- ii. **DECISION:** Approved Sup211 as amended for Letter Ballot.

- c. **Sup212: XA Protocol Storage (WG-02)**
  - i. Francisco Sureda led the group through a review of the Supplement. All open issues have been closed. WG-02 requested two, 2-hour slots, but they may only need one if the schedule is tight.
  - ii. **DECISION:** Approved Sup212 as amended for Letter Ballot.
  
- d. **Sup213: 2G-RT Enhanced RT Image and Acquisition Instruction (WG-07)**
  - i. Ulrich Busch, Jim Percy and Christof Schadt led the group in a review of Supplement 213 (version 11 of the document). The next step for Sup213 is Public Comment. WG-07 requested two, 2-hour slots for the January 2021 WG-06 meeting.
  - ii. **Action:** Uli to work on and upload a PowerPoint for the January meeting (including what obligations the receiver has).
  
- e. **Sup214: Cone Beam CT in Radiation Dose SR (WG-28)**
  - i. Nick Bevins and Donald Peck led the group through a review of the Public Comments received on Supplement 214 (version 46 of the document). WG-28 will revise the Supplement 214 and it will return to WG-06 in January in preparation for Letter Ballot. The group requested one, 2-hour slot for the January WG-06 meeting.
  
- f. **Sup220: MR Prostate Imaging SR (WG-08)**
  - i. Andrey Fedorov led the group through a review of the Public Comments received on Sup220. WG-08 requested two, 2-hour slots at the January WG-06 meeting.
  
- b. **Sup221: Dermoscopy (WG-19)**
  - i. Liam Caffery led the group through a final read of the Supplement. The group approved Sup221 for Final Text as amended and commended WG-19 on their work.
  - ii. **DECISION:** approve for Final Text as amended.

## 5. Reports from stakeholders

- a. **Update from WG-20 and HL7 Imaging Integration (Whitby/Lindop)**
  - i. WG-20/HL7 holds [teleconferences](#) roughly every two weeks. Their next meeting will take place in January 2021. They will also hold a joint meeting with WG-10 in January 2021.
  - ii. Their current work includes:
    1. Co-sponsoring 1392-FHIRcast: still working through publication process
    2. FHIR ImagingStudy resource: organizing testing through a FHIR Connectathon. The group recommended some potential partners/cosponsors.
    3. DocumentReference extension for imaging: will report on this item at the next WG-06 meeting in January 2021.
    4. Profiling imaging order workflow with the goal of a potential IG and/or IHE profile: the group will meet with Orders and Observations (OO) to discuss gaps.
      - a. **Action:** WG-20 to raise the encounter modelling gap with OO.

5. Mapping between SR content and FHIR with the potential outcome of a FHIR addition to Part 20: so far they have reviewed the basic idea with OO and spoke with WG-02 and WG-28 on some dose specifications.
- iii. For more information, visit: <http://www.hl7.org/Special/committees/imagemgt/>

## 6. Deadlines for action items from this meeting

- a. Items ready for Public Comment must be submitted to Shayna by November 23<sup>rd</sup> in order to have 45 days for the comment period before the next WG-06 meeting in January 2021.
- b. Items ready for Letter Ballot must be submitted to Shayna by November 16<sup>th</sup> in order to meet the 49 days requirement (plus 1 week buffer for legal review) before the next WG-06 meeting in January 2021.

## 7. Upcoming WG-06 Meetings

### a. 2021 meetings –

- i. January 11-15, 2021  
**Action:** Shayna to send out calendar appointment for January meeting  
**Action:** Shayna to add cancelled Supplements 182 and 196 to DSC agenda.
- ii. March 22-26, 2021
- iii. June 21-25, 2021
- iv. August 30-September 3, 2021
- v. November 8-12, 2021

### b. Next Meeting Agenda

- i. The agenda plan is posted in the January 2021 meeting folder.
- c. FYI: the next DICOM Standard Committee meeting will take place on [December 4, 2020 from 9am-1pm US ET.](#)

## 8. Adjournment

- a. The November WG-06 virtual meeting was called to order at 9:00AM US ET on Monday, November 11, 2020.
- b. The November WG-06 virtual meeting was adjourned at 1:30PM US ET on Friday, November 15, 2020.

Prepared and submitted by Shayna Knazik  
Reviewed by Counsel 12/27/20