|  |  |
| --- | --- |
| Description: Description: O:\LOGOS\DICOM\DICOM LOGO - MEDIUM.tif | **1300 North 17th Street, Suite 900Arlington, VA 22209, USA****+1-703- 475-9217**[http://dicom.nema.org](http://dicom.nema.org/)E-mail: **dicom@medicalimaging.org** |

MINUTES

###### DICOM WORKING GROUP SIX

(Base Standard)

**September 8-12, 2014**

### MITA/NEMA HQ

### Arlington, VA

**Members Present Represented by M T W Th F**

ACR James Philbin x x x x

Agfa Healthcare Robert Horn x x x x x

GE Healthcare Andrei Leontiev x x x x

JIRA Makoto Suzuki for Yukio Ito x x x

PixelMed David Clunie x x x x

Philips Healthcare Bas Revet x x x x x

Siemens Healthcare Bjorn Nolte x x x x x

Toshiba MRI USA Kevin O’Donnell xx x x

**Members Not Present Voting Representative**

\*Carl Zeiss Medical Software Karl-Heinz Fleischer

\*Konica Minolta Med. Imaging Michael Laconti

\*Merge Healthcare Ronald Cowan

**Alternate Voting Representatives,**

**Observers, Others Present Affiliation M T W Th F**

Ulrich Busch WG-07/Varian x x x

Earl Canfield WG-12/Philips p p p

Abouzar Eslami WG-09/Carl Zeiss Medical x x

Sven Flossmann WG-16/Brainlab p

Brad Genereaux WG-27/Agfa p

Leela Holliman WG-08/Dapasoft-Canada

 Health Infoway x

Mark Horton WG-09/Indian Health Serv p p

Kaemmerer, Marc Deutsche Rontgengesschaft p

Kahn, Charles WG-08/ACR p

Knipe, Ruth WG-12/Siemens p p p

Koenig, Helmut WG-20/Siemens p p

Kowalczyk, Luiza MITA x x x x

Luszcz, Joe WG-11/Philips p p p p

Schadt, Christof WG-07/Brainlab x x x

Schmidt, Teri Sippel WG-08/Karos Health p p

Solomon, Harry WG-08/GE Healthcare x x

Van Hemert, Jano WG-09/Optos Plc x x

Van Syckle, Don DVS Consulting x x

Vastagh, Stephen MITA x x x x x

Whitby, Jonathan WG-11/Toshiba x x x x x

Zammit, Jon WG-08 p

(\* = Does not count toward a quorum, P = Phone and/or web, X = Present)

**Presiding Officer:** Bas Revet, Chair

# **Opening and Administrative**

The Chair called the meeting to order at 08.30 on September 8, 2014. A quorum was present. Members approved the agenda. The minutes of the previous meeting was approved. The Secretary reviewed the antitrust rules.

The Chair issued an invitation to nominate the next WG-06 Chair. The November meeting is scheduled to be his last meeting.

# **Report on Ballots**

The Secretary reported that the ballots distributed following the June 2014 meeting of WG-06 had passed.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| BALLOT  | APPROVE | DISAPPROVE | ABSTAIN | **COMMENTS** |
| CPack-77 | 24 |  | 6 | 4 |
| Sup 170 | 23 |  | 5 | 3 |

# **CPack-77 Ballot Results: Review of the Comments, Disposition of the CPs**

The Group reviewed the LB comments and decided on Final Text or other action as shown below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CP#** | **Titles in CPack-77**  | **Assigned to** | **Review of Comments & Discussion**  | **Disposition** |
| 1032 | Fix Position Angle Sign Inconsistency in Mammography Image | K.O’Donnell | SEPT 2014: No commentsJUNE 2014: revisions in CP made by J Keyes were reviewed by WG-06. No objections to LB | FT |
| 1278 | Additional cardiac image types for enhanced CT | D. Clunie | SEPT 2014: No commentsJUNE 2014: brief discussion of apparent redundancy in text. Approved for LB | FT |
| 1324 | Add a new Value Representation for URI/URLs | J Philbin | SEPT 2014: Accepted Agfa comment, Discussed J Keyes comments (yes, yes, no, no)JUNE 2014: H Solomon comments were accepted. The CP will be re-balloted to allow all DSC members to look at this significant change.MARCH 2014: Discussed Version 5. Discussed and revised the Default Character Repertoire.JAN 2014: substantial discussion whether to make it a Supplement. Approved for VPOCT 2013: keep assigned | FT |
| 1342 | Extend Image Type for Breast X-Ray Image IODs | J. Keyes | SEPT 2014: No commentsJUNE 2014: KOD will add revisions C.8-74c. Will e-mail Janet. | FT |
| 1354 | Move requirement use isocenter 3D-Xray | B.Revet | SEPT 2014: No commentsJUNE 2014: B. Revet will check the current Standard and synchronize and update both. Bas will write CP as needed. | FT |
| 1355 | Make X-Ray RDSR event level device conditional | D. Clunie | SEPT 2014: Remove noteJUNE 2014: reviewed approved for LB | FT |
| 1356 | Add Content Qualification to all composite IODs |  | SEPT 2014: No comments. D Clunie will add to parametric object.JUNE 2014: reviewed approved for LB | FT |
| 1359 | Clarify restrictions on icon images inside image IODs | B.Revet | SEPT 2014: No commentsJUNE 2014: Purpose of CP was discussed: clean-up and organize better. Also discussed the icon resolution 64 is too small. Made revisions. | FT |
| 1360 | Add Performed Procedure Step Comment to Module Definition | U. Busch | SEPT 2014: No commentsJUNE 2014: reviewed approved for LB | FT |
| 1365 | Support of more than 16 bit in point index lists | D. Clunie | SEPT 2014: No commentsJUNE 2014: this is the part 2 of correcting an error in surface segmentation. This is an important topic as MR DTI is starting. This is strengthening and clarifying the Standard. WG-06 noted several items (some editorial) including retiring some attributes and marking the Standards that way. Only the long attributes will remain. D Clunie will correct those for future review. | FT |
|  |  |  |  |  |

WG-06 decided and voted unanimously to approve, as **final text**, the CPs as listed above.

