

## MINUTES

### WORKING GROUP 14 Security

<b>Date and Time</b>	Tuesday 15 October 2019 9:00 – 10:00am US ET
<b>Presiding Officers</b>	Rob Horn, Producer Co-Chair Lawrence Tarbox, User Co-Chair
<b>DICOM Secretariat</b>	Lisa Spellman, General Secretary, DICOM

#### Voting Members Present

Agfa  
 Fairhaven Technologies  
 GE  
 Konica Minolta Healthcare  
 MISAT  
 PHC Co. LTD/JAHIS  
 Siemens  
 Univ. of Arkansas, Med. Sciences

#### Represented by

Bill Jacqmein (Voting)  
 Rob Horn (Co-chair) (Voting)  
 Matthew Hillyer (Voting)  
 Michael Laconti (Voting)  
 Chung-Yueh Lien (Voting)  
 Katsuya Watanabe (Voting)  
 Hans-Martin Von Stockhausen (Voting)  
 Lawrence Tarbox (Co-chair)

#### Voting Members Not Present

ACR  
 Canon Medical Systems USA  
 Canon Medical Systems  
 CFDA  
 Change Healthcare  
 GE Healthcare  
 Hologic  
 JIRA  
 Laitek  
 OFFIS  
 Philips  
 Philips  
 PixelMed Publishing  
 Siemens GmbH  
 Siemens Healthineers  
 Supersonic  
 Stryker

#### Represented by

James Philbin (Voting)  
 Kevin O'Donnell (Alternate)  
 Scott Nitsche (Voting)  
 Jia Zheng (Voting)  
 Elliot Silver (Alt voting) Roger Trevisan (Voting)  
 Matthew Hillyer (Voting)  
 Jeff Garrett (Voting)  
 Akihiro Yomoda (Voting)  
 Douglas Sluis (Voting)  
 Marco Eichelberg (Voting)  
 Jeroen Medema (Alt Voting)  
 Ben Kokx (Voting)  
 David Clunie (Voting)  
 Andreas Klingler (Alt Voting)  
 Mohammed Aleem (Alt voting)  
 Damien Lerat (Alt voting)  
 Corey Cochran (Voting)

#### Alternate Voting Members, Observers, Guests Present

Canon Medical Systems EU  
 GE  
 JAHIS/Fujifilm  
 MITA  
 Philips  
 Rogan-Delft BV

Keith Knight (Observer)  
 Steve Nichols (Observer) Piero Simoni (Observer)  
 Maseo Murata (Observer)  
 Zack Hornberger (Observer)  
 Nikhilesh Sonar (Observer)  
 Pim Philipse (Observer)

## 1. Opening

- 1.1 Open the meeting and roll call.
- 1.3 Review of antitrust and patent rule.
- 1.3 Agenda review and approval.
- 1.4 The minutes from 24 September 2019 were approved with no changes.

## 2. MDS2 update

- Zack Hornberger informed that the new MDS2 is available
- He noted that it includes a sample worksheet that people might wish to review.
- <https://www.nema.org/Standards/Pages/Manufacturer-Disclosure-Statement-for-Medical-Device-Security.aspx>

## 3. NCCoE comment review

- Deadline: Public comments on the draft will close on **November 18, 2019.**
- Rob sent an email with ideas to WG-14 on 14 October via email which he reviewed on the call. Points were discussed and draft was completed. Rob will finalize and send to the WG for final review.
- No other comments were received, however, WG members are encouraged to still submit comments.
- It was noted that if DICOM stakeholders do not comment and share feedback, we may well receive back in regulation undesirable outcomes.

## 4. Any other new “hot issues” that have come up since the last WG-14 tcon?

- No issues shared.

## 5. Review of draft communications matrix

- On the 24 Sept tcon, it was agreed to develop a communications matrix to identify target audiences and topics
- Status of Action 1 from 24 Sept: Lisa will help WG to create the first draft to get things going. Aiming for a draft at November tcon.

## 6. Review of proposed updates to current DICOM-MITA white papers

The three existing white papers below were selected for updating at the 24 Sept tcon. We were not able to discuss because the NCCoE took the majority of time today, but leaving these below for the minutes and these will be discussed on the 19 November tcon.

### [Management of Machine Authentication Certificates](#)

This paper helps healthcare providers and medical device engineering organizations decide how to use digital certificates to secure machine to machine communications.

- Perhaps we do this for DICOM. Do we note that people are not deploying TLS? Are they finding it too hard? And there could be other reasons as well.
- How many modalities have implemented TLS? It's on the laptop of the development engineers

### **Decision:**

- **Content:** The group thinks the content for this document is mostly ok, but some updates are needed.
- **Look:** The look must be updated across all documents.
- DICOM only or joint with MITA?

