

# MINUTES

## DICOM STANDARDS COMMITTEE

April 12, 2011

(Pisa, Italy)

<b>Members Present – Vendors</b>	<b>Represented by</b>
Agfa HealthCare	Geert Claeys
CoreLab Partners	David Clunie
ETIAM	Emmanuel Cordonnier
Fujifilm Medical Systems	Takashi Nakashima
GE Healthcare	Harry Solomon
Panasonic	Hideki Hamada
Philips Healthcare	Cor Loef
Siemens Healthcare	Nikolaus Wirsz
Toshiba Medical Research Institute USA	Kevin O'Donnell
<b>Members Present – Users</b>	<b>Represented by</b>
American Academy of Oral and Maxillofacial Radiologists	Robert Molteni
American College of Radiology	John Carrino
American Dental Association	Greg Zeller
European Society of Radiology	Peter Mildemberger
Radiological Society of North America	Chris Carr
<b>Members Present – General Interest</b>	<b>Represented by</b>
JAHIS	Takashi Nakashima
JIRA	Makoto Suzuki
Medical Imaging & Tech. Alliance	Howard Clark
<b>Others Present</b>	<b>Associated with</b>
Atsushi (Art) Amano	JAHIS/Olympus Medical Systems

Fred Behlen	ACR/LAITEK
Koji Imokawa	JIRA
Florian Knicker	Panasonic R&D Center Germany
Bas Revet	Philips Healthcare
Katsuya Watanabe	Panasonic Healthcare
Stephen Vastagh	Medical Imaging & Tech. Alliance

<b>Members Absent – Vendors</b>	<b>Represented by</b>
*Boston Scientific	Tat-Jin Teo
*Carestream Health	Jonathan Belanger
*Carl Zeiss Meditec	Tobias Kurzke
*Corista	Eric Wirsch
DatCard Systems	Jere Darling
*DeJarnette Research Systems	Charles Stockham
*Genetix	Julian Burke
Hologic	Janet Keyes
*Konica Minolta Medical & Graphic	Ugo Joe Piasevoli
*^McKesson Medical Imaging Group	David Heaney
*MEDIS Medical Imaging	Robert Goedhart
Merge Healthcare North America	Ronald Cowan
Microsoft	Evgeny Salnikov
*^Sectra	Krister Valtonen
*Sony	Paul Gardiner
*SuperSonic Imagine	Jacques Souquet
*Varian Medical Systems	Uli Busch
*Ziosoft	Katsumasa Makino
<b>Members Absent – Users</b>	<b>Represented by</b>
*American Academy of Ophthalmology	Lloyd Hildebrand
American Academy of Orthodontists	Kirt Simmons
*American College of Cardiology	Thomas Gerber
American College of Radiology	Charles Kahn
*American College of Radiology	Steve Horii
American College of Radiology	Alan Rowberg
*American College of Veterinary Radiology	Dennis Balance
*College of American Pathologists	James MacDonald
*European Society of Cardiology	Nico Bruining
*Healthcare Information Management & Systems Soc.	Audrey Dickerson

*Medical Image Standards Assn. of Taiwan	Jenn-Lung Su
Societe Francaise de Radiologie	TBD
*Society for Imaging Informatics in Medicine	Paul Nagy
Spanish Health Informatics Society	Marcial Garcia Rojo
<b>Members Absent – General Interest</b>	<b>Associated with</b>
*Canada Health Infoway	Margaret Kennedy
*Center for Devices and Radiological Health	Kish Chakrabarti
*CIMICS	Jianming Qu
*India Centre for Development of Adv. Computing	J. S. Bhatia
*Korean PACS Standards Committee	Hee-Joung Kim
*National Cancer Institute	C. Carl Jaffe
*Web3D Consortium	Alan Hudson

- \* = Does not count toward a quorum at this meeting.
- ^ = Has not submitted Patent Agreement.

**Presiding Officers:**

Kevin O'Donnell, Co-chair  
John Carrino, Co-chair

**1. Preliminary Events**

Participants identified themselves and their employers. Members accepted version 2 of the agenda, which had been posted to the Committee's private FTP site. Minutes of the December 2, 2010 meeting at RSNA were approved with minor corrections. The quorum requirements at this meeting were met.

**2. Election of New Members**

Members approved requests to join the DICOM Standards Committee that had been submitted by:

- Harris Corporation
- Vital Images

An application for membership also was received from the CHINA Electronics Standardization Institute. However, the accompanying Patent Disclosure Agreement had not been signed, so this application was tabled for consideration at the next meeting.

