

MINUTES

DICOM WG-06 Base Standard

March 21-25, 2022
Hybrid (Face2Face & Remote) Meeting

Presiding Officers: Bjorn Nolte, Siemens Healthineers, Chair
David Clunie, PixelMed, DICOM Editor

DICOM Secretariat: Shayna Knazik, MITA/NEMA

Summary of decisions from this meeting

- Supplement 225 on Multi-Fragment Video Transfer Syntax was approved for Final Text as amended.
- Supplement 209: DICOM Conformance Statement was approved for Letter Ballot as amended.
- Supplement 223: Inventory IOD and Related Services was approved for Letter Ballot as amended.
- Supplement 231 on Adaptive Dynamic Range GSPS was approved for Public Comment as amended.
- Supplement 227: Ultrasound Elastography Structured Report was approved for Letter Ballot as amended.
- A Supplement on Adaptive Dynamic Range GSPS was presented for First Read and was assigned the number 231.
- A Supplement on TLS 2022 Update was presented for First Read and was assigned the number 230.
- CPack-115 was approved for Final Text with 13 Correction Proposals (CPs), and CP-2163 was sent back to WG-14.
- CPack-116 was approved for Letter Ballot with 22 CPs.

1. Administrative

- a. With a quorum present, the March WG-06 Hybrid Face2Face & Remote Meeting was called to order at 9:03AM US EST on Monday, March 21, 2022.

- b. Antitrust and patent statement was reviewed: Per DICOM bylaws, all discussions in this meeting, including those in the chat window, must abide by DICOM's antitrust and patent policies which are located on the DICOM website: <https://www.dicomstandard.org/patent>
- c. The agenda was reviewed and approved.
- d. The minutes from the January 2022 WG-06 meeting were reviewed and approved.

2. Report on Letter Ballots

| DSC Ballot | Approve | Disapprove | Abstain | Comments |
|----------------|---------|------------|---------|----------|
| CPack-115 | 18 | 0 | 2 | 8 |
| Supplement 213 | 15 | 0 | 4 | 3 |

a. CPack-115

- The official ballot was distributed to voting members of the DICOM Standard Committee on January 26, 2022 and closed on March 15, 2022. CPack-115 included the following CPs (14 CPs):

| CP # | Title | Decision |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| CP-1196 | Add phantom-specific Total DLP Values to allow for Head and Body in same RDSR scope of accumulation | Approved for Final Text |
| CP-2086 | Relax requirement for Slice Thickness, Pixel Spacing and Imaged Volume Width/Depth/Height for Whole Slide Microscopy LABEL and OVERVIEW images | Approved for Final Text |
| CP-2130 | Referencing from UV Mapping Module | Approved for Final Text |
| CP-2135 | Add Acquisition and Pyramid Entities to Information Model, with UIDs and other Attributes | Approved for Final Text |
| CP-2139 | Corrected inconsistencies in JSON Data Model mapping from XML | Approved for Final Text |
| CP-2140 | Add basic and examination information of the patient for DICOM virtual film printing | Approved for Final Text |
| CP-2151 | Align RT Structure Set Codes with Segmentations | Approved for Final Text |
| CP-2160 | Move duplicate Code Meaning for Code Value 65801008 to list of synonyms | Approved for Final Text |
| CP-2163 | <i>Add term to represent the local client copy buffer to CID 405 for Data Export</i> | <i>Sent back to WG-14 - will be re-balloted once Canon's comment is resolved</i> |
| CP-2165 | Add indicator of control material on slide | Approved for Final Text |
| CP-2167 | Add more brain segmentation labels | Approved for Final Text |
| CP-2169 | Move SCP rendering requirements from Part 3 to Part 4 | Approved for Final Text |
| CP-2171 | Define use of Pixel Padding Value for PALETTE COLOR images | Approved for Final Text |
| CP-2172 | Explanations on RT Radiation Usage and Intent | Approved for Final Text |

- *David Clunie made a motion to approve Cpack-115 for Final Text, excluding CP-2163. Wim Corbijn seconded the motion. The motion was approved.*

- **DECISION:** CPack-115 was approved for Final Text, excluding CP-2163.

