



# **MINUTES**

## **JOINT VIRTUAL MEETING OF**

### **WORKING GROUP TWO (WG-02) (Projection Radiography and Angiography) WORKING GROUP TWENTY EIGHT (WG-28) (Physics)**

**Logistics:** **March 10-11, 2021; 10:00am to 12:00pm US ET**

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

**Secretariats:** Alberto Torresin (EFOMP)  
Shayna Knazik (MITA/NEMA)

**Voting Members Present:**

AAPM  
AAPM  
EFOMP  
ESR/EFOMP  
GE Healthcare  
IPEM/British Institute of Radiology  
MITA  
PACS Health

Nick Bevins  
Donald Peck  
Alberto Torresin  
Annalisa Trianni  
Francisco Sureda  
Ed McDonagh  
Shayna Knazik  
Steve Massey

**Voting Members Not Present:**

Philips Pritham Shetty

**Non-Voting Members Present:**

AAPM Mahesh Mahadevappa, Observer  
GE Healthcare Steve Nichols, Observer  
Hologic Yuan Fang, Observer

## Opening Items

- Welcome and roll call: the teleconference was called to order and a quorum was present.
- DICOM antitrust and patent rules were reviewed.
- The agenda was reviewed and approved.
- The minutes from the preview meeting (2020-12-16) were reviewed and approved.

## CPs

- Members reviewed the advances of CPs discussed in previous meetings, and reviewed new CPs related to the scope of WG-02 and WG-28:

Number	Name	Submitted	Assigned	Coded Status	Comments/Actions for WG-02 and WG-28
<b>CP 1196</b>	Add phantom-specific Total DLP Values to allow for Head and Body in same RDSR scope of accumulation	Clunie	Clunie	Assigned	Nick Bevins continues to work with WG-21 on this CP. Their conclusion was that concept of total DLP in its current DICOM framework does not make sense, in particular phantom types. WG-21 has drafted a letter and a member will be taking this to IEC. CP-1196 was then decoupled with Sup214.
<b>CP 1319</b>	Frame Of Reference Reliability	Sureda, et al.	Busch	Assigned	<b>Action:</b> Francisco to update and submit to WG-06 for their March meeting.
<b>CP 1915</b>	Adapt definition of FocalSpot (0018,1190) to comply with IEC60336 section 8.3	Hoenig	Nolte	Assigned	Members reviewed this CP and there has been no activity on it in WG-06. Members will continue to review. <b>Action:</b> Shayna will ask Björn for a status update.
<b>CP 1927</b>	Patient Sex and Gender clarifications	Horn	Horn	Assigned	WG-06 reactivated it's subgroup on Sex and Gender Encoding, so work has resumed on this CP. The HL7 document on Sex and Gender Encoding passed in January 2021 so this should be due for DICOM work in the upcoming months. Members will continue to monitor this CP.
<b>CP 1964</b>	Improve the definition of pixel spacing	Corbijn	Corbijn	Assigned	Members reviewed this CP and there have been no new updates since the last review. Members will continue to monitor this CP. <b>Action:</b> Shayna to ask Wim for a status update on this CP and relay that members have some concerns on the definitions.
<b>CP 2107</b>	Add repeated acquisition to TID 10003, 10013	Nichols	Nichols	Assigned	Members discussed this CP with submitter Steve Nichols and ensured that Sup214 is implementing the updates in the same way that the CP is proposing. Members will continue to monitor.
<b>CP 2108</b>	Add software grid terminology	Nichols	Nichols	Assigned	Members discussed this CP and reviewed X-Ray concepts. Members will continue to monitor.
<b>New CP</b>	Differentiate Geometric Types of CT Imaging Sources	Yan		New	WG-07 Radiotherapy requested that WG-28 review their new CP before submission to WG-06. Members discussed the CP and recommended that the CP be reviewed by WG-21 as it doesn't impact Sup214. <b>Action:</b> Shayna to send to Till and cc: WG-07 leaders.

### Supplement 212: XA Protocol Storage

- Members reviewed the Final Text version of Sup212, focusing on the tracked changes that Francisco made in response to comments received at the January 2021 WG-06 meeting. Francisco noted that all comments received were minor, with the exception of the new attribute Requested Series Description Code Sequence.
- Supplement 212 is now incorporated into the DICOM Standard. Congratulations WG-02!