**3. Requests to Join Working Groups**

Members unanimously approved all nominations and applications for appointment of members to existing DICOM working groups. Each candidate has submitted a signed Patent Disclosure Agreement. The following appointments were made:

- WG-07 (Radiotherapy)

- Ion Beam Applications – Vendor (David Wikler = Rep)
- Yulong Yan – Individual (University of Arkansas for Medical Sciences)
- WG-16 (Magnetic Resonance)
  - Kees Verduin – Individual (Kaveco)
- WG-22 (Dentistry)
  - American Assn. of Dental and Maxillofacial Radiographic Technicians – Society – (Dan Halpert = Rep)
  - Dolphin Imaging and Management Solutions – Vendor (Chester Wang = Rep)
  - Hartmut Feuerhahn – Individual (Consultant)
  - Claudio Levato – Individual (Comprehensive Dentistry)
  - Roberto Molteni – Individual (CEFLA Dentale)
  - Orangedental – Vendor (Rep = Zeller)
  - Zimmer Dental – Vendor (Suneel Ranga Sai Battula = Rep)
- WG-27 (Web Technology for DICOM)
  - Aspera – Vendor (Diego Dugatkin = Rep)

#### 4. [Staff Report](#)

### STATUS OF RECENT SUPPLEMENTS

Sup. No.	Subject	Approved for	Due	Next Step or Comments
74	Utilization of Worklist in Radiotherapy Treatment Delivery	Fin. Txt.		Approved Apr. '11
96	Unified Worklist and Procedure Step	Fin. Txt.		Approved Jan. '11
115	Evidence Document			Rev. for PC/2011
139	Enhanced XA/XRF IOD Informative Annex	Fin. Txt.		Approved Apr. '11
142	Clinical Trial De-identification Profiles	Fin. Txt.		Approved Jan. '11
147	2 <sup>nd</sup> Generation RT			Rev. June '11
148	WADO via Web Services	Ltr. Blt.	Jun. '11	Rev. for FT/June. '11
149	MPEG-4	Fin. Txt.		Approved Apr. '11
150	Radiation Dose Summary Information in Radiology Reports	Ltr. Blt.	Jun. '11	Rev. for FT/Aug. '11
151	IVOCT	Ltr. Blt.	Mar. '11	Rev. for FT/June. '11
152	Ophthalmic Thickness Mapping	Pub. Cmt.	Dec. '10	Rev for LB/June. '11
153	Blu-ray Discs	Ltr. Blt.	Apr. '11	Rev. for FT/Tcon
154	Optical Surface Scanning			Rev. for PC/June. '11

CB = Confirmation Ballot; FT = Final Text; FZ = Frozen Text for Trial Use; LB = Letter Ballot; TBD = To Be Determined

## 5. Proposed Work Items

Members considered the four work-item requests that had been submitted for Committee approval and posted at least two weeks prior to the meeting.

#	WG	Request	Result	Comments
A	6	Injector Record / Contrast Media Dose SR	Unanimous approval	An ad hoc group of persons from WG-02, 16, and 21 should be organized under WG-06.
B	6	Retire GP Worklist	Approved with one abstention (GE Healthcare)	Expected to have some impact on IHE.
C	26	Multispectral Image Presentation	Unanimous approval	
D	27	Web Technology Based Management and Storage of DICOM Studies	Not approved. Among persons present, 2 voted for, 8 voted against, 7 abstained. There were 3 proxies in favor of the request.	The scope (from Modality to PACS and Portal and Viewer, and to the VNA) was considered too broad in term of use cases covered. Need to focus on specific deficiencies of the existing Standard.

## 6. Inactive Work Items

WG-06 has been charged to routinely identify any work items that have not demonstrated progress (in the form of a review by WG-06) over the last three years. One is listed in the table below. The champions/editors of such work items are invited by the chair of WG-06 to justify the continuation of those work items or recommend their cancellation. In the case of Supplement 136, the co-chair of WG-15 recommended that it be cancelled. The Committee agreed.

Sup#	Name	Last WG-06 Review
136	DOT Mammography	January of 2008

WG-06 Chair **Bas Revet** observed that there are several work items that have never advanced far enough to get a supplement number. He will create a list for consideration by the Committee.

## 7. Attribute Based Annotations Work Item (2008-09-A)

This item was proposed for deletion at the Committee's December 2010 meeting. However, after further consideration, **David Clunie** offered to serve as editor of a new supplement to complete this Work Item.