# **Voting Package (VP) for Sept 2014**

The CPs listed below have either been approved for the Sept. VP at the June 2014 meeting or have been readied for this Voting Package, following the June 2014 meeting. The CPs listed below were reviewed and discussed. The CPs were either approved by unanimous vote for inclusion in the next Letter Ballot (CPack 77) or were directed for further work (remained “Assigned”) as shown below.

[Legend: LB=approved for next CPack, VP=for next meeting’s voting package, AS=remains assigned]

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CP#** | **Title**  | **Assigned to** | **Discussion** | **Disposition** |
| 1350 | Add WADO-RS as a retrieval mechanism for referenced Instances | J Philbin | SEPT 2014:JUNE 2014: Combine w/ CP 1352MARCH 2014: WG-06 reviewed, no comments  | LB |
| 1366 | Correction of Relationships in Planar and Volumetric ROI Templates | D Clunie | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |
| 1367 | Correct errors in Colon CAD SR IOD Template Figures | D Clunie | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |
| 1368 | Space should be listed in DS and IS VR character repertoire | D Clunie | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |
| 1369 | Relax device identifier constraint in x-ray irradiation event per CP 1065 undone by CP 1077 | D Clunie | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |
| 1370 | Conformance Statement Example is Missing Private Creator Value | D Clunie | SEPT 2014: DC explained rationaleJUNE 2014: Approved for VP | LB |
| 1371 | Length of TM permitted is too long | D Clunie | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |
| 1372 | Add NCI Thesaurus as Coding Scheme | D Clunie | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |
| 1373 | Add Alzheimer’s Disease PET Radiotracers | D Clunie | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |
| 1374 | Add Zr 89 Monocolonal Antibody PET Radiotracers | D Clunie | SEPT 2014: Discussed coding authority. SNOMED is hard to deal with nowadaysJUNE 2014: Approved for VP | LB |
| 1375 | Add Various PET Radionuclides and Radiotracers | D Clunie | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |
| 1376 | Add Individual Long Bone Concepts to Anatomic Region and Body Part Examined | D Clunie | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |
| 1377 | Use SNOMED Code for Radiopharmaceutical | D Clunie | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |
| 1378 | Add Anatomic Codes for Fetal Biometry and Pelvic Ultrasound | D Clunie | SEPT 2014: Discussed DTID 300JUNE 2014: Approved for VP | LB |
| 1379 | Add Definitions for all DCM Controlled Terms or Replace with Terms from External Lexicon | D Clunie | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |
| 1380 | Various NM Radionuclides are not list in CID 18. Add them, using DCM codes if necessary for those not in SNOMED or UMLS. | D Clunie | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |
| 1381 | Add term "Flat Filter" for Filter Types used in Proj. X-Ray | B. Revet | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |
| 1382 | Correct element number in reference to SOP Instance UID | B. Revet | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |
| 1383 | Add external resource URI to MWL | A Leontiev | SEPT 2014: R Horn noted that this will be extensively abused. He noted related use of FHIR resources. Also, DC withdrew objection.JUNE 2014: Approved for VP | LB |
| 1384 | Update values in CID 3722 | A Leontiev | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |
| 1385 | Add ‘Measurement Laterality’ to General Ophthalmic Refractive Measurements Module | R Horn  | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |
| 1386 | Addition of Measurement Report Root Template for Planar and Volumetric ROIs | D Clunie  | SEPT 2014: Add missing code to CID cc1c2. The Group reviewed the CP in detail.JUNE 2014: Approved for VP | LB |
| 1387 | Addition of Quantity Descriptors to Real World Value Maps | D Clunie | SEPT 2014: pertains to Sup 172JUNE 2014: Approved for VP | LB |
| 1388 | Add Real World Value Map Reference to Measurements | D Clunie | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |
| 1389 | Factor Common Descriptions Out of Image Library Entries | D Clunie | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |
| 1390 | Generalize Concepts in Abstract Multi-dimensional Image Model Component Semantics | D Clunie | SEPT 2014: CP stems from Use Cases in WG-30 related projectJUNE 2014: Approved for VP | LB |
| 1391 | Addition of Quantity Descriptors for Perfusion and Tracer Kinetic Modelling | D Clunie | SEPT 2014: Some definitions need to be changed. JUNE 2014: Approved for VP | LB |
| 1392 | Addition of Quantity Descriptors and Measurements for PET | D Clunie | SEPT 2014: Reviewed, discussedJUNE 2014: Approved for VP | LB |
| 1393 | Correct Tag Numbers For BLD Adjusted Positions | U Bush | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |
| 1394 | Add Radioactive Source Model ID to RT Brachy Application Setups Module | U Bush | SEPT 2014: Minor revisions madeJUNE 2014: Approved for VP | LB |
| 1395 | Extend RT Structure Set ROI Color | U Bush | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |
| 1396 | Clarify Dose Value units for DVH in RT Dose | U Bush | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |
| 1397 | Multiplicity Structure Classification Code | U Bush | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |
| 1398 | Add FOR Module to RTSS IOD | U Bush | SEPT 2014: Change shall to will in Note 2, other editorial in Note 2JUNE 2014: Approved for VP | LB |
| 1399 | Add Effective Wedge Angle | U Bush | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |
| 1400 | Assign WADO-WS namespace and schema | J Philbin | SEPT 2014: R Horn mentioned that DICOM has not yet registered the URN asked WG-27 to make registrationJUNE 2014: Approved for VP | LB |
| 1401 | Clarify meaning of PARTIAL in X-Ray RDSR | B Revet | SEPT 2014: Approved for LBJUNE 2014: Approved for VP | LB |

# **Letter Ballot CPack-78**

WG-06 decided unanimously to submit for legal review and thereafter circulate in a **Letter Ballot,** for vote by the DICOM Standards Committee, the Correction Proposals (CPs) listed below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CP#** | **Letter Ballot to Be Issued CPack-77 Title** | **Assigned to** |  |  |
|  | Same as CPs listed in Item 4 above |  |  |  |
|  |  |  |  |  |