### Supplement 214: Cone Beam Radiation Dose Structured Reporting

- Members reviewed the Letter Ballot version of Supplement 214, focusing on comments received since the January WG-06 meeting. The group reviewed some preliminary feedback that WG-07 discussed at their recent meeting.
- The Supplement was revised accordingly and Nick will upload the current version to the FTP.
- Shayna has reserved one, 2-hour slot at the March WG-06 meeting for this Supplement, in preparation for Final Text.

### Part 17 additions: CP or Supplement?

- The group discussed an old supplement that WG-02 began years ago to update the PS3.17 Annex AA: Radiation Dose Reporting Use Cases (Informative), which was created by Sup94 in 2004. The scope was to clean-up use cases that were redundant with the IHE REM profile, and to add use cases for the Dose SR enhancements since 2004 (including DR/DX and mobile X-Ray cases).
- In the past years, there has been a high interest (ACR, FDA, MIR, MITA CR-DR Group) to foster the implementation of DR/DX Radiation Dose SR, but the attempt to establish a program in Digital Radiography (similar to the Dose Index Registry for CT) was facing to poor implementations. DICOM WG-28 will help by undertaking a kind of “RDSR Implementation Guide for DR” through the new supplement Informative Annex with examples to help DR vendors to implement the RDSR.
  - **Action:** Heinz suggested that he create a CP to work on the strike AA from the Annex portion, then the group can draft a supplement on all RDSR’s.
- Editorial questions:
  - Current Part 17 Annex AA: need to clean up (and refer to IHE): will do a through a CP (Heinz)
  - Will create a new single Annex for traditional RDSR (Projection X-Ray) and enhanced RDSR.
    - Include CT.
    - Exclude P-RDSR and NucMed.
    - Name of the Annex: Radiation Dose Structured Reporting (as proposed in Sup 214) – to be discussed with WG-06 in March’21
    - Content: encoding examples (not use cases) ...
- Process for creating the new Annex:

- Supplement or CP? We would prefer a supplement (brings more attention to other groups to contribute)
- Draft a Work Item Proposal:
  - General examples and encoding guidance of traditional RDSR: many questions still arise from the field. Changes over time (CPs) added increasing complexity of RDSR, worth to put together this knowledge in DICOM Part 17. Not only for X-Ray projection RDSR (XA, Mammo, DX) but also for CT.
  - Provide examples using traditional and enhanced RDSR, mapping from one to the other...
- What Working Group will pull this work? WG-28, as it impacts several modalities and involves various Working Groups (02, 15, 21).
- Next DSC meeting: April 30 – NWIP are due on April 16. **Action:** Francisco will write a draft and will circulate it before March 25 (for WG-06 pre-review while reviewing Sup 214) within WG-28 and WG-02 / WG-15 / WG-21.
  - Limitations: there is no examples of RDSR in part 17
  - Description of proposal:
  - Parts impacted: Part 17
  - Resources: Active participants: WG-28/02, but will need reviews/agreements by WG-15/21. A lot of work has been done already within WG-02/WG-28.
  - Time Line and WG-06 meetings: Ask advice from WG-06
- Who's the editor? Start with collaborative editors (ask chairs of WGs)
- New Annex Content requirements:
  - General to all modalities (e.g. encoding of observers, physicians...)
  - Sections for each Modality: Each modality will focus on the top issues for that type of products
    - XA:
      - Encoding of distances (for dose measurement, mechanical distances...)...Isocenter in XA (table, patient mapping...): think about data needed for P-RDSR
      - Pulse, irradiation duration...
      - Filters
    - X-Ray (CR, DR, DX):
      - Integrated vs. non-integrated systems
      - Repeat/Reject
    - CT:
      - Reject reasons, repeat acquisitions
      - ...
  - Mapping between Traditional and Enhanced RDSR

### Planned Meeting Dates in 2021

- Members will discuss plans for 2021 meetings.
- Tentative virtual meeting – June 9-11, 2021; 4 hours a day
- September 15-17 meeting (tentatively face-to-face in Trento, Italy)

### New Business

- There was no new business to discuss at this time.

### Adjourn

- The meeting was adjourned at 12:04pm US Eastern on March 11, 2021.

Prepared and submitted by Shayna Knazik

Reviewed by Counsel 6/3/21