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| Description: Description: O:\LOGOS\DICOM\DICOM LOGO - MEDIUM.tif | **1300 North 17th Street, Suite 900 Arlington, VA 22209, USA**  **+1-703- 841-3281**  [http://dicom.nema.org](http://dicom.nema.org/)  E-mail: [**dicom@medicalimaging.org**](mailto:dicom@medicalimaging.org) |

# ***MINUTES***

## **JOINT DICOM MEETING**

## **WORKING GROUP TWO (WG-02)** (Projection Radiography and Angiography)

## **WORKING GROUP TWENTY EIGHT (WG-28)** (Physics)

**Logistics**: **September 19-21, 2018;** 09:00am to 5:00pm

**University of Helsinki and Helsinki University Hospital Meilahti Tower Hospital**

Haartmaninkatu 4, FI-00029, HUS, Finland

Meeting room T1.202C ("Thoraxtupa")

**Presiding Officers:** Francisco Sureda, Chair WG-02

Annalisa Trianni, Co-Chair WG-28

Donald Peck, Co-Chair WG-28

**Secretary:** Alberto Torresin (EFOMP)

Shayna Knazik (AAPM)

**Voting Members Present Represented by**

AAPM Donald Peck

EFOMP, ESR Annalisa Trianni

GE Healthcare Francisco Sureda

AAPM Nick Bevins

PACS Health Steve Massey

Siemens Healthcare GmbH Heinz Blendinger

Philips Pritham Shetty

### Preliminary Events

* Identified participants and reviewed the DICOM Antitrust Rules.
* Reviewed the agenda and revised as needed.
* Reviewed and approved minutes from the meeting on June 6-9, 2018 Prague, Czech Republic:
  + <http://dicom.nema.org/Dicom/minutes/WG-02/2018/>
  + <http://dicom.nema.org/Dicom/minutes/WG-28/2018/>

### CP Review

Members reviewed the advances of the CPs discussed during the last meeting:

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| Number | Name | Submitted | Assigned | Coded Status | Comments/Actions for WG-02 and WG-28 |
| **CP 1319** | Frame Of Reference Reliability | Francisco Sureda, et al. | Ulrich Busch | Assigned | WG-02 reviewed the version 13. To contact Ulrich Busch to include examples of SPECT-CT or PET-MRI. WG-02 agrees with version 13 of the CP. **Action: Francisco Sureda** |
| **CP 1768** | Correct PS3.17 Figure FFF.2.3-1: “Example of Usage of Photometric Interpretation” | Sureda | Clunie | Letter Ballot | Members reviewed the CP to check if the WG-02 indications were taken into account. No further actions. |
| **CP 1800** | Field of View Origin clarification needed | Wim Corbijn | Wim Corbijn | Assigned | Members reviewed the latest version of CP.Members will follow the indications of Wim Corbijn and include a table with the values which describe the images. **Action: Francisco Sureda** |
| **CP 1807** | Corrections of Performed Storage Module | Sureda | O'Donnell | Assigned | Members reviewed the last version of the CP after Kevin O’Donnell’s comments. A new of version (v.03) of the CP has been created and will be submitted. **Action: Francisco Sureda** |

* Members reviewed new CPs related to the scope of WG-02 and WG-28:
  + CP1830 – Use of Segmentation and parametric Maps with Whole Slide Imaging” – in Voting Packet.
  + CP1842 – Referenced Frame Numbers used in Acquisition Context is Limited by 16-bit VR” – assigned.
  + CP1846 – Replace DCM code for circumscribed with SNOMED codes – To be checked to verify the codes in the Informative Annex.
  + CP1850 – Change old RT-style SNOMED IDs to CT-style Concepts IDs” – To be checked to verify if it affects also the codes. To check Part 17 of the standard and modify if necessary. The new CP will affect the whole standard. To follow-up, in particular the content and position of the Annex XXX which contain the mapping between the old RT code scheme and the new CT one.

### Review Current Work Items and Supplements

* Supplement 202 Real Time Video – Public Comments
  + Members reviewed the Supplement 202 on Real time video proposed by DICOM WG-13 on Visible Light, particularly the deployment of equipment in real time.
  + This supplement is useful for real time angiographic application.
  + Members needed more time to read through this lengthy supplement, so there are no comments at this time. This will be discussed further at their next meeting.
* Supplement 188 on Multi-Energy (ME) CT scanners – Letter Ballot
  + Members have no changes to recommend at this time.