# **Assigned CPs**

#  **(CPs in the “Assigned” meeting folder and other previously assigned CPs that were introduced for consideration for the next Voting Package.)**

[Legend: LB=approved for next CPack, VP=for next meeting’s voting package, AS=remains assigned]

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CP#** | **Title** | **Assigned to** | **Discussion** | **Dis-position** |
| 1031 | Use of OIDs and Non-ASCI Characters in Codes | R. Horn | SEPT 2014: Lengthy discussion and revision of CP. Version 05 was approved for LB. more below the tableJUNE 2014: Will use DICOS tags, will rename code value. consider the tag Why are we introducing UC? Why 1023 code values.On Hold: Discuss when R. Horn is present. MARCH 2014: SNOMED-larger character limit. 16 character limit is a problem: discussed the failure modes resulting from this. KOD noted that it would be helpful to receive feedback from implementers. D Clunie expressed concerns about this direction. It was noted that so far codes are alphanumeric | VP |
| 1288 | Add templates and code definitions for QAPV support | U Busch | SEPT 2015: This would be the only RT SR; it is more practical to make it new IOD. Decided to cancel CP and re-submit as Supplement. Make it 1st read in Nov. Mtg. | Cancel |
| 1319 | Frame Of Reference Reliability | U Busch | SEPT 2015: after long discussion it was decided to keep it assignedMARCH 2014: The related White Paper was posted. Reviewed the CP (version 07) and conducted extensive discussion, which will continue. Concluded that there is a need for analyzing and solving specific use cases. Reviewed the attributes. Noted that these types of changes, as a matter of policy, are not being added to existing objects.Jan 2014: discussed the Frame of Reference White paperOCT 2013: v03 reviewed. WG-02&27 White Paper to be reviewedAugust 2013: How to record whether FOR is correct. KOD noted that all changes should be a different FOP with mapping | AS |
| 1345 | Add Related UPS Sequence | K O’Donnell | SEPT: 2014: K.O’Donnell reviewed history. Supporting file (by WG-07- RT) was referred to by David, which explains the use case. Remains AssignedJAN 2014: Lengthy discussion. This CP may be the solution to existing problems. | AS  |
| 1403 | Clarify use of DIMSE service Status codes | A Leontiev | SEPT 2014: Approved for Nov. VPJUNE 2014: New, received CP number | VP |
| 1404 | Correct Condition on Exposure in Projection X-Ray RDSR | D Clunie  | SEPT 2014: Approved for Nov. VP | VP |
| 1405 | Replace BI-RADs codes that have SNOMED equivalents | D Clunie  | SEPT 2014: Approved for Nov. VP | VP |
| 1406 | Add codes for tumor sites | D Clunie | SEPT 2014: Approved for Nov. VP | VP |
| 1407 | Add diffusion tractography related sites | D Clunie  | SEPT 2014: Approved for Nov. VP | VP |
| 1408 | Add NeuroNames as Coding Scheme | D Clunie  | SEPT 2014: Approved for Nov. VP | VP |
| 1409 | Add Conformance Storage Media Categories | D Clunie  | SEPT 2014: Approved for Nov. VP | VP |
| 1410 | Clarify Lossy Image Compression Ratio | D Clunie  | SEPT 2014: Approved for Nov. VP | VP |
| 1411 | Reserved Group for Known Safe Private Elements | D Clunie  | SEPT 2014: Approved for Nov. VP | VP |
| 1412 | LOINC code updates in SR templates and context groups | D Clunie  | SEPT 2014: Approved for Nov. VP | VP |
| 1417 | Clarify use and declaration of private mapping resource | D Clunie  | SEPT 2014: Approved for Nov. VP | VP |
| 1422 | Correct High Bit value description in various IODs | D Clunie  | SEPT 2014: Approved for Nov. VP | VP |
|  |  |  |  |  |

CP-1031 – SEPT 2014 discussion continues-

Add the word SNOMED in the text.

What is the goal? Rob’s intent was to solve the URN issue. Why is it necessary to add to DICOM? RX-1. WHO macro. This is used in the drug databases. Advantages of URNs: parsable. There is a camp that favors URNs exclusively and another camp that prefers SNOMED. How will the foreign characters be accommodated? Can it not be a subset of ASCII? Is case sensitivity matter? Do we allow punctuation characters (should allow some.). Should we allow control characters (NO.?) Should we allow spaces (no.) Avoid Null character (many (programming) languages do not recognize? Default character repertoire is a synonym for US ASCII.

# **VP (Voting Package) for November 2014**

Based on discussions and decisions as recorded in Tables 3, 4 and 6, the Voting Package for the next meeting includes: (CPs are copied from previous tables for convenient reference.)

