

MINUTES
DICOM WG-06 Base Standard
August 31-September 4, 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
			8/31	9/1	9/2	9/3	9/4
ACR	Brian Bialecki	Voting	X	X	X	X	X
Agfa	Paul Seifert	Voting	X	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
Siemens Healthineers	Björn Nolte	Voting	X	X	X	X	X
Voting Members Absent							
PixelMed Publishing	David Clunie	Voting				X	
Others Present (Alternate Voting Members, Observers, Guests)							
Company/ Organization	Represented by		Monday 8/31	Tuesday 9/1	Wednes- day 9/2	Thursday 9/3	Friday 9/4
AAPM	Nick Bevins	Obs.			X		X
AAPM	Donald Peck	Obs.		X	X		X
AAPM/ Univ of Arkansas for Medical Sciences	Larry Tarbox	Obs.	X				
American College of Cardiology	Bruce Bray	Obs.			X		
Agfa	Bill Wallace	Obs.	X	X	X	X	
Argentix	Elliot Silver	Obs.					
Brainlab	Christof Schadt	Obs.	X	X	X	X	X
CSImed	Uwe Tronnier	Obs.			X		X
Elekta	Jim Percy	Obs.	X	X	X	X	
GE Healthcare	Francisco Sureda	Obs.		X		X	
KaVo Kerr Group	Chris Bope	Obs.			X		
Laitek	Harry Solomon	Obs.	X		X		X
Individual	Ulrich Busch	Obs.	X	X		X	X
Individual	Stephen Vastagh	Obs.		X	X		
Mayo Clinic	Kenneth Persons	Obs.	X				
Vital Images	Jonathan Whitby	Obs.				X	

1. Administrative

- a. Welcome—The meeting was called to order. A quorum was present.
- b. Agenda—The agenda was reviewed and approved.
- c. Antitrust/Patent Statement—The NEMA antitrust and DICOM patent statement were reviewed.
- d. Review of Minutes—The minutes from the June 2020 WG-06 meeting were approved.

2. Report on Letter Ballots

a. CPack-107 (June Voting Package)

- i. The official ballot was distributed to voting members of the DICOM Standard Committee on July 16, 2020 and included the following CPs:

CP #	Title
1881	Add IEC 62985 Size Specific Dose Estimation
1951	Add ultrasound Probe ID
1974	Overlay usage with Multi-frame Image unclear
1994	Primary Anatomic Structure Sequence has no CID defined
1995	Add keywords for standard UIDs
1996	Correct duplicate assignment of UID to ICD-11 already used for Dublin Core
1998	Relax unnecessary TID 1500 requirements to simplify for some AI/ML use cases
1999	Non-measurement 2D and 3D coordinate and image references
2000	Angle measurement codes and templates
2001	Add to general volume calculation methods
2002	Add to well known brain atlas frames of reference
2003	Add missing item count in Multi-energy CT Characteristics Macro Derivation Algorithm Sequence
2004	Make Frame Anatomy in Parametric Map Optional
2005	Deformable Registration Codes
2007	Referenced Dose Reference UID is missing from Referenced Brachy Application Setup Sequence
2008	Add Synchronization Module to CT IOD
2009	Update use of may to shall for mandatory usage
2010	New ImageType(s) for Multi-energy CT Acquisition: ENERGY_VRPROP_WT
2011	TID 10015. CT Dose Check Details: Alternative dose alert behavior according NEMA XR-25 (2019)
2012	Add Comments on Radiation Dose (0040,0310) to PS 3.15 Table E.1-1
2013	Replace DCM code for Soft Tissue with SNOMED code
2018	Description of CTDivol is not complete
2019	Correct inconsistencies from Sup188 (Attribute presence, Rescale Type Definition (%))

<i>DSC Ballot</i>	<i>Approve</i>	<i>Disapprove</i>	<i>Abstain</i>	<i>Comments</i>
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CPack-107	12	1	1	4
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3. Report on Correction Proposals

- a. **CPack-107 - DECISION:** CPack-107 was approved for Final Text, with the exception of CP-2010 (22 FTs).
 - i. Not approved for Final Text: CP-2010 on New ImageType(s) for Multi-energy CT Acquisition: ENERGY_VRPROP_WT
 - ii. **Action:** Shayna to send this CP back to WG-21 to rework.