### XA Protocol Storage (new supplement)

* Members reviewed the **draft12** of the supplement for **XA Protocol Storage** and will continue working on it to ensure consistency with the Sup121.
* Members reviewed the proposed **new DICOM Work Item** **Request** for this supplement that will be submitted to the DSC meeting of Sept 26, 2018 in Australia.
* The work in progress includes: (a) definition of the use cases related to the X-Ray Angiographic procedures, (b) description of the set of parameters and associated details of the angio protocols, and (c) mapping between IT related items (Modality Worklist), Imaging settings and Protocol Storage.
* The state of art of the document was discussed to prepare the WG-06 meeting. The presentation is stored on the DICOM web site.
* Activity to compile the document commenced and different actions will be completed by assigned WG-02 and WG-28 members.

### RDSR Informative Annex (new supplement)

* Members continued to work on the new supplement to replace the Annex AA of Part 17, pursuant to DICOM Work Item 2004-04-C (Radiation Dose SR). Work assignements were given to the owners of the remaining sections: AA.4.2 and AA.4.3 Real-world scenarios of typical equipment configurations, AA.4.4.2 Encoding of Distances, AA.4.4.3. Encoding of Irradiation Duration, AA.4.4.x Pulse Rate in Variable Frame Rate, and AA.4.4.x 3 Images Acquires and Stored.
* The editors will synchronize to prepare a version for first reading by WG-06 in March 2019.

### Radiation Dose Structured Reporting for Cone Beam CT (new supplement)

* Members continued working on the new supplement pursuant to DICOM Work Item 2015-12-D (Cone Beam CT-RDSR). This new supplement considers an Enhanced RDSR with the ability to include CBCT and other modalities as well as further information that the equipment could provide.
* Members had a thorough point-by-point discussion on the WG-28\_supXXX\_draft\_Ext-RDSR\_Rev06.doc document. The structure of the new supplement was presented describing the different TID definition and contents.
* Some parameters (for example: bow tie filtration in CBCT) must be included inside the TID description but their usability is related to the relevance of the parameter in connection with the application. In connection with this and other comments, the activity of defining of TID was done (Relative to Parent, VT, Concept Name, VM, Req Type, Condition, and Value Set Contraint). This activity will continue during the next meeting (New York, 2019).
* A new draft of the working document WG-28\_supXXX\_draft\_Ext-RDSR\_Rev07.docx is now in meeting folder.
* Members contacted the chairs of AAPM IPC, Working Groups 7,15, 21, 22, as well as EFOMP for feedback/support from those groups for submission to WG06. **(Action: Annalisa Trianni)**

### Follow –Up Topics

* IHE REM Profile: Members did not discuss at this meeting, so they will follow up the current CPs related to the IHE Profile for Radiation Exposure Monitoring (REM) at their next meeting in 2019 (New York), and will provide comments when appropriate.
  + <ftp://ftp.ihe.net/Radiology/TF_Maintenance/>
* Review MRI Supplement 210 for Paradigm Protocol Storage: Members reviewed the progress of this supplement and have no comments at this time. Members will continue to monitor the progress of this supplement, and will check for other new Work Items related to Protocol Storage of other modalities.
* MRI Protocol Storage Supplement: Members reviewed this supplement and have no comments at this time. Members will continue to monitor the progress of this supplement, and will check for other new Work Items related to Protocol Storage of other modalities.

### Reports from liaisons with other groups and organizations

Annalisa Trianni and Heinz Blendinger reported on the IEC Interventional activities related to radiation dose reporting. The IEC 61910-1 has been introduced in the 60601-2-43 and 60601-2-54.

### New Work Items

There are no new work items at this time.

### Planned Meeting Dates in 2019

Members continued defining the plan for 2019 and 2020 meetings.

* **April 2019** joint WG-02/28 meeting in New York City, USA. Meeting room confirmed for April 1-3, 2019 at Memorial Sloan Kettering.
* **June 2019** joint WG-02/28 meeting tentatively set for Dublin, Ireland. Confirming availability for the first week in June 2019.
* **September/October 2019** joint WG-02/28 meeting tentatively set for Paris, France.
* **2020 possible meeting locations:** Barcelona, Spain; Vancouver, Canada; Stockholm, Sweden.

### New Business

There is no new business at this time.

### Adjourn

The meeting was adjourned at 4:00pm on September 21, 2018.

Submitted by Shayna Knazik, Secretary of WG-28

Reviewed by Luiza Kowalczyk, DICOM Secretary

Reviewed by Clark Silcox, Legal Counsel