MEETING NAME         WG-34 Photoacoustics Teleconference

MEETING PLACE/DIAL IN       https://spie-org.zoom.us/j/89427438548?pwd=T1pmaytBc01BOWM3c21rakRQdzlEUT09

DATE & TIME               Thursday, April 28, 2022, 12:15 PM ET

PRESIDING OFFICERS        American College of Radiology   - Brian Bialecki (Co-Chair)
                          iThera Medical GmbH       - Stefan Morscher (Co-Chair)

VOTING MEMBERS PRESENT    Seno Medical Instruments
                          University College London
                          Seno Medical Instruments, Inc.
                          Allison Bertrand, Alt-Voting
                          Ben Cox
                          Bryan Clingman

VOTING MEMBERS ABSENT     University of Cambridge
                          Carl Zeiss Meditec AG
                          SuperSonic Imagine
                          GE Healthcare
                          Sarah Bohndiek*
                          Stefanie Freitag*
                          Damien Lerat*
                          Steven Nichols*

*Not present at two consecutive meetings and therefore not counted for quorum during this tcon

DICOM SECRETARIAT         Joint: SPIE/IPASC
                          Amanda Kalkwarf, SPIE, Secretariat

1. OPENING ITEMS:
   - **Call to order:** The meeting was called to order. Staff recorded attendance and confirmed that a quorum was present.
   - **NEMA Antitrust rules and DICOM Patent Policy:** Staff reviewed the Guidelines for Conducting NEMA Meetings and patent policy.

2. REVIEW AND APPROVE AGENDA: The agenda was reviewed and approved.
3. REVIEW MINUTES: The minutes from the 2022-04-14 meeting were reviewed and approved.

4. TOPIC ITEMS TO BE DISCUSSED:
   
   • Discussion of the work item:
     
     o Approve changes made since 2022-04-14 Meeting on the Google Drive:

     The document was reviewed in the Google Drive.

     Discussion ensued about table C.7.6.16-3., Frame Content Macro Attributes table. Members were of different opinions about the Frame Reference DateTime attribute, specifically if it is required whether it is original or DERIVED. One member proposed specific edits, which were mainly agreed to; Bialecki said he will recheck the standard to see if a bulleted “required if” list is used anywhere else.

     There was initial agreement to proposed edits to the Detector Response Type Code Sequence. Discussion continued about the attribute, and there was final agreement to change Detector Response Sequence from a 2 to a 1, but only if the Detector Response Type Code Sequence row is deleted and a Code Sequence Macro row is inserted below it.

     The definition for the Code Sequence Macro table, 8.8-1, was edited to “DCID SADFD “Ultrasound Transducer Technology” PIEZOCOMPOSITE, CMUT, PMUT, INTERFEROMETRIC.” Discussion ensued about including CMUT and PMUT. There was agreement to change it to “PIEZOCOMPOSITE TRANSDUCER, MEMS-BASED TRANSDUCER, INTERFEROMETRIC TRANSDUCER.”

     There was agreement to the proposed edits to the Data Dictionary.

     Discussion ensued about the definition of “water.” There was agreement to close the open comment regarding this definition and to retain the existing definition in the Data Dictionary: “Water is used as a coupling medium between the imaging device and the subject. This code is only to be used for pure water without additives that change either the optical or acoustical properties.” There was agreement to change the attribute from “Water (H2O)” to “Water Couplant (H2O).” There was further agreement to not use any of the terms from the water definition in the standard.

     A member said updates are still needed for Use Case 1. Small changes to the diagram are necessary because they still reference Stack ID and need to be replaced with TemporalPositionTimeOffset.

     Discussion resumed about water. A member said he found definitions for “water” and “air” in the standard. Another member said he did not like the change from “Water (H2O)” to “Water Couplant (H2O).” There was agreement to change it back to “Water (H2O)” and to use the SNOMED code. A note was added to “add SNOMED-RT ID.” Discussion continued about water, with some members preferring “Water Couplant (H2O)” over “Water (H2O).”
Action Items:

• Consider whether the event timer is needed in photoacoustic or not – Bialecki
• Review the standard to see if a bulleted “required if” list is used anywhere else. - Bialecki
• Review whether “Field” is the correct term to use in “Detector Response Field Code Sequence.” – Bialecki
• Review the DICOM standard to check if the “Image Filtering” table should be included - Bialecki

• Any Additional Items: A member reported that WG-34 may be asked to assist a potential microwave imaging working group at some point in the future; most likely after the WG-34 supplement is completed. The rest of WG-34 said that plan sounded reasonable.

5. Reminder of DICOM resources:

FTP Server for exchange of documents:
ftp://d9-workgrps@medical.nema.org/MEDICAL/Private/Dicom/WORKGRPS/WG34/

Email listserv for discussion (must be on the list to post):
nema1+dicom-wg34-1579@discoursemail.com

Discussion guidelines: Use for directly related technical information, and avoid antitrust topics and discussion of patented technology (known patents must be disclosed)

Meeting Minutes

Will be circulated online and posted under WG-34 page here: https://www.dicomstandard.org/wgs

New members please fill this out: https://www.dicomstandard.org/participate All are welcome. Voting members of this group are required to sign an organizational patent form (unless an individual, e.g. a student). Those wishing to join as a member of the DICOM Standard Committee to have input on DICOM’s priorities may inquire at the participate form.

6. OLD BUSINESS/NEW BUSINESS

7. DATE AND TIME OF NEXT MEETING

Thursday 12 May 2022, 12:15 PM ET

Submitted by: Amanda Kalkwarf/Carolyn Hull, 5/12/22