3. Report on Correction Proposals

a. New CPs

| Submitted file name | Title | New CP # |
|--------------------------|---------------------------------------------------------------------------------------------|----------|
| Correct Table | Correct Table C.11.1.1.2.1-1 Recommended Rescale Type Assignments for Multi-energy CT Image | CP-2209 |
| cp_AP_CID4231 | Correction needed - CID 4231 Lens Status – Inactive SCT Code Value for Phakic | CP-2210 |
| cp_ay01 | Add RPLD Glass dosimeter to Radiotherapeutic Dose Measurement device | CP-2211 |
| cp_dac605 | Update PET Radiopharmaceuticals with SCT | CP-2212 |
| cp_dac606 | Species Attributes conditions should be non-human not animal | CP-2213 |
| cp_dac607 | Sub-pixel Resolution SCORD mapping to 3D RCS | CP-2214 |
| cp_dac608 | Measurements and Categorical Statements on Patients, Studies and Series | CP-2215 |
| cp_dac609 | Add Specimen Module to Presentation States | CP-2216 |
| cp_nb28 | Add CID for Radiation Dose Imaging Procedures | CP-2217 |
| cp_new_fs01 | Add Note in PS3.16 TID 10007 row 3 | CP-2218 |
| cp_new_fs02 | Add Note in PS3.16 to Table Position Codes | CP-2219 |
| cp_RT166 | Add missing Treatment Site Modifier | CP-2220 |
| cp_RT199 | Clarify Block Accessory Codes | CP-2221 |
| cp_RT201 | Dose Calibration Conditions Verified Flag Clarification | CP-2222 |
| cp_RT204 | Use correct IOD names in caption of their module tables | CP-2223 |
| cp_RT205 | Add Breast Segmentation Types Context Group | CP-2224 |
| cp_vanWijk | Add Application Entity Titles (AETs) to de-identification profile | CP-2225 |
| cp_dac610 | Correct references to Content-Encoding and conditions arising from it | CP-2226 |
| cp_dac611 | Support of new MLC types | CP-2227 |
| Correct Content Encoding | Prescription Overview Sequence | CP-2228 |
| cp_RT187 | Fix Attribute wording for Brachy | CP-2229 |
| cp_RT206 | Correct/add Body Part Examined Defined Terms in correspondence Table L-1 | CP-2230 |
| cp_RT208 | Switch to SNOMED CT code for Phantom | CP-2231 |
| cp_WG21_added | Add missing Treatment Site Modifier | CP-2232 |
| cp_WG21_switch | Clarify Block Accessory Codes | CP-2233 |

- **Action:** Shayna to contact Christof that Enhanced CT needs to be added to CP-2220 and to coordinate with WG-21/Till.

b. CPack-116/March 2022 Voting Packet

| CP # | Title |
|---------|-------------------------------------------------------------------------------------------|
| CP-2062 | Add Device UID to Contributing Equipment Sequence |
| CP-2064 | Code to reference a contributing processing algorithm |
| CP-2144 | Cleanup PS3.17 section AA to refer to IHE REM profile and figures |
| CP-2162 | Clarification of waveform filter attributes |
| CP-2168 | Abbreviated spelling of "SR Document IE" |
| CP-2173 | KOS Current Requested Procedure Evidence Sequence |
| CP-2174 | Clarify Photometric Interpretation of Legacy Converted images |
| CP-2175 | Correction of invalid module references in Softcopy Presentation State IODs |
| CP-2176 | Add Category of Finding to TID 1500 |
| CP-2177 | Add Specimen Module to Microscopy Bulk Simple Annotations |
| CP-2178 | Clarify Microscopy Bulk Simple Annotations Coordinate Units |
| CP-2180 | Add Anatomy to Microscopy Bulk Simple Annotations |
| CP-2181 | Add keywords for Context Groups in PS3.16 |
| CP-2182 | Simplification of RT ROI Observations |
| CP-2183 | Add used ROI to Registration |
| CP-2184 | Add Conceptual Volume to Structure Set |
| CP-2186 | Cleanup of Planning Risk Volume Code |
| CP-2187 | Describe usage of Configuration and Commissioning Keys To Radiation Generation Mode Macro |
| CP-2188 | Restore RESTful WebServices use case examples |
| CP-2191 | Correct errors in Audit Message example in Part 17 |
| CP-2192 | Add digital certificate to de-identification profile |
| CP-2193 | Add Encapsulated Document to de-identification profile |

- *David Clunie made a motion to approve Cpack-116 for Letter Ballot. Björn Nolte seconded the motion. The motion was approved.*
- **DECISION:** CPack-116 was approved for Letter Ballot (22 CPs).

c. Assigned CPs

Note: Please upload the VP version (candidates for the CPack-117/June 2022 Voting Package) in the [June 2022 VP mtg folder](#).