VP=for next meeting’s voting package

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CP#** | **Title** | **Assigned to** |  |  |
| 1031 | Use of OIDs and Non-ASCI Characters in Codes | R. Horn | SEPT 2014: Lengthy discussion and revision of CP. Version 05 was approved for LB. more below the tableJUNE 2014: Will use DICOS tags, will rename code value. consider the tag Why are we introducing UC? Why 1023 code values.On Hold: Discuss when R. Horn is present. MARCH 2014: SNOMED-larger character limit. 16 character limit is a problem: discussed the failure modes resulting from this. KOD noted that it would be helpful to receive feedback from implementers. D Clunie expressed concerns about this direction. It was noted that so far codes are alphanumeric | VP |
| 1403 | Clarify use of DIMSE service Status codes | A Leontiev | SEPT 2014: Approved for Nov. VPJUNE 2014: New, received CP number | VP |
| 1404 | Correct Condition on Exposure in Projection X-Ray RDSR | D Clunie  | SEPT 2014: Approved for Nov. VP | VP |
| 1405 | Replace BI-RADs codes that have SNOMED equivalents | D Clunie  | SEPT 2014: Approved for Nov. VP | VP |
| 1406 | Add codes for tumor sites | D Clunie | SEPT 2014: Approved for Nov. VP | VP |
| 1407 | Add diffusion tractography related sites | D Clunie  | SEPT 2014: Approved for Nov. VP | VP |
| 1408 | Add NeuroNames as Coding Scheme | D Clunie  | SEPT 2014: Approved for Nov. VP | VP |
| 1409 | Add Conformance Storage Media Categories | D Clunie  | SEPT 2014: Approved for Nov. VP | VP |
| 1410 | Clarify Lossy Image Compression Ratio | D Clunie  | SEPT 2014: Approved for Nov. VP | VP |
| 1411 | Reserved Group for Known Safe Private Elements | D Clunie  | SEPT 2014: Approved for Nov. VP | VP |
| 1412 | LOINC code updates in SR templates and context groups | D Clunie  | SEPT 2014: Approved for Nov. VP | VP |
| 1417 | Clarify use and declaration of private mapping resource | D Clunie  | SEPT 2014: Approved for Nov. VP | VP |
| 1419 | Correct Sequence Level of Procedure Step Cancellation DateTime | U Busch | JUNE 2014: New, received CP number | AS |
| 1422 | Correct High Bit value description in various IODs | D Clunie  | SEPT 2014: Approved for Nov. VP | VP |
|  |  |  |  |  |

#  **CPs discussed that remain “Assigned”**Copied from Tables 3, 4 and 6 for convenient reference.

# AS=assigned / remains assigned

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CP#** | **Title** | **Assigned to** | **Discussion** | **Dis-position** |
| 1345 | Add Related UPS Sequence | K O’Donnell | SEPT: 2014: K.O’Donnell reviewed history. Supporting file (by WG-07- RT) was referred to by David, which explains the use case. Remains AssignedJAN 2014: Lengthy discussion. This CP may be the solution to existing problems. | AS  |
|  |  |  |   |  |

# **New CPs Submitted that were assigned a CP Number and an Editor**

The following new change proposals were received and posted in the “New” subdirectory of the meeting folder. CP numbers shown were assigned by WG-06. They will be placed in the “Assigned” folder of the next WG-06 meeting:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CP# assigned** | **New Correction Proposals -- Title** | **Assigned to** | **Discussion**  | **File ID** |
| 1423 | Extending RFC 3240 with DICOM-Mime header fields | D Clunie,  | SEPT 2015 – NEW:David Clunie will work with Marc to finalize CP and submission to IETF. Secretary will submit to IETF. | CP-2014-03-DICOM-MIME\_Type\_2014-04-22.docx |
| 1424 | Add Series entity present in Real-World Model but missing in Information Model figure | D Clunie | SEPT 2015 – NEW: | cp\_dac264\_seriesinformationmodel |
| 1425 | Tab character should be permitted be in text VRs (ST, LT, UT) | D Clunie | SEPT 2015 – NEW: | cp\_dac267\_tabcharactersintextvrs |
| 1426 | Correct condition in Pixel Measures, Plane Position and Orientation Functional Groups for Segmentation | D Clunie | SEPT 2015 – NEW: | cp\_dac268\_positionorientationconditionsegmentation |
| 1427 | Make Defined Term for 3D Dimension Organization Type used for US Volume mean equally spaced as well as parallel slices, and add Spacing Between Slices | D Clunie | SEPT 2015 – NEW: | cp\_dac269\_3ddimensionequalspacing.pdf |
| 1428 | Use Pixel Measures in Enhanced US Volume | D Clunie | SEPT 2015 – NEW: | cp\_dac270\_pixelmeasuresvolumeus.pdf |
| 1429 | Tiled Image Box in Structured Display | A Leontiev | SEPT 2015 – NEW: | CP\_HS80\_StrucDisplay |
| 1430 | Add Motion Mode Definition Module | U Busch | SEPT 2015 – NEW: | cp\_RT55\_AddMotionModeDefinitionModule\_04.doc |
| None |  Brachytherapy Delivery Instruction  | U Busch | SEPT. 2015-NEW:Make it a Sup.Adding new SOP Class in CP. Use an existing Work Item. Submit for FR in Nov. 2014. | cp\_RT60\_BrachytherapyDeliveryInstruction\_03.doc |
| 1431 | Add Beam Effective Dose in RT Fraction Scheme Module | U Busch | SEPT. 2015-NEW:Needs editing | cp\_RT62\_AddBeamEffectiveDoseInRTFractionSchemeModule\_02.doc |
| 1432 | Add Beam Effective Dose in RT Fraction Scheme Module | U Busch | SEPT. 2015-NEW:Looks very RT | cp\_RT64\_AddSupportForIonTherapyScanningModes\_03.doc |
| 1433 | RT-specific KOS CIDs | U Busch | SEPT. 2015-NEW:Delete blank lines | CP\_RT66\_RTSpecificKOSCodes\_01.doc |
| 1434 | Additional SSD Information | U Busch | SEPT. 2015-NEW: | CP\_RT69\_AdditionalSSDInformation\_01.doc |
| 1435 | Correct errors in State Diagram of Hosted Applications | D Clunie | SEPT. 2015-NEW: | cpjr\_20140728\_PS3.19figure.pdf |
|  |  |  |  |  |

# New CPs Submitted– Rejected

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CP# assigned** | **New Correction Proposals -- Title** | **Assigned to** | **Discussion**  | **File ID** |
| NoneRT 60 | Brachytherapy Delivery Instruction  | U Busch | SEPT. 2015:Make it a Sup.Adding new SOP Class in CP. Use an existing Work Item. Submit for FR in Nov. 2014. | cp\_RT60\_BrachytherapyDeliveryInstruction\_03.doc |

Note: The comprehensive list of all CPs (including all FT and cancelled) is posted in this meeting’s folder.

