IHE-RO Technical Committee
Face-to-face Meeting
Mt. View, California
January 25-29, 2010

Technical Committee Chairs:
Bruce Curran, MS, ME
Stuart Swerdloff, PhD

IHERO Task Force Co-Chairs
Jatinder Palta, Ph.D.
Prabhakar Tripuraneni, M.D., F.A.C.R., F.A.S.T.R.O.

Mission Statement: *The American Society for Radiology Oncology (ASTRO) has formed a multi-society Task Force to undertake an initiative to promote the Integration of the Healthcare Enterprise (IHE) – Radiation Oncology (RO), fostering seamless connectivity and integration of radiotherapy equipment and the patient health information systems. The Task Force will include members from ASTRO, RSNA, American Association of Physicists in Medicine (AAPM), the American College of Radiology (ACR) and the Medical Imaging and Technology Alliance (MITA). In addition, members of the International community have also been invited to participate in IHE-RO. The IHE-RO Task Force, in close collaboration with radiotherapy product manufacturers, will develop appropriate integration profiles for radiation therapy and setup a demonstration of seamless communication among the full array of radiotherapy products.*

Hours:

Monday, 1/25/2010	9:00am – 6:00pm
Tuesday: 1/26/2010	8:30am – 6:00pm
Wednesday: 1/27/2010	8:30am – 6:00pm
Thursday: 1/28/2010	8:30am – 6:00pm
Friday, 1/29/2010	8:30am – 12:00pm

NOTES

Name	Company	1/25	1/26	1/27	1/28	1/29
Bruce Curran	Rhode Island Hosp./ASTRO	Y	Y	Y	Y	Y
Stuart Swerdloff	Elekta	Y	Y	Y	Y	Y
Walter Bosch	ATC / ASTRO	Y	Y	Y	Y	Y
David Murray	Tomotherapy	Y	Y	Y	Y	Y
Harold Beunk	Nucletron	Y	Y	Y	Y	Y
Ulrich Busch	Varian	Y	Y	Y	Y	Y
Sam Brain	Stanford Univ.	Y	Y	Y	Y	Y
Sue Reilly	Elekta	Y	Y	Y	Y	Y
Mark Sinclair	Vision RT	Y	Y	Y	Y	Y
David Wikler	IBA	Y	Y	Y	Y	
Summer Mark	Third Way Software	Y		Y	Y	Y
Scott Mark	Third Way Software	Y	Y	Y	Y	Y
Chris Pauer	Tomotherapy	Y	Y	Y	Y	Y
Nghia Ho	Mass. General Hosp.	Y	Y	Y	Y	Y
Frida Swerdloff	SJS Targeted Solutions	Y				
Koua Yang	Philips	Y	Y	Y	Y	Y

Justin Cambra	Accuray	Y	Y	Y	Y	Y
Hanne Kooy	Mass. General Hospital		Y			
Martin Pellinat	Vision Tree Software			Y		
Danny Armstrong	Vision Tree Software			Y		
Stephen Perius	Vision Tree Software			Y		
Padonaja Chilla	Philips			Y	Y	

I.   Call to Order [1/25/10 @ 9:00]
    a. Approval of Agenda – approved with additions/clarifications
        • IPDW includes "IPDW light" (D. Murray) [later renamed to TDW]
        • Add Test Tool strategies
        • 2010 Profile Development → Future Profile Selection

    b. Approval of minutes from November 2nd, November 5th -7th and December 3rd.
        • Nov 2 and Nov 5-7 minutes approved without objection
        • Dec 3 minutes approved with note: Bruce to send Dose Compositing Profile for
          Public Comment 1/25/10; delivery workflow profiles depend on DICOM work in
          progress

II.   Agenda Items (from Nov 5-7, 2009 Meeting)
    • 2010 Profile Development (2011 Trial Implementation)(0.5 days)
    • IPDW (Review for Public Comment)(1 day)
        o Non-Position-Verification Profile
    • DPDW (2 days)
    • Dose Compositing (?Public Comment Response)(0.5 days)
        o Dose compositing to be sent for Public Comment 1/25/10
    • CPs (2 x 1 hour sessions)
    • Domain Pre-testing
    • Report from WG7 on Patient Positioning & 2nd Generation RT