2010	New ImageType(s) for Multi-energy CT Acquisition: ENERGY_VRPROP_WT
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- b. **CPack 108 - DECISION:** CPack-108 was approved for Letter Ballot Voting as amended (20 LBs).

CP #	Title
1614	Add a bulkdata subresource to study, series and instance WADO-RS
2006	Unattached Contours
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
2040	Fix DICOMweb DICOM Media Types
2041	Add Table Value Type for DICOM SR
2042	Add SV and UV Selector Attributes

c. Assigned CPs

Note: Please upload the VP version (candidates for the November Voting Package/CPack-109) in the [November VP mtg folder](#).

CP #	Title	Decision
1196	Add phantom-specific Total DLP Values to allow for Head and Body in same RDSR scope of accumulation	Remains assigned – sent to WG-21 & WG-28 for discussion

1950	Add measurement codes for Cardiac Strain	Remains assigned
1975	Active image region overlay	Moved to November 2020 Voting Packet
1990	Clarify Semantics of CID 62 Imaging Agent Administration Phase Type concepts	Remains assigned
2014	Correct condition in TID 11020 row 11	Moved to November 2020 Voting Packet
2015	Change UDI specification of Device identification from mandatory to optional	Cancelled
2016	Handling of injector events for entering / resuming from a programmed / manual hold state could not be protocolled within the Injector Event TID 11022	Remains assigned
2023	Clarify missing numeric measurement value in SR	Moved to November 2020 Voting Packet
2043	Update code for Procedure DateTime	Moved to November 2020 Voting Packet

d. New CPs

Submitted file name	Title	New CP #
Cp_dac562	Add more specific tumor graft histologic types and sites	CP-2067
Cp_jfp41	PS3.18 Re-Documentation Warning Messages	CP-2068
Cp_jm11	DICOM Communication Model needs to be extended with RTC	CP-2069
Cp_jr15	GSPS can only reference monochrome images	CP-2070
Cp_jr16	Clarify that Default Transfer Syntax can be rejected by an Association Acceptor	CP-2071
Cp_REQ	PS3.18 Minor Errata Search Transaction Resources	CP-2072
Cp_rjh47	Clarify requirements for TLS in BCP195 Profile	CP-2073
Cp_RT158_01	Incorrect action code for Treatment Machine Name	CP-2074
Cp_RT159_01	Add properties to Key Object Selection instance list	Rejected - KOS IOD cannot be modified.
Cp_RT160_01	RT Radiation Record Set Corrections	CP-2075
Cp_CFINDDateTimeRangeSearchAmbiguity	C-FIND DateTime range searches using timezone offsets are sometimes ambiguous	CP-2076
Cp_Description of De-identification attributes inconsistent	Description of De-identification attributes inconsistent	CP-2077
Cp_dac563	Update DICOM to reflect changes in IHTSDO SNOMED CT-DICOM Subset for JUL 2020 INT Release	CP-2078

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. **Sup160: 2G RT Patient Positioning & Workflow (WG-07)**
 - i. Ulrich Busch, Jim Percy and Christof Schadt led the group in a line-by-line review of Supplement 160 (version 29 of the document). The next step for Sup160 is Public Comment.
 - ii. **DECISION:** Approved for Public Comment.

- b. **Sup210: Paradigm Protocol Storage (WG-16)**
 - i. Wim Corbijn provided a review of Supplement 210's PowerPoint and Data Model spreadsheet. After discussion, the group agreed that WG-16 is on the right track. Wim plans to request another slot at the November WG-06 meeting.