| CP # | Title | Decision |
|---------|-------------------------------------------------------------------------------------------|-----------------------------|
| CP-2148 | Clarify audit trail messages | Moved to June Voting Packet |
| CP-2161 | <i>Photogrammetric Model Enhancement of VL IODs</i> | <i>Remains assigned</i> |
| CP-2166 | Update DICOM to reflect changes in IHTSDO SNOMED CT-DICOM Subset for JUL 2021 INT Release | Moved to June Voting Packet |
| CP-2185 | <i>Add Treatment Session UID to First Generation RT Objects and CT Image</i> | <i>Remains assigned</i> |

| | | |
|---------|--------------------------------------------------------------------------------------------------------------|-----------------------------|
| CP-2190 | Clarify origin server behavior when includefield=all is passed in a query | Moved to June Voting Packet |
| CP-2194 | Add Specimen and Container Type to Preparation Template | Moved to June Voting Packet |
| CP-2195 | Add seed point for purpose of region | Moved to June Voting Packet |
| | Add seed point for purpose of region | Moved to June Voting Packet |
| CP-2196 | Add FHIR Coding Scheme URL Type | Moved to June Voting Packet |
| CP-2197 | Add Clinical Trial Time Point Type Code Sequence to Study Module and extend Value Set | Moved to June Voting Packet |
| CP-2198 | Correct row reference in Content Item Description of TID 10003 | Moved to June Voting Packet |
| CP-2199 | Fixes to Part 5 for recently added VRs OV, SV and UV (and regarding inconsistent and incomplete definitions) | Moved to June Voting Packet |
| CP-2200 | Fix inconsistent names of extended Storage Service features | Moved to June Voting Packet |
| CP-2201 | Fix wrong term "Basic Worklist Management SCP" | Moved to June Voting Packet |
| CP-2202 | Clarifications and examples for Value Set Constraint field | Moved to June Voting Packet |
| CP-2203 | Add References between 1 st and 2 nd Gen Radiation IODs | Moved to June Voting Packet |
| CP-2205 | Correction of confusing statement regarding implementation of Pixel Aspect Ratio for icons | Moved to June Voting Packet |
| CP-2206 | Correct the media types for video in PS3.18 | Moved to June Voting Packet |
| CP-2208 | <i>Include additional cardiovascular terms to Part 16</i> | <i>Remains assigned</i> |

4. Report on Supplements

NOTE: All documents are uploaded to the FTP server in the directory of WG-06. Please refer to those documents for more technical details. Contact the Secretariat for help accessing the FTP.

a. New Supplement on TLS 2022 Update (WG-14)

- Larry Tarbox and Rob Horn led the group through a First Read of a New Work Item Proposal on TLS 2022 Update, which included a review of two PowerPoint presentations. This supplement updates the Secure Communications profiles to reflect the new versions of IETF's BCP-195 (best Current Practices) and the Japanese-requested enhancements to BCP-195 (principally changes to minimum cipher suit requirements).
- This supplement will retire the 3 Secure Communications profiles based on the old versions of BCP-195 and create 2 new profiles referencing the new version of BCP-195. The latest BCP-195 can be found at <https://tools.ietf.org/html/bcp195>
- WG-14 requested one, 2-hour slot at the June WG-06 meeting.
- *Rob Horn moved to assign this Supplement a number and Kevin O'Donnell seconded. The motion was approved.*
DECISION: This Supplement was assigned the number 230.

b. New Supplement on PET GSPS (WG-03)

- Steve Nichols led the group through a First Read of a New Work Item Proposal on Adaptive Dynamic Range GSPS, along with its accompanying PowerPoint. This

Supplement defines a new SOP Class that relaxes the requirements of the existing GSPS SOP Class for modalities in which the dynamic range varies between images or frames. The SOP Class will not include the GSPS Modality LUT and address handling of Modality LUT in the referenced image(s).

- After discussion, the group agreed that this Supplement is ready for Public Comment.
- *Kevin O'Donnell moved to assign this Supplement a number and Wim Corbijn seconded. The motion was approved.*

DECISION: This Supplement was assigned the number 231.