## Defending Medical Information Systems Against Malicious Software

This white paper informs both vendors (manufacturers and integrators of MedIS) and users (for example, hospitals and medical practices) about possible malware attacks and suggests ways to protect against them.

### **Decision:**

- **Content:** The group thinks the content for this document is mostly ok, but some updates are needed.
- **Look:** The look must be updated across all documents.
- DICOM only or joint with MITA?

## Identification and Allocation of Basic Security Rules In Healthcare Imaging Systems

This paper identifies a set of security and privacy rules that, if properly enforced by healthcare providers or their medical imaging Information Technology (IT), can help them meet their legal obligations.

- The group also discussed this paper as a possible next update as well. Discuss on the 15 Oct call.
- MITRE has its “Att&ck Matrix. How about developing an “Att&ck Matrix” for DICOM?

### **Decision:**

- **Content:** The group thinks the content for this document is mostly ok, but some updates are needed.
- **Look:** The look must be updated across all documents.
- DICOM only or joint with MITA?

## **7. White paper review: Working title “Medical Device Safety and Cybersecurity”**

- Bill Jacqmein drafted and was reviewed on 17 September WG-14 tcon
- Updates: Bill Jacqmein started a draft which was reviewed on the 17 Sept tcon. He will update and bring to Nov or Dec tcon.

## **8. NSA Manageable Network paper**

- This has been discussed on several past calls. The proposal is for WG-14, jointly with MITA, to create a white paper based on NSA Manageable Network Plan . NSA created a high-level project plan. Add details about how to use DICOM and MDS2 to help fill in the gaps. MITA will help to produce and promote.
- Target audience: Hospital CISOs
- Link to draft: Rob Horn started a rough draft, is in Meeting Folder for 15 May 2019 (Note: DICOM does not list link to meeting folders in the Minutes).
- Link to NSA site: <https://apps.nsa.gov/iaarchive/search.cfm?criteria=manageable+network+plan>
- Status update: This was not discussed today, will be discussed on November tcon.

## **9. Other general discussion notes for the development of shelf-ready content**

- Possible top questions/topics of no more than 700 words:
- “Why doesn’t DICOM include security?”
  - Tell a story about how it does through a story. The media wants the story to be 700 words or less
- “Hey administrator, have you looked at this...have you considered...?”
- **One pager checklist paper:** For administrators, including PACS and CISOs to include a short, focused list, a one pager/check-list for PACS Admins and only coming from the DICOM side (noting which may be DICOM-only and which may need to be DICOM-MITA jointly developed).
  - The content and goal is to aim end users at the “**Manageable Network**” paper
  - Example: The real basics, Step 1: the real danger is connected to your network, many do not realize that they have holes, know your use case
- **For today’s call:** Need to find volunteers to take the lead on drafting

## 10. Messaging/education opportunity: Possible session at RSNA20 to address recent critical security topics

- Idea: Submit a Course Refresher request, carry over to next agenda, maybe invite from NCCOE to co-present for RSNA 2020.

## 11. Digital Signature issue

- On hold for future tcons.

## 12. Expected Process activity, DICOM Section 8.4

- On hold for future tcons.

## 7. New Business/Old business

- No old or new business was presented.

## 8. Next Meetings – tcons: (Usually the 3<sup>rd</sup> Tuesday, please note alternating times, 9-10am, 11am-12pm US ET)

Tue 19 November 2019, 11am-12pm US ET: <https://global.gotomeeting.com/join/734478813>

Tue 17 December 2019: 9-10am US ET <https://global.gotomeeting.com/join/686557661>

Tue 21 January 2020: 11am – 12pm US ET: <https://global.gotomeeting.com/join/435759061>

## 10. Next Meetings - F2F

- None scheduled at this time.

## 11. Adjournment

The call adjourned at 10am US ET. Report prepared by Lisa Spellman, DICOM General Secretary.

Report reviewed by MITA/NEMA legal counsel. Clark Silcox, October 16, 2019.

### Appendix: Carry over information that we don't want to lose

#### Use of ACME certificates at Connectathons, IHE ITI profile proposal

- There was a discussion on January's call regarding ACME Certificates and other methods.
- A proposal was sent to Eric Poiseau, TM, European Connectathon and Steve Moore, TM, NA Connectathon. Steve and John Moehrke requested more info and pushed back a bit. They would like to better understand the need and value. Secure communications have not taken off (1) users don't know to ask for it (2) Vendors not pushing it

#### Next steps:

- Rob and Lawrence will do a bit more thinking and put together additional documentation.
- They might also draft a white paper. Continue discussion later in 2019.
- Lawrence has a presentation at SIIM2019 that will also cover some of this.
- Rob suggested that a good next step may be to draft a threat model to explain when and where it makes sense to use ACME. Perhaps also tie this to the MITRE ATT & CK model as well.