# **CPs on Hold**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CP#** | **Title** | **Assigned to** | **Discussion** | **Status** |
| 375 | Correct CID 4017 | K O’Donnell | B Revet (BR) will refer to WG-22 for SNOMED codes.Need SNOMED codes, CID # and UIDs | FT Passed, On hold |
| 1071 | Additions to various CIDs of Supplement 78 | B. Revet | Waiting for SNOMED Codes | FT Passed, On hold |
| 1302 | Correct example of Chinese encoding | A Leontiev | SEPT. 2015 Remains on hold.Rob and Andrei will investigate negative ballot vote from ChinaOCT 2013: Discussed negative by China in CPack 73. Discussed returning to ASCII. Noted that Part 5 does not call for =.ACTION: R. Horn to checkAUG 2013: more editorial revisionsJUNE 2013: Discussed the carat issue and added to CP draft. | On HoldAS |
| 1349 | Link from still picture to video | B Revet | JUNE 2014: See the Toshiba comment: KOD the text is not fully informative, only understandable to “insiders”. Check with author, Florian Knicker. Remains assigned.MARCH 2014: WG-06 reviewed, no comments | On HoldAS |
|  |  |  |  |  |

# **ACTION Items and Other Discussions-**

# Action Items relative to CPs restated:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CP#**  | **Title** | **Assigned to** | **Discussion** | **Status** |
|  |  | WG-27 | Register DICOM URN Background: R. Horn noted that this administrative step needed. |  |
| RT-55 | cp\_RT55\_IncludeMotionModePermissionInRTToleranceTable\_02.doc  |  | Discuss with WG-21 |  |
| 1288 | Add templates and code definitions for QAPV support | U Busch | SEPT 2015: This would be the only RT SR; it is more practical to make it new IOD. Decided to cancel CP and re-submit as Supplement. Make it 1st read in Nov. Mtg. | Cancel |
| 1423 | Extending RFC 3240 with DICOM-Mime header fields | D Clunie,  | David Clunie will work with Marc to finalize CP and submission to IETF. Secretary will submit to IETF. | AS |
| RT 60 |   | U Busch | SEPT. 2015:Make it a Sup.Adding new SOP Class in CP. Use an existing Work Item. Submit for FR in Nov. 2014. | Wil be resubmitted as a Sup |
|  |  |  |  |  |