- *Wim Corbijn moved to approve for Sup231 for Public Comment as amended and Kevin O'Donnell seconded. The motion was approved.*

DECISION: Supplement 231 was approved for Public Comment.

c. Supplement 209: DICOM Conformance Statement (WG-31)

- Antje Schroeder and WG-31 continued with the presentation of Supplement 209 since their last sessions in January 2022, beginning with the Open Issues. Sup209 is working toward Letter Ballot.
 - There was one Open Issue regarding “Data Retention in DCS”. As there are many small changes in different parts of DICOM, it was decided to postpone this change (seen below in the screenshot) to a CP initiated from WG-31 to handle this for all affected sections and parts of DICOM.

Do we need to document data retention capabilities in the DICOM Conformance Statement?

For now, we keep it out because data retention depends on site policies and supporting functionality should be documented in product manuals. Aspects of these capabilities may be addressed in the configuration section.

Answer: Storage Commitment SCP section notes that a description of duration of storage can be documented there. However, a detailed description of retention policy capabilities is better document in other product documentation. Also add to storage service (maybe use different wording to indicate short-term vs long-term (review and reference Part 4 Section b.4.3.2.))

- *Wim Corbijn moved to approve Supplement 209 for Letter Ballot pending amendments and Paul Seifert seconded. The motion was approved with one point of discussion for the minutes.*
 - Kevin O'Donnell noted reservations that line-by-line review had not been completed due to the length of the supplement and the interest of the authors to move to the next stage. The average supplement is 50 pages. At 264 pages, Sup209 is the second longest on record. The 8 months between PC and LB is what we would normally spend on a 75 page supplement. It seems likely the quality for 264 pages will not be as high as usual. In the future, WG-6 needs remind authors that long documents take longer to review and Supplement authors should be encouraged to limit the scope or plan to divide the Supplement into multiple parts.
- **DECISION:** Supplement 209 was approved for Letter Ballot as amended.

d. **Supplement 213: Second Generation Radiotherapy – Enhanced RT Image and Acquisition Instruction (WG-07)**

- Christof Schadt, Jim Percy, and Uli Busch led the group in a review of Supplement 213 in preparation for Letter Ballot. The group picked up with their line-by-line review of the draft since the January 2022 WG-06 meeting.

e. **Supplement 223: Inventory IOD and Related Services (WG-33)**

- Harry Solomon led the group through a review of Supplement 223 in preparation for Letter Ballot. One substantive change was made since the January WG-06 meeting: added a set of access end points at the top level inventory level.
- *Björn Nolte moved to approve Supplement 223 for Letter Ballot pending amendments and Wim Corbijn seconded the motion.*

DECISION: Supplement 223 was approved for Letter Ballot as amended.

f. **Supplement 224: Service Discovery and Control (WG-23)**

- Brian Bialecki continued with the review of Sup224 in preparation for Public Comment. The group reviewed both the PowerPoint and the Supplement draft.

g. **Supplement 225: Multi-Fragment Video Transfer Syntax (WG-04)**

- Bill Wallace presented Supplement 225 in preparation for Final Text. The group reviewed the entire document at the January 2022 meeting, but David Clunie was not present, so it was tentatively approved for Final Text pending David's final review. During David's review, he still had some significant items to discuss so it was not converted to Final Text. The group reviewed David's changes which he worked on offline with Bill.
- *David Clunie made a motion to approve Supplement 225 as amended for Final Text. Kevin O'Donnell seconded the motion. The motion was approved.*

DECISION: Supplement 225 on Multi-Fragment Video Transfer Syntax was approved for Final Text as amended.

h. **Supplement 226: Confocal Microscopy (WG-19)**

- Liam Caffrey presented Supplement 226: Confocal Microscopy in preparation for Public Comment. Progress since the January WG-06 meeting includes:
 - Major changes
 - Originally 1 IOD now 3 IODs
 - Additional IODs Confocal Microscopy Tiled Pyramidal Image IOD and Confocal Microscopy Multi-Frame Image IOD
 - Skin Cancer Acquisition Context > Skin Imaging Acquisition Context
 - Add CID Specimen stains for CM (do not use existing CID)
 - Minor changes
 - Formatting errors
 - FL to FD
 - Added microscope to Optical Magnification Factor
- The group was close to finishing the review of the Supplement but they'd like to see a few more changes, so we will schedule a 2-hour call before the June meeting.