- c. **Sup211: DICOMweb Retrieve via ZIP (WG-27)**
 - i. The group performed a line-by-line review of Supplement 211 (version 21 of the document). The next step for this Supplement is Letter Ballot. WG-06 offered an additional teleconference for WG-27 so that a final, quick line-by-line review can be done and the Supplement can be sent for Letter Ballot by the deadline of September 14th.
 - **Action:** Shayna to send a doodle poll for Thursday and Friday for a call to finalize Sup211 for Letter Ballot.
 - ii. WG-06 met on September 10th call to finalize the Supplement since it was so close to being ready at the end of the WG-06 meeting.
 - iii. **DECISION:** The group voted to approve Sup211 for Letter Ballot pending final amendments and two additional votes from voting members who were unable to attend the call.
 - **Action:** Shayna to email David and Wim for their votes.

- d. **Sup212: XA Protocol Storage (WG-02)**
 - i. No public comments were received so the content of Supplement 212 has not changed since its last visit to WG-06. The group revisited the PowerPoint and remaining open issues and assigned some homework based on comments from the group.
 - ii. WG-02 will work on the changes requested by WG-06 and plans to request two slots in the November WG-06 meeting, in preparation for Letter Ballot.

- e. **Sup213: 2G ET 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). However, the next step for Sup213 is Public Comment, and WG-07 will request two slots for this during the November WG-06 meeting.

- f. **Sup214: Cone Beam CT in RDSR (WG-28)**
 - i. Nick Bevins and Donald Peck led the group through a review of the Public Comments received on Supplement 214 (version 43 of the document). WG-28 will revise the

Supplement 214 and it will return to WG-06 in November in preparation for Letter Ballot.

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 virtual meeting is September 20-24, 2020.
- ii. Their current work includes: Co-sponsoring 1392-FHIRcast; FHIR ImagingStudy resource; DocumentReference extension for imaging; Profiling imaging order workflow with the goal of a potential IG and/or IHE profile; and Mapping between SR content and FHIR with the potential outcome of a FHIR addition to Part 20.
- iii. For more information, visit:
 1. <http://www.hl7.org/Special/committees/imagemgt/>
 2. <https://www.dicomstandard.org/wgs/wg-20>

6. Deadlines for action items from this meeting

- a. Items ready for Public Comment must be submitted to WG-06 by September 22nd in order to have 45 days for the comment period before the next WG-06 meeting in November.
- b. Items ready for Letter Ballot must be submitted to WG-06 by September 14th in order to meet the 49 days requirement (plus 1 week buffer for legal review) before the next WG-06 meeting in November.

7. Upcoming WG-06 Meetings

a. 2020 meetings

- i. Next meeting: November 9-13, 2020. The agenda plan is posted in the November 2020 meeting folder.
Action: Shayna to send out calendar appointment for November meeting
Action: Shayna to note to Carolyn to add cancelled Supplements 182 and 196 to DSC agenda.

b. 2021 meetings – Alternate time zones?

- i. January 11-15, 2021
- ii. March 22-26, 2021
- iii. June 21-25, 2021
- iv. August 30-September 3, 2021
- v. November 8-12, 2021

- c. FYI: the next DICOM Standard Committee meeting will take place on [December 4, 2020 from 9am-1pm US ET.](#)

8. Debriefing

- a. Creation of a checklist of what to review/remember when discussing Supplements: open issues, PowerPoint, comments like TBD or to-do, any security issues?, SOP class UID list in Part 2 and Part 6.

Action: add this item to the November agenda for consideration.

9. Adjournment

- a. The August/September WG-06 virtual meeting was called to order at 9:00AM US ET on Monday, August 31st.
- b. The August/September WG-06 virtual meeting was adjourned at 1:12PM US ET on Friday, September 4th.

Prepared and submitted by Shayna Knazik
Reviewed by Counsel Peter Tolsdorf on 11/11/2020