## 8. XML Encoding of the DICOM Standard

David Clunie reported that there has been no recent progress on this matter. He will work with staff to prepare contracts for:

- Converting new figures to SVG format
- Developing an XML version of the Standard

## 9. DICOM-Related Activities around the World

Committee members from the following geographic areas presented reports on standards-related activities of interest to the DICOM community:

Area	Presenter	Type	Comments
Brazil	Alexandra Monteiro	Power-Point	<ul style="list-style-type: none"><li>• Mentioned ISO Cmte. 13131 on Quality Criteria for Services and Systems for Telehealth</li><li>• DICOM should contact Brazilian Standards Assn.</li></ul>
China	Zhen Tong and Jian-Ming Qu	Power-Point	DSC requests that <b>Rob Horn</b> look into this report.
Europe	Cor Loef	Oral	Considerable evidence of DICOM activity in Europe.
Japan	Makoto Suzuki	Power-Point	Reported on activities of JIRA and JAHIS.
U.S.	John Carrino	Oral	Short oral report on ACR's DICOM Cmte.
U.S.	Chris Carr		Short oral report on RSNA's contract from the National Institute of Biomedical Imaging and Bioengineering.

Copies of the written reports and PowerPoint presentations may be found in the "Reports" folder for this meeting on the DICOM Web Page and the Public FTP site.

## 10. International Standards-development Organizations

The Committee's liaisons to the following organizations will report on developments that have occurred subsequent to the December 2010 meeting of the DSC:

- AAPM – David Clunie/Kevin O'Donnell – Efforts are underway to develop a closer working relationship with this professional organization. Holding the next DICOM Committee meeting in conjunction with AAPM may present valuable opportunities for interaction.
- HL7 – Helmut Koenig/Harry Solomon – WG-20's next meeting will be held in Orlando on May 17 and 18. Joint sessions are planned with HL7' working groups on Anatomic Pathology, Structured Documents, and Orders and Observations. HL7's Version 2.7 has been published. Version 2.8 is advancing.
- IEC 62B Diagnostic Imaging Equipment – David Clunie – No new information was available.
- IHE – Chris Carr provided a detailed oral report on activities of IHE Radiology, which is working on supplements for Image Object/Change Management and XCA-I. A whitepaper

on Managing Radiology Report Templates is nearing publication. One profile on Data Elements in Cardiology Imaging Reports is coming up soon.

- ISO/TC 215 – Cor Loef reported on the joint meeting between ISO TC215’s WG2 and DICOM’s WG-10 that was held in Orlando, FL on February 21, 2011.

#### **11. Committee for the Advancement of DICOM**

Members determined that this item does not need to appear on the agenda any longer.

#### **12. DICOM Conference**

No specific proposals were advanced for the location of the next Conference. Members hope that some alternatives will be available for consideration at the next meeting.

#### **13. Reports from the Working Groups**

Members reviewed and discussed the written and oral reports prepared by working group chairs. No specific recommendations were captured for inclusion in the minutes of this meeting. Copies of the written reports and PowerPoint presentations may be found in the Reports Folder for this meeting.

#### **14. Promoting DICOM**

Harry Solomon alerted members to a call for papers that had been published by the Journal for Biomedical Informatics, which might be relevant to some in the DICOM Community.

Chris Carr noted that RSNA may plan a demonstration of XDS-oriented image exchange.

Emmanuel Cordonnier mentioned a “Continua” initiative in France that will address imaging at some time in the future.

One member suggested that there might be an opportunity for DICOM to prepare a standard for smart phones with an AP that ties images to the patient’s records.

#### **15. Appropriateness Criteria Related to Imaging (ACR)**

John Carrino directed members’ attention to the specific site on the ACR Web Page that addresses this particular topic. Some work is already underway.

#### **16. IHE-REM Paper**

Stephen Vastagh gave a short oral report on MITA activities relative to this topic. In particular, he called attention to a joint paper issued by COCIR, MITA, and JIRA on “IHE Dose Reporting Workflow for CT.” He considers this a call to IT Software manufacturers to feature the IHE REM profiles on their products.

### **17. Updates of Strategic Statements**

The Secretary presented updates to the Strategic Document submitted by working group chairs. Members noted that it would be especially helpful if the updates were prepared with change tracking so they could more easily determine what was new and what was boiler plate.

### **18. New Business and Agenda Items for the Summer/Fall Meeting**

Vendor Co-chair Kevin O'Donnell took a few moments to recognize the contributions that Howard Clark had made to the DICOM Community over the course of his ten year term as DICOM Secretariat. On behalf of the entire DICOM Community, he presented Dr. Clark with a plaque and unique composite photo, which used thousands of medical images to create a portrait of Howard. Members of the Committee then signed the photo and added their best wishes for an enjoyable retirement. A dinner party was held in the evening. Members who took photos at either time are encouraged to post them to the Private FTP site for this meeting.

### **19. Time and Place of Future Meetings**

Members confirmed the following meeting dates and locations:

- September 20, 2011 – MITA/NEMA
- December 1, 2011 – RSNA; Chicago, IL

### **20. Adjournment**

The meeting was adjourned at 5:45 p.m.

**Prepared by**

Howard Clark, Secretary  
April 27, 2011

**Reviewed by counsel**

April 28, 2011