- **Action:** Shayna to send a doodle to WG-19 and WG-06 in early April.

i. Supplement 227: Ultrasound Elastography Structured Report (WG-12)

- Kevin O’Donnell presented Supplement 227: Ultrasound Elastography Structured Report in preparation for Letter Ballot. He reported that the Supplement received a good amount of Public Comments from a few different groups. He began discussion with the open issues.
- *Björn Nolte moved to approve Supplement 227 for Letter Ballot pending amendments and Wim Corbijn seconded the motion.*

DECISION: Supplement 227 was approved for Letter Ballot as amended.

j. Supplement 229: Photoacoustic Imaging IOD (WG-33)

- Brian Bialecki, Stefan Morscher, Allison Bertrand presented Supplement 229 in preparation for Public Comment. The group walked WG-06 through some substantive changes that were made based on feedback from the First Read. The accompanying PowerPoint was also reviewed.
- Wim noted that since the Supplement proposes to change a CID that is for Ultrasound, and the fact that it’s extended with technology that can be used for Ultrasound, it would be good to touch base with WG-12 to get agreement on this extension.
 - **Action Item:** Shayna will connect WG-33 with WG-12.
- Also discussed was the need for fMRI examples of the advanced blending presentation state. Wim suggested that Shayna connect Allison to Jim Reuss from Prism Clinical Imaging to see how they did this.
 - **Action Item:** Shayna will connect Allison with Jim Reuss.
- The group requested 2 hours early in the week and 1 hour later in the week for their sessions at the June meeting.

5. WG-20/HL7 II Report

a. Jonathan Whitby and Chris Lindop led the group through a PowerPoint which lays out a plan/timeline of the WG-06 review process for WG-20-managed FHIR Resources. The yellow highlights in the plan below show WG-06 recommendations to this review process:

- WG-20 will seek WG-06 review of managed FHIR resources at the following stages:
 - Resource proposal: Depending on timing, may be before or after FHIR Management Group approval but prior to draft resource is added to the FHIR build. (Equivalent to DICOM First Read stage)
 - WG-06 proposed refinement: by default, before FHIR Management, send to WG-06 but emergency can be sent to the WG-06 Chair for more urgent review
 - Resource Maturity 1: Prior to updating resource maturity in build. (Equivalent to the state when a Supplement is released for DICOM Public Comment).
 - Maturity 1 means it may be of interest to people outside the WG that created, but with the expectation that it can change significantly.
 - Between Maturity level 1-5, not much WG-06 activity is needed.
 - Resource Maturity 5: Prior to updating resource maturity in build
 - Equivalent to “Letter Ballot”, however WG-06 will consider Maturity 5 to be “Final Text” so it would be WG-20’s judgement to bring any comments back to WG-06.
 - Unless there are major/substantive ballot comments, this should be the last time WG-06 needs to do a review.
 - Transition from Maturity 5 to Normative to follow HL7 balloting process (equivalent to DICOM Final Text)
 - Review Ballot comments in WG-06: we will review and approve and coordinate some notification in DICOM. Will put the obligation on WG-20 to bring any ballot comments of interest to WG-06.
 - WG-20 to notify DICOM membership of relevant ballots

- b. WG-06 reviewed and provided some initial feedback on the FHIR ImagingSelection resource which will be included in the FHIR R5 ballot. It is currently at Maturity 0, but WG-20 tentatively thinks it is ready to be balloted at Maturity 1.

6. Deadlines for action items from this meeting

For any supplements going out for comment/ballot that are also on the agenda for next meeting, the comment/ballot window results in the following deadlines. (Submit earlier if you want any time to resolve comments)

- a. Submit **Public Comment** drafts to Shayna by **April 18, 2022**.
- b. Submit **Letter Ballot** drafts to Shayna by **April 11, 2022**.

7. Upcoming WG-06 Meetings

a. Next meeting:

- June 20-24, 2022
 - The agenda plan is posted in the June 2022 meeting folder.
 - Planning for a face-to-face meeting in Arlington, Virginia.
 - **Action:** Shayna will send out the calendar appointment for this meeting and reserve a conference room at NEMA HQ.

b. 2022 meetings

- September 12-16, 2022: This week coincides with the IHE EU Connectathon. Both WG-06 and DSC tentatively planned to take advantage of the possibility that provided of getting a meeting room at the Connectathon venue. However, some members participate in both committees so WG-06 will consider holding its meeting the week after, Sept 19-23. Shayna has asked Annalisa Trianni if she could host WG-06 in Trento, Italy that week since Shayna will be there for the WG-02/28 meeting. WG-02/28 agreed to move their meeting dates to September 14-16 in the event that WG-06 is able to use the Trento meeting room. The DSC and WG-10 meetings need to be coordinated as well.
- November 14-18, 2022

c. 2023 meetings

- January 9-13, 2023
- March 20-24, 2023
- June 19-23, 2023
- August 28-September 1, 2023
- November 6-10, 2023

8. Old/New Business

- a. None at this time

9. Adjournment

- a. The March 2022 WG-06 meeting was adjourned at 12:32pm US Eastern Time on Friday, March 25, 2022.