# **List of all remaining assigned CPs at the end of this WG-06 meeting**

(AS=assigned)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CP#** | **Title** | **Assigned to** | **Discussion** |  |
| 145 | Curve Data Value Representation Clarification | D. Clunie | 1319 | AS |
| 235 | Clarify NM detector start angle usage | J. Pohlhammer |  | AS |
| 296 | Eliminate Duplicate Terms and Provide Missing Definitions | H. Solomon |  | AS |
| 430 | Additions to PS 3.16 for Cardiac Cath SR | H. Solomon |  | AS |
| 471 | Add Common Finding Template | H. Solomon |  | AS |
| 591 | Attribute Identifier List for Errors in Sequence Attributes | H. Solomon |  | AS |
| 596 | Add Request and Schedule Information to Results and MPPS | R. Horn |  | AS |
| 597 | Instance Availability Notification Structure | H. Solomon |  | AS |
| 757 | Add RTSS ROI Feature UID | H. Solomon |  | AS |
| 802 | Incorporate Fixes on 702 and 706 | D. Clunie |  | AS |
| 804 | Indicator for Cone Beam CT | K. O’Donnell |  | AS |
| 811 | Note for Forwarders Regarding SCP-assigned Instance UIDs during N-CREATE  | D. Harvey |  | AS |
| 812 | Clarification that Pixel Padding Value Is a Raw Value before Any Transformations  | D. Harvey |  | AS |
| 833 | Transfer Syntax Availability and Selection for Q/R  | R. Horn |  | AS |
| 836 | Clarify Usage of Attributes for Normalized IODs | K. O’Donnell |  | AS |
| 838 | Consistent Naming of Error Code Tables | K. O’Donnell |  | AS |
| 934 | Fix Inconsistency of C-FIND Only Number of Patient Related XXX Attributes | D. Harvey |  | AS |
| 941 | More Clarification of Instance References | D. Clunie |  | AS |
| 991 | Clarify Handling of Private Data in the Retrieve Without Bulk Data Service | R. Horn |  | AS |
| 992 | Clarify Allowable Length Values for Certain PDUs | K. O’ Donnell |  | AS |
| 1013 | RT Ion Beams Recording Clarifications | WG-07 |  | AS |
| 1019 | Add Body Part at the Study Level | K O’Donnell |  | AS |
| 1030 | Re-factor Common Attributes for Enhanced Images | B. Revet |  | AS |
|  |  |  |  |  |
| 1066 | Encoding of Attributes with Value Length > 64KiB with Explicit VR | R. Horn |  | AS |
| 1086 | New DICOMDIR ZIP File Extension | R. Horn |  | AS |
| 1106 | Assign a Namespace for Audit Schema Elements | R. Horn |  | AS |
| 1115 | Add Dose Reference Point Codes for CR/DR | K. O’Donnell |  | AS |
| 1126 | Corrections LOINC Codes Sup78 | B. Revet |  | AS |
| 1127 | Add Fields for Organ Dose to Dose SR | K. O’Donnell |  | AS |
| 1163 | Conformance for Application Hosting | H Solomon |  | AS |
| 1180 | Use LOINC\_Short Name | H. Solomon | Was in Aug 12 VP | AS |
| 1189 | Add usage of Temporal Position Time Offset to Per Frame content Macro as needed for Enhanced MR and Enhanced CT objects. | W. Corbijn |  | AS |
| 1196 | Add phantom-specific Total DLP Values to allow for Head and Body in same RDSR scope of accumulation | D. Clunie | Need to be discussed in WG-21  | AS |
| 1207 | Change Multi-frame Dimension module usage to “User Option” for IVOCT IOD | B. Revet | Tom Probasco-WG-06 needs more information and examples for when it is meaningful [BR to contact TP]  | AS |
| 1208 | Clarify the unambiguous use of Private Creator Data | B. Revet | B Revet clarified that the intent of the CP is to prevent the same identifier issued for different blocks. It was suggested to state that the “same privet creator shall not be used for different blocks.” ACTION: B Revet will reword it to include more normative text and include examples in the notes. Also make it clear that there is no implication in the order of the blocks. | AS |
| 1217 | Add Extensible SR SOP Class for new types of Content Item | D. Clunie | JUNE 2014: Discussion: SR was created for rendering but was given up for rendering and intended for machine consumption. SCOORD3D was a defined and was added. Let’s wait till next defined need or show increased needs. Continue to discuss when D Clunie present.AUGUST 2013: should there also be a Supplement developed instead of a CP? Discussed what warning might need to be given if content is not understood. The question was posed whether this should be pursued. It was noted that SR cannot handle many JUNE 2013 discussion: Postponed discussion when D Clunie and R Horn are present in Aug++++++++++++++++++++++++++++++content such as vectors (e.g. BP waveform.) Members were concerned of safety but acknowledged the value of this CP. Another value is the advancement of SR in general. This CP could add contents of the Evidence Document. It was suggested to include a few illustrations. | Remains AS |
| 1224 | Add Expiration Date to UPS | K O’Donnell |  | AS |
| 1225 | Add Procedure Step Completion Codes to UPS | K. O’Donnell |  | AS |
| 1226 |  Add more specific post-processing codes to CID 9231 | K. O’Donnell |  | AS |
| 1227 | Fix Estimated Dose Saving attribute | K. O’Donnell |  | AS |
| 1228 | Correct inconsistency between Table C.30.3-1 and Table CC.2.5-3 of UPS | K O’Donnell |  | AS |
| 1241 | Restrict claming UPS Work items AS to another AE | K O’Donnell |  | AS |
| 1302 | Correct example of Chinese encoding | A Leontiev | Rob and Andrei will investigate negative ballot vote from ChinaOCT 2013: Discussed negative by China in CPack 73. Discussed returning to ASCII. Noted that Part 5 does not call for =.ACTION: R. Horn to checkAUG 2013: more editorial revisionsJUNE 2013: Discussed the carat issue and added to CP draft. | On HoldAS |
| 1319 | Frame Of Reference Reliability | U Busch | MARCH 2014:The related White Paper was posted. Reviewed the CP ( version 07) and conducted extensive discussion, which will continue. Concluded that there is a need for analyzing and solving specific use cases. Reviewed the attributes. Noted that these type of changes, as a matter of policy, are not being added to existing objects.Jan 2014: discussed the Frame of Reference White paperOCT 2013: v03 reviewed. WG-02&27 White Paper to be reviewedAugust 2013: How to record whether FOR is correct. KOD noted that all changes should be a different FOP with mapping | AS |
| 1320 | Update to CID 3411 Intracoronary Devices | A Leontiev |  | AS |
| 1321 | Add Telecom Addresses | A Leontiev |  | AS |
| 1322 | Add Consulting Physician | A Leontiev |  | AS |
| 1323 | Clarify Audit Code Meanings | R Horn | Clarify Codes | AS |
| 1345 | Add Related UPS Sequence | K O’Donnell | JAN 2014: Lengthy discussion. This CP may be the solution to existing problems. | AS |
| 1349 | Link from still picture to video | B Revet | JUNE 2014: See the Toshiba comment: KOD the text is not fully informative, only understandable to “insiders”. Check with author, Florian Knicker. Remains assigned.MARCH 2014: WG-06 reviewed, no comments | On HoldAS |
| 1353 | Secure Transport Connection Profile should allow higher TLS versions | R Horn |  | AS |
| 1357 | Allow Unicode Katakana in alphabetic name group | A Leontiev |  | AS |
| 1358 | Correct tag mismatch between Implant Template Group Module and dictionary | A Leontiev |  | AS |
| 1361 | Correct ParticipantObjectDescription in DICOM audit message | R Horn |  | AS |
| 1362 | Correct AuditSourceIdentification in DICOM audit message | R Horn |  | AS |
| 1364 | Minor corrections to WADO-RS and STOW-RS | J Philbin |  | AS |
| 1402 | Add UI Value Representation to Hanging Protocol Selector attributes | J Philbin |  | AS |
| 1413 | Add UCUM license terms  | A Leontiev | JUNE 2014: New, received CP number | AS |
| 1414 | Update PS3.1 definitions | A Leontiev | JUNE 2014: New, received CP number | AS |
| 1415 | Update PS3.1 front matter | A Leontiev | JUNE 2014: New, received CP number | AS |
| 1416 | Update to use SNOMED codes | A Leontiev | JUNE 2014: New, received CP number | AS |
| 1417 | Clarify use and declaration of private mapping resource | D Clunie | JUNE 2014: New, received CP number | AS |
| 1418 | Add UDI (Universal Device ID) to objects | K O’Donnell | JUNE 2014: New, received CP number | AS |
| 1419 | Correct Sequence Level of Procedure Step Cancellation DateTime | U Busch | JUNE 2014: New, received CP number | AS |
| 1420 | Support for Multi Slab Block in Ion Plan | U Busch | JUNE 2014: New, received CP number | AS |
| 1421 | Support for Mean Excitation Energy In Structure Physical Properties | U Busch | JUNE 2014: New, received CP number | AS |
| 1422 |