III. Meeting Agenda
    • Monday-AM
        o Introductions [1/25/10 @ 9:00]
        o Agenda Review
        o Organization – Review of Profiles [1/25/10 @ 9:30]
            ▪ IPDW Profile Report (David Murray, Uli Busch)
                • Review of profile identified issues that need correction: Operational
                  requirements of various devices was not fully appreciated, more
                  flexibility is needed.
                • Two classes of machines have been identified: IPDW (conventional
                  linac), Delivery-only ("IPDW light") – define separate profiles for
                  these
                • Goal is to fix up Delivery-only profile and get it out for testing in
                  2010
                • Discussion: applicability of profile to Brachy? Ions? – What TMS
                  support is required? SOP classes?

- - Dose Compositing – ready for Public Comment
  - DPDW Profile
    - DICOM 2nd Gen RT objects are needed for this profile – Work in Progress in WG-7
    - Parallel work to be done in IHE-RO TC
  - Residual Dose Optimization
    - Dose Compositing with application-specific features (precedent: CD viewer UI characteristics profile for neurosurgery)
    - Incorporation of fractionation information? Deformable registration? (see Nov 5-7, 2009 TC meeting minutes)
  - Structure Set Templates
    - How to do this (XML?): B. Bennett to evaluate options (see Nov 5-7, 2009 TC meeting minutes)
  - Authentication / Authorization (single sign-on)
    - ITI Cross-enterprise User Authentication (XUA) profile was tested at Jan 2010 IHE Connectathon – more information expected soon
  - Other Profiles
    - Prescription (Treatment Intent Object): Workflow/Scheduling and Planning/Content

- o IPDW [1/25/10 @ 10:50]
  - Review of IPDW Profile (Vol 1 v. 3.1 and Vol 2 v. 3.1.1) – Uli Busch
    - For devices such as Tomo and Accuray, the positioning step is done internally and need not be scheduled at the TMS. For conventional linacs, need to support image acquisition, registration, patient positioning, and position monitoring in a flexible manner for a variety of IGRT procedures.
    - Positioning may be accomplished with imaging (2D, 3D) or other techniques.   How is Patient Position *Monitoring* to be indicated? Recorded?
    - Ordering of Worklist items: use SPS Start Date and Time (0040,4005) values to order PS for a patient; date/times for patients are *scheduled* times. (User may skip steps or switch order according to clinical needs or preferences.)
    - TMS support for unscheduled, unsolicited UPS: what is needed for a TMS to support injection of such PS into its database? → **Support for unscheduled procedure steps remains an open issue.**
    - All Procedure Steps for a patient's treatment are set IN PROGRESS when the patient is selected. An NSET 0 is issued when a procedure step is actually started.
    - Input sequence specification
      - o Keep separate AE Titles for TMS and Archive?
      - o Should the Profile specify which objects are to be retrieved from TMS and which from Archive?
      - o Challenge is for TMS to manage data held outside itself.

- Monday-PM

- o IPDW [1/25/10 @ 14:20]
  - ▪ Review of IPDW Profile (cont'd) – Uli Busch
    - • Input sequence specification (cont'd)
      - o **Open Issue: Support for dynamic procedures whose input data is not yet instantiated when the PS is created?**
    - • Output sequence specification
    - • Required Procedure Steps
      - o Treat Step is required
      - o Multiple RT Plans may be treated in a treatment session
      - o Use RT Treatment Record *from the most recent session* to determine starting meterset for continuation sessions
    - • Optional Procedure Steps
      - o Acquisition, Registration, Patient Position Adjustment, Patient Position Monitoring
  - ▪ Review of Scheduled Delivery Workflow Profile (D. Murray)
    - • Profile Name?
    - • Profile schedules treatment *delivery*, verification is not explicitly ordered, but may be added to scheduled delivery.
    - • Treatment Record (RT Beams Treatment Record, RT Treatment Summary) instances to be supplied by TMS.
    - • **Need to decide whether TMS and Archive are separate Actors.**
    - • Rename TMS to distinguish from other profiles? **No.**
    - • The input sequence references exactly on RT Plan instance, and