MINUTES

JOINT DICOM MEETING
WORKING GROUP TWO (WG-02) (Projection Radiography and Angiography)
WORKING GROUP TWENTY-EIGHT (WG-28) (Physics)

Version 1

Logistics: June 3-5, 2019; 08:30 to 17:00
Royal College of Surgeons in Ireland
SSG - Faculty of Radiologists
26 York Street, Dublin, Ireland
Tutorial Room R.421 (No. 26, Floor 4)
(End of this document contains complete schedule)

Presiding Officers: Francisco Sureda, Chair WG-02
Annalisa Trianni, Co-Chair WG-28
Donald Peck, Co-Chair WG-28

Secretary: Shayna Knazik (AAPM)
Alberto Torresin (EFOMP)

Voting Members Present Represented by
AAPM Donald Peck

WG-02 (Projection Radiography & Angiography) and WG-28 (Physics)
Of the DICOM Standards Committee
June 3 – 5, 2019
1. **Preliminary Events**

- The Secretary identified participants and reviewed the antitrust rules and DICOM Patent Disclosure Policy.
- Reviewed the agenda and revised as needed.
- Reviewed and approved the minutes from the meeting on April 1-3, 2019 in New York City, USA:

- All documents discussed at this meeting can be found at:

2. **CP Review**

- Members reviewed the advances of the CPs discussed during the last meeting, and reviewed new CPs related to the scope of WG-02 and WG-28.

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Submitted</th>
<th>Assigned</th>
<th>Coded Status</th>
<th>Comments/Actions for WG-02 and WG-28</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP 1319</td>
<td>Frame Of Reference Reliability</td>
<td>Francisco Sureda, et al.</td>
<td>Ulrich Busch</td>
<td>Assigned</td>
<td>WG-02 agrees with the version 13 and contacted Ulrich Busch asking to include examples of SPECT-CT or PET-MRI.</td>
</tr>
<tr>
<td>CP 1800</td>
<td>Field of View Origin clarification needed</td>
<td>Wim Corbijn</td>
<td>Wim Corbijn</td>
<td>Assigned</td>
<td>Following the indications of Wim Corbijn, a table was included with the values which describe the images. The update was not taken in Part 3 by WG-06 (Jan 2019), but it could be included in Part 17 as explanatory information.</td>
</tr>
<tr>
<td>CP 1863</td>
<td>Dose (RP) conditions are too restrictive in RDSR template TID 10003B</td>
<td>Kruse</td>
<td>Wim Corbijn</td>
<td>Assigned</td>
<td>An email was sent to Wim Corbijn saying that WG-02 and WG-28 agree that the Dose (RP) condition could include an additional condition that the value is not required if the system cannot calculate or measure it.</td>
</tr>
<tr>
<td>CP 1881</td>
<td>Add IEC 62985 Size Specific Dose Estimation</td>
<td>Ruf</td>
<td>Björn Nolte</td>
<td>Assigned</td>
<td>Tcouncil with WG-21 &amp; WG-28 was held on May 7, 2019 to discuss this CP. No specific action at this time-- waiting for WG-21 to follow up.</td>
</tr>
<tr>
<td>CP 1899</td>
<td>Number of Frames attribute should never have a value of zero</td>
<td>John Perry</td>
<td>David Clunie</td>
<td>Assigned</td>
<td>Members reviewed. No follow up at this time.</td>
</tr>
<tr>
<td>CP 1880</td>
<td>Update Linear_Exact and Sigmoid formula</td>
<td>Wim Corbijn</td>
<td>Wim Corbijn</td>
<td>Letter Ballot</td>
<td>CPACK 102. To follow up.</td>
</tr>
</tbody>
</table>
3. **Supplement 212: XA Protocol Storage**

- Members reviewed Draft No. 18 of the Supplement and its corresponding PowerPoint in preparation for discussion with WG-06 on June 4-5. WG-02 focused on the open issues and updates since the April meeting including:
  - 10.x.1.1. Referenced Protocols Macro Attribute Descriptions: adding new SOP instance and Protocol Elements
  - C.8.7.1.1 X-Ray Image
  - CID XAProt01 Contraindications For XA Imaging
- On June 4-5, 2019, WG-02 then met with WG-06 to review the Supplement and PowerPoint in preparation for Public Comment. WG06 had several comments/suggestions for changes and a follow-up meeting with WG06 is scheduled for September 2019.
- Other than open issues, the work in progress includes the addition of examples to Part 17 as soon as the IOD Modules and Attributes are “stabilized” following WG-06 comments.

4. **Supplement 214: Cone Beam Radiation Dose Structured Reporting**

- On May 13, 2019, WG-28 held a teleconference where updates were made on the Supplement in preparation for this meeting.
- On June 3, 2019, members reviewed the updated version of this Supplement as well as its corresponding Powerpoint in preparation for WG-06 review on June 4-5. Once WG-06 provides their comments, the Supplement will be revised prior to dissemination for Public Comments.
- On June 4-5, 2019, members met with WG-06 to review and discuss the Supplement. The group decided that the Supplement may need to return to WG-06 for another review in September. They will discuss this item on their next conference call and let WG-28 know whether additional review will be needed.