|  |
| --- |
|  Correct High Bit value description in various IODs |

 |  | JUNE 2014: New, received CP number | AS |
| 1423 | Extending RFC 3240 with DICOM-Mime header fields | D Clunie,  | SEPT 2015 – NEW:David Clunie will work with Marc to finalize CP and submission to IETF. Secretary will submit to IETF. | AS |
| 1424 | Add Series entity present in Real-World Model but missing in Information Model figure | D Clunie | SEPT 2015 – NEW: | AS |
| 1425 | Tab character should be permitted be in text VRs (ST, LT, UT) | D Clunie | SEPT 2015 – NEW: | AS |
| 1426 | Correct condition in Pixel Measures, Plane Position and Orientation Functional Groups for Segmentation | D Clunie | SEPT 2015 – NEW: | AS |
| 1427 | Make Defined Term for 3D Dimension Organization Type used for US Volume mean equally spaced as well as parallelslices, and add Spacing Between Slices | D Clunie | SEPT 2015 – NEW: | AS |
| 1428 | Use Pixel Measures in Enhanced US Volume | D Clunie | SEPT 2015 – NEW: | AS |
| 1429 | Tiled Image Box in Structured Display | A Leontiev | SEPT 2015 – NEW: | AS |
| 1430 | Add Motion Mode Definition Module | U Busch | SEPT 2015 – NEW: | AS |
| None |  Brachytherapy Delivery Instruction  | U Busch | SEPT. 2015-NEW:Make it a Sup.Adding new SOP Class in CP. Use an existing Work Item. Submit for FR in Nov. 2014. | AS |
| 1431 | Add Beam Effective Dose in RT Fraction Scheme Module | U Busch | SEPT. 2015-NEW:Needs editing | AS |
| 1432 | Add Beam Effective Dose in RT Fraction Scheme Module | U Busch | SEPT. 2015-NEW:Looks very RT | AS |
| 1433 | RT-specific KOS CIDs | U Busch | SEPT. 2015-NEW:Delete blank lines | AS |
| 1434 | Additional SSD Information | U Busch | SEPT. 2015-NEW: | AS |
| 1435 | Correct errors in State Diagram of Hosted Applications | D Clunie | SEPT. 2015-NEW: | AS |
|  |  |  |  |  |

1. **Supplement 147 – Second Generation Radiotherapy {WI 2007-06-B}**

This was a continuation of the reading for Public Comment. WG-07 reorganized Sup 147 dividing it into 6 Supplements listed below. U. Busch briefly reported on the decision to divide Sup. 147.

|  |  |
| --- | --- |
| 147 | Second Generation Radiotherapy –Prescription and Segment Annotation |
| 175 | Second Generation Radiotherapy – C-Arm Radiations |
| 176 | Second Generation Radiotherapy – New RT Radiations |
| 177 | Second Generation Radiotherapy – Dose Objects |
| 178 | Second Generation Radiotherapy – RT Course |
| 179 | Second Generation Radiotherapy – RT Explanatory (Part 17) |

C. Schadt Distributed hard copies of the “Real World Model” and the IOD Information Model for reference to WG-06 members. He also distributed a hard copy of the the Summary Contents of the above divided Supplements for overview an reference.

C. Schadt continued the review of the draft from Table C.AA.B2-1, where the last WG-06 ended, and which became part of the new Sup. 147.

The draft was posted in the meeting folder: <sup147\_43 - 2014-09 - 3 Wed Start.doc>. Christof marked up the draft based on the discussions.

At the end of session 1 the revised draft was posted as <sup147\_43 - 2014-09 - 5 Thu Start.doc>

At the end of session 2 the status of the annotated draft was captured as <sup147\_43 - 2014-09 - 5 Thu End.

WG-06 directed to remove indices with parameters and use only concrete attributes.

WG-06 indicated that apparently there were no other substantive issues left to discuss; the numerous changes to be made will be reviewed in November prior to voting on Public Comment release. Sup 147 will return in November as per the above.

# **Supplement 155 –Imaging Reports using HL7 Clinical Document Architecture {WI-2010-04-D}**

This was a continued reading for Public Comment. For the first session, WG-08 Co-Chair H. Solomon posted < Sup155\_2014-09-08.docx.> WG-08 members T. Schmidt, L. Holliman, as well as WG-20 Co-Chair H. Koenig joined this session and discussion.

H. Solomon referenced the WG-06 t-con and the material covered prior to this meeting.. He reviewed the template.

Ending Document: The document, as revised during the discussion sessions, was saved in the meeting folder as < Sup155\_2014-09-10.docx and < Sup155\_2014-09-11.docx>

The Sup 155 will be balloted for ‘comments only’ to HL7.

The line-by-line reading was completed and the Supplement was approved for Public Comment subject to making the revisions decided during the review.

# **Supplement 156 – Multi-Dimensional Presentation State** **{WI 2008-04-C}**

This was a reading for Letter Ballot.

J. Whitby presented in person and J. Luszcz by phone.

The public comments were processed and the discussion started with the document sup156\_PlanarMPR\_20140910\_BeginWG6Session1.docx posted in the meeting folder. The annotated document was saved and posted as of the beginning of Session 2 as sup156\_PlanarMPR\_20140911\_BeginWG6Session2.docx.

The Supplement will return for further reading.

# **Supplement 169, Simplified Adult Echocardiography Structured Report [WI-2012-11-A]**

K. O’Donnell, (KOD) /Editor of the Sup 169 presented the results of WG-12 review of Public Comments received on Sup 169. The following files were posted in the meeting folder: ConsolidatedComments-Sup169-20140907.xls and sup169\_PC+3.docx .

This was a reading for approval for Letter Ballot. WG-12 Chair J. Luszcz and members E. Canfield of Philips and R. Knipe of Siemens were assisting.

KOD presented the tabulation of the comments (Excel file) with the WG-12 resolutions/responses. 34 comments have been analyzed by WG-12. The discussion included WG-12 request for WG-06 advice advice regarding the Agfa comment. The Group discussed and decided that the notes in C.17.5 and TID 3602 cover adequately; TID 3602 prevails if conflict.

Retiring TID 5200 was discussed in WG-12. WG-06 noted that this supplement is very widely used and its retirement is not practical and/or realistic.

The Supplement was reviewed line-by-line for Letter Ballot.

C16 - There was an extensive discussion on how should different BSA calculation methods be handled? An e-mail inquiry will be sent to WG-12.

The line-by-line reading was completed and the Supplement was approved for **Letter Ballot** subject to making the revisions decided during the review.

1. **Supplement 170, Server Options for RESTful Services [WI-2013-12-C]**

This was a review of the Letter Ballot comments for Final Text.

The Editor, J. Whitby, presented the Supplement. WG-27 members J. Philbin and K. O;Donnell assisted. The document was posted as < sup170\_ServiceCapabilities\_FT\_draft.docx>.