10. Meeting Participants

| Voting Members Present | | | | | | | |
|---------------------------|-----------------|-------------|-----|-----|-----|-----|-----|
| Company/ Organization | Represented by | | Mon | Tue | Wed | Thu | Fri |
| ACR | Brian Bialecki | Voting | X | X | X | X | X |
| Agfa | Paul Seifert | Voting | X | X | X | X | X |
| Canon Medical Systems USA | Kevin O'Donnell | Voting | X | X | X | X | X |
| Carl Zeiss Meditec | Detlev Hohmeier | Voting | X | X | X | X | |
| Fairhaven Technologies | Robert Horn | Voting | X | X | X | X | |
| GE Healthcare | Steven Nichols | Voting | X | X | X | | |
| JIRA | Akihiro Yomoda | Alt. Voting | X | X | X | X | X |
| MITA/NEMA | Shayna Knazik | Voting | X | X | X | X | X |
| Philips | Wim Corbijn | Voting | X | X | X | X | X |
| PixelMed Publishing | David Clunie | Voting | X | X | X | X | X |
| Siemens Healthineers | Björn Nolte | Voting | X | X | X | X | X |
| | | | | | | | |
| Company/ Organization | Represented by | | | | | | |
| CIMICS | Bryan Fan | Voting | X | X | X | X | X |

| | | | | | | | |
|--------------------------------------------------|-----------------------|--------|---|---|---|---|---|
| Konica Minolta Healthcare Americas | Michael Laconti | Voting | X | X | X | X | X |
| | | | | | | | |
| Company/ Organization | Represented by | | | | | | |
| AAPM/University of Arkansas for Medical Sciences | Lawrence Tarbox | Obs. | X | | | | |
| Argentix Informatics | Elliot Silver | Obs. | X | X | | X | |
| Brainlab | Christof Schadt | Obs. | | X | X | | X |
| Caliber Imaging and Diagnostics | Paul Hemmer | Obs. | | X | | | |
| Canon Medical Systems USA | Jonathan Whitby | Obs. | | | X | | |
| Carl Zeiss Meditec | Marita Bergmann | Obs. | X | | X | | |
| Carl Zeiss Meditec | Anju Philip | Obs. | | X | X | | |
| CSImed | Uwe Tronnier | Obs. | X | X | X | | |
| Elekta | Jim Percy | Obs. | | X | | | X |
| Fraunhofer Heinrich Hertz Institute | Jean-Claude Rosenthal | Obs. | | | | X | |
| GE Healthcare | Hervé Hoehn | Obs. | X | X | X | | |
| GE Healthcare | Chris Lindop | Obs. | X | X | X | X | X |
| GE Healthcare | Jouke Numan | Obs. | | X | | X | |
| ICCAS | Richard Bieck | Obs. | | | | X | |

| | | | | | | | |
|--------------------------|------------------------|-------------|---|---|---|---|---|
| ICT Group | Toine Van Wijk | Obs. | X | X | X | | |
| Individual | Heinz Blenderger | Obs. | X | X | | | |
| Individual | Ulrich Busch | Obs. | X | X | X | | X |
| iThera Medical | Stefan Morscher | Obs. | | | | X | |
| Laitek | Harry Solomon | Obs. | X | X | | X | |
| Localite | Sven Arnold | Obs. | | | | X | |
| Lumo Imaging | Davood Tashayyod | Obs. | | X | | | |
| MITA/NEMA | Carolyn Hull | Alt. Voting | X | X | X | X | X |
| Philips | Yogalakshmi Selvarajan | Obs. | | X | | | |
| Philips | Nikhil Sonar | Obs. | X | | | | |
| Seno Medical | Allison Bertrand | Obs. | | | | X | |
| Seno Medical | Bryan Clingman | Obs. | | | | X | |
| Siemens Healthineers | Antje Schroeder | Obs. | X | X | X | | |
| Staffordshire University | Roosbeh Naemi | Obs. | | | | X | |
| University of Queensland | Liam Caffery | Obs. | | X | | | |
| VISUS | Marc Kaemmerer | Obs. | | | | X | |

Prepared and submitted by Shayna Knazik
Reviewed by Counsel 6/28/22