

Minutes-Tcon

DICOM WG 23: Artificial Intelligence / Application Hosting

Date and Time: 11:00am – 12:00pm US ET
25 February 2020

Presiding Officers: Gianluca Paladini, Industry Co-Chair
Lawrence Tarbox, User Co-Chair

DICOM Secretariat Carolyn Hull, MITA

Voting Members Present

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|---|--------------------------------------|
| AAPM/Univ. of Arkansas for Medical Sciences | Lawrence Tarbox, Industry Co-Chair |
| Y ACR/Northwestern Memorial Hospital | Brian Bialecki |
| Imagebiopsy | Michael Egger |
| Institute of Cancer Research | Simon Doran |
| VISUS | Marc Kaemerrer |
| GE Healthcare | Chris Lindop |
| Siemens | Gianluca Paladini, Industry Co-Chair |
| Isomics | Steve Pieper |
| Canon Kevin O'Donnell | |
| RSNA | Chris Carr |
| Medical Image Standards Association of Taiwan | Chung-Yueh Lien |
| Hitachi Healthcare Americas | Ravi Managuli |

Voting Members Not Present

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|---------------------------------|-------------------|
| GE Healthcare | Steven Nichols |
| Carl Zeiss Meditec AG | Régis Deshayes |
| American College of Radiology 2 | Steven Horii |
| AGFA HealthCare | Jos Jennes |
| DesAcc EMEA Ltd | Graham King |
| VISUS Technology Transfer GmbH | Sebastian Korber |
| Infinitt Healthcare Co., Ltd. | Sophie Kwon |
| DaPict, Inc. | Steve Lord |
| Philips | Jeroen Medema |
| Agfa | Hamid Neshat |
| American College of Radiology | James Philbin |
| VISUS Technology Transfer GmbH | Dennis Schlevoigt |
| Varian Medical Systems, Inc. | Thomas Schwere |
| Argentix Informatics | Elliot Silver |
| Laitek Inc. | Douglas Sluis |
| Sectra Imaging IT Solutions AB | Krister Valtonen |
| Vital Images, Inc. | Jonathan Whitby |
| Clario Medical Imaging | Chris Wood |

Alternate Voting, Observers, Guests, and Staff Present

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|-------------------------|-------------------------------|
| NEMA/MITA Staff | Carolyn Hull, DICOM Staff |
| Nuance | Sridhar Balasubramanian |
| PixelMed | David Clunie, Observer |
| Imagebiopsy | Michael Egger |
| Sectra | Daniel Forsberg, Observer |
| NVIDIA | Brad Genereux, Observer |
| Fairhaven Technologies | Rob Horn |
| Blackford Analysis | Keith Houston |
| Siemens Healthineers | Joerg Illmann |
| Philips | Chris Melo, Observer |
| Siemens Healthineers | Srividya Rajamani, Alt Voting |
| Bangkok Hospital Phuket | Sirisak Yaisoongnoen |

1. Opening

- 1.1. Welcome and roll call – The group was welcomed and roll taken.
- 1.2. Antitrust and patent rules review –NEMA antitrust and patent rules were reviewed.
- 1.3. Agenda review and approval – The group approved the agenda.
- 1.4. Review and approval of minutes from 2019-2-11—The minutes were approved.

2. Supplement 219 Simplified SR in JSON

- Action from previous call: Outreach
- Gianluca- DCMTK contacted but no reply yet
- Any other outreach successful?
 - Larry- Dcm4che
 - Steve- Java- will reach out to pipeline people; Pi-DICOM
 - Action: Groups to send out what they sent? Draft email, etc.
 - Discuss next time.

3. Collaborative work on IHE Profiles

- Two IHE Profiles are in development (by IHE). (Please see past WG-23 minutes for details)
- **AI Workflow:** Chris Lindop, lead | **AI Results:** Kevin O’Donnell, lead

AI Workflow: Chris Lindop

No new updates

AI Results: Kevin O’Donnell

No new updates

4. STOW-RS type transaction

- **IHE request:** IHE asked WG-23 to explore a new STOW-RS type transaction for stating new JSON payload. WG-23 will likely need to collaborate with WG-27 on this.
- Idea that it would be a one pager or similar with WG-27.
- David will be on the next call with WG-27 and will try to discuss.

5. Outreach/Education/Info Sharing

6. **Old or New Business** Chris Lindop other topics- container management- One big topic part of proposal and continued was container-izing and managing the algorithms. Seems to be continuation of hosting section.

To properly address in IHE, would have to build out requirements. Proposal to put as new work item. Aligns well with application hosting. Agree on some APIs that the host would invoke to talk to the container.

Next step? Draft a proposal for DSC.

Issue: Ready for standardization? What is the right scope to standardize? MS putting together something like this, not only one container system. Blackford- can distribute to WG-23 - ACR/B(D?)SI. Here because want this endorsed through DICOM. Want to be in collaboration through DICOM. Brad q: already have a spec UPSRS. What is additional for the API that specifically addresses containers. A: Would include how do define resources, how do you tell it it's alive, time to be silent, etc. Similar to application hosting but newer technology. ACR model API is an API but says nothing about underlying ?. Not really saying whether remote or local, whether orchestrator has any power over it. Missing service discovery or service hosting piece. What is not doable yet, is that episodes of patient care matter-build on OEM.

If need a work item, need to think about timing. If need a work item for Vienna meeting, then the next opp will be in October. Work item is one page proposal. Can put it in. Brad or Larry could present. A PowerPoint for DSC would be good. Need commitment of resources. Have a statement from ACR/DSI that they are willing to put work in. Brian can facilitate. Need 2-3 vendors to say interested- an indication that can be written into the one pager that xyz companies are interested. Who will be the point person? Brad to write one-pager and slide deck. Action: People send to Brad. Could entertain a motion now.

Use wording of motion for one pager. Scope agreement: What is DICOM's position uniquely? Thinks service discovery. MPO tech could be leveraged. Once how describe service, specify what it looks like. How do I tell it to prep, start, stop, etc. First step: Gap analysis, existing application hosting APIs. How do we revise them and how?

Action: Brad will take the template from DSC for WI proposal, fill it out, and put on Google docs so all can contribute. All to weigh in—Keith, Chris, anyone interested.

Review on the 10th. Can make part of the report presented – just want the day before. Get feedback from DSC just don't get the work item. Next meeting, DSC getting NWI. Before March 10 call, draft WG report, and note we are thinking of reporting next time.

Gianluca suggests to review [DICOM Pt. 19](#) .Frame as services that aren't available in Part 19. Brad says likely content in DICOM archives that can use.

Next meeting: WG can review the report and start comments.

7. **Next meetings-F2F:** None scheduled at this time.

8. **Next meetings – tcons**

Teleconference (tcons) (Every other Tuesday, usually 11am – 12pm US ET, unless schedule conflicts)

Tuesday, March 24 2020 11:00AM ET

Tuesday, April 7, 2020 11:00AM ET

IHE RAD meetings below

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|---------------|---------|---------|--|------------------------|-------------------------|
| 2020-04-20-23 | All Day | Meeting | IHE Rad Tech Mtg: Preparation for Trial Implementation Publication | Agenda | Minutes |
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9. Adjourn-the meeting was adjourned at 12:00PM

Submitted by: Carolyn Hull , 3/20/20

Reviewed by counsel: CRS, March 22, 2020.