The Agfa and Hologic Comments were reviewed, accepted, and the responses prepared and posted in the meeting folder.

The Supplement was approved for **Final Text**.

1. **Supplement 171 RESTful Unified Procedure and Workflow Step (RS UPS) [WI-2013-08-B]**

This was a reading for Letter Ballot.

The Editor, J. Whitby, presented the draft which was posted in the meeting folder as sup171\_LB\_draft.docx. WG-27 members J. Philbin and K. O’Donnell (in person) and Brad Genereaux (by phone) assisted.

K. O’Donnell reported the interest in IHE Radiology for ‘distributed reporting’ and suggested WG-27 to monitor this development. This will be a different model from XDW (which allows users to create rules.) This prompted D. Clunie to speak of the need for distributed workflow. R Horn spoke of widely implemented workflow models including ‘whiteboard’. It was suggested for DICOM to evaluate the workflow-related parts of the Standard.

 The Supplement was approved for **Letter Ballot**.

1. **Supplement 172, Quantitative Parametric Map Storage [WI-2014-04-B]**

This was a reading for Letter Ballot.

D. Clunie is the Editor of this Supplement. He posted the presented < sup\_parametricmap\_01.pdf>, which was posted in the meeting folder. The following files have been posted in the meeting folder: sup172\_05.pdf, sup172\_05.xml, sup172\_05\_changes.pdf, sup172figures.

This was the review of the Public Comments. D. Clunie included public comments in the ‘Open Issues’, ‘Other Issues’ and in the ‘Closed Issues’ that were listed in the < sup172\_05\_changes.pdf> file posted in the meeting folder; the Editor’s suggested resolutions of the public comments were noted. The group discussed the comments and suggested resolutions.

Thereafter the Group reviewed the Draft line-by-line while referring alternatively the sup172\_05.pdf and sup172\_05\_changes.pdf files. The changes made are summarized in the Closed Issues section of the updated documented linked via the status page:

 <http://www.dclunie.com/dicom-status/status.html#Supplement172>

Highlights include:

- Removing Large Rows and Columns

- OF/OD equivalents of Pixel Padding Value and Pixel Padding Value Range

- Special values like NaN, +Inf, -Inf are explicitly permitted

- No floating point equivalents of Smallest Image Pixel Value

 and Largest Image Pixel Value (drop these entirely)

- Multi-frame Dimensions Module and Frame Content Functional Group are

 mandatory (and added to example) ... may change after ballot

- Derivation Image Functional Group Macro is conditional

- No 32 bit integer for this IOD

- No MONOCHROME1 or RGB

- CID 7203 reused for derivation code (see example)

- Text about implicit scaling to integers for pseudo-color (palette)

- Recognition that there can be more than one parameter in an instance

- Image/Frame type values 3 (flavor) and 4 (derived contrast) added to

 make it easier to find/recognize these

The example has been updated to highlight some of these features,

especially:

- dimensions, stack and use of Quantity as a dimension

- Image/Frame Type value 3 of PERFUSION and 4 of KTRANS

- Study and Series Description and Procedure Code Sequence

- use of (113066,DCM, "Time Course of Signal") in Derivation

 Code Sequence, since that seemed to be the best fit for this

 from the CID 7203 selections (defined as "The image is derived by

 calculating values based on the time course of signal).

The document was approved for **Letter ballot** subject to the above changes.

1. **Supplement 173, Wide Field Ophthalmic Photography Image Storage SOP Class [WI-2013-12-A]**

This was a reading for Public Comment.

Don Van Syckle is the Editor of this Supplement. The Supplement is proposed on behalf of DICOM WG-09. He was joined by A. Eslami, M. Horton, and J. Hemert.

It was discussed which depth is necessary for floating point precision: 32bit or 64bit.

A question arose during the meeting addressing the concept of points contra pixels. Points have no area at all but pixels have x and y dimensions.

Sparse sampling was discussed in the context of 2D to 3D data mapping.

A line-by-line reading was completed and the supplement was approved for **Public Comment.**

1. **Supplement 174, WADO RESTful Rendering [WI-2013-12-B]**

This was a continued reading for public comment.

Editor J. Philbin posted and presented sup174\_WADO-RS\_Rendering.docx.

# The open and closed issues were discussed and updated. Other advice from WG-06 was marked in the Draft Supplement.

# *Scope and Field of Application*

*This supplement enables the RESTful Retrieve service to retrieve rendered instances. This is done by adding query parameters to the request URI. These parameters are similar to those already available in the URI and WS Retrieve services.*

*A client makes an HTTP request with query parameters specifying how the images ~~should~~* ***shall*** *be rendered and receives a response containing those images as the result.*

The end of session snapshot of the marked-up document was saved and posted as sup174\_WADO-RS\_Rendering\_with\_wg6\_discussion.docx.

The Supplement will **return**.

1. **New Business**

There was no new business discussed.

1. **Future Meetings**

* Nov. 10-14, 2014, Arlington, MITA HQ, VA, USA

2015

* Jan. 12-16, 2015, Arlington, MITA HQ, VA, USA
* March 23-27, 2015, Arlington, MITA HQ, VA, USA
* June 15-19, 2015, Barcelona, Spain
* Sept. 14-18, 2015, Arlington, MITA HQ, VA, USA
* Nov. 9-13, 2015, Arlington, MITA HQ, VA, USA
1. **Next Meeting Agenda**

An agenda plan was prepared for the next meeting. This was posted as <Agenda Plan for November 2014.xls> in the meeting folder.

Note:

The comprehensive list of all CPs (including all FT and cancelled) is posted in this meeting’s folder: CP-2014-09-12.xlsx

The comprehensive list of all Supplements (sorted by Supp. Number) is posted in this meeting’s folder: Supstat-2014-09-12.xlsx

1. **Adjournment**

The meeting recessed at 17.30 daily and resumed at 08.30 the next day. The meeting was adjourned at 13.00, on Sept. 12, 2014.

Submitted by Stephen Vastagh, Secretary

Reviewed by Clark Silcox, Legal Counsel