5. **Review Current Work Items and Supplements: Supplement 202 Real Time Video**

- Supplement 202 Real Time Video (DICOM WG-13) has reduced its scope to Visible Light. The mechanisms defined in this supplement are potentially useful for real time angiographic applications.
- **Emmanuel Cordonnier (Editor)** provided an overview of the Supplement 202 on Wednesday June 5, 2019 at 4:30pm-5:30pm CET (3:30pm-4:30pm Dublin time). Emmanuel discussed the
Supplement with a special focus on the application of these concepts to real time video in the Interventional arena. WG-13 was invited to this call. *(End of this document contains Tconf details).*

- The group will follow up on this item at their next meeting in October.

6. **WG-12 Ultrasound New Work Items**

- Members reviewed the coordinated work between DICOM WG-01 (Cardiac and Vascular Information), WG-12 (Ultrasound), and other organizations on the development of a work item in the Cardiovascular imaging domain, mostly focused on extending DICOM SR for Strain measurements.
- Donald Peck sent an email to AAPM Ultrasound Subcommittee regarding the questions on pixel maps. The Subcommittee Chair replied that they are working with WG-12 on this and several other issues. No further action is necessary at this time.

7. **Follow –Up Topics**

- **DICOM work on structured data reporting:** Members followed-up on the discussion with Joe Deasy (Memorial Sloan Kettering) at their last meeting in April regarding linking structured data between DICOM and other representations.
  - Joe Deasy (Memorial Sloan Kettering) had asked about DICOM work on structured data reporting and linking structured data between DICOM and other representations. Donald Peck replied that DICOM has already added a method to link structured data between DICOM and other representations [e.g. NCI Annotation and Image Markup (AIM) to and from DICOM SR Measurement Templates]. Donald suggested that a good method to help support the utilization of DICOM is to work with IHE to develop a profile for its use, and that WG-02 and WG-28 can present to IHE that AAPM has interest in providing support to develop this profile.
  - Joe Deasy recommended that his colleague Aditya Apte ([aptea@mskcc.org](mailto:aptea@mskcc.org)) would be a good candidate to help drive this work forward. Francisco Sureda was assigned an action item to ask about the status of this work at the next IHE meeting (April 15-19, 2019 in Rennes, France) and to suggest Aditya Apte as a new member.
  - Francisco brought this up at the IHE meeting and reported back to WG-02 and WG-28 that the IHE Technical Committee executes what the IHE Planning Committee has decided, so that meeting was not the right forum to submit a request for a new profile. He also noted that the two Working Groups should have a look at other DICOM groups before reaching out to IHE.
  - The next step is to discuss this with domain experts in DICOM WG-06 to seek for guidance and recommendations because some of the WG-06 members are also members of the DSC and IHE Planning Committees. Donald sent an email to Joe Deasy recommending him to reach out to Lawrence Tarbox to get information about working with DICOM and AI issues. No further action at this time.

- **IHE MAP and REM Profiles:** Members followed up on the development of these IHE Profiles and the related CPs. ftp://ftp.ihe.net/Radiology/TF_Maintenance/
• MRI Supplement 210 and MRI Protocol Storage Supplement: Members are continuing to monitor the progress of this supplement, and will check for work related to Protocol Storage of other modalities. These items will be followed up through the WG-06 reviews.

8. Reports from liaisons with other groups and organizations
• Annalisa Trianni reported on the MITA X-Ray Interventional activities and on the IEC Interventional activities related to radiation dose reporting. There is a new IEC group under the umbrella of 243 to develop a protocol for QA test on angiosystems. The kick-off meeting will take place in Budapest in late June 2019. Annalisa will continue to update WG-02 and WG-28 about this group and their discussions. There was nothing to report on MITA X-Ray Interventional activities at this time.

9. New Work Items
• There were no new activities (including joint activities with other WGs) for members to discuss at this time.

10. Planned Meeting Dates in 2019-2020
Members continued to define the calendar for 2019 and 2020 meetings:
• October 21-23, 2019 joint WG-02/28 meeting in Paris, France.
• 2020 possible meeting locations: Barcelona, Spain (May 11-15, 2020); Vancouver, BC (just before or after the AAPM Annual Meeting which is July 12-16); and Taormina, Italy (fall).

11. New Business
• No new business was discussed.

12. Adjourn
• The meeting was adjourned at 5:00pm on June 5, 2019.

Meeting Schedule and Locations (Dublin local time)

Monday
9am – 5pm
SSG - Faculty of Radiologists

Tuesday
8:30am - 12:30pm (with WG-06) The Department of Health
1:30pm - 5pm SSG - Faculty of Radiologists

Wednesday
8:30am -12:30pm (with WG-06) The Department of Health
1:30pm - 5pm SSG - Faculty of Radiologists

SSG - Faculty of Radiologists: 26 YORK STREET, Dublin R.421. TUTORIAL ROOM (NO. 26, F4)
The Department of Health: Block 1, Miesian Plaza, 50 - 58 Lower Baggot Street, Dublin, D02
XW14. Meeting Room: Room 5.22

Tconf Details

Wednesday
4:30pm - 5:30pm (Central European Time) / 3:30pm - 4:30pm (Dublin local time)

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https://global.gotomeeting.com/join/552946413

Meeting Number: 552-946-413
Meeting Password: none

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OR
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Canada (Toll-free): +1 647 497 9372

International toll-free numbers available during sign-in.

ENTER ACCESS CODE: 552-946-413

Submitted by Shayna Knazik, DICOM WG-28 Secretary
Reviewed by Luiza Kowalczyk, DICOM Secretariat
Reviewed by CRS, October 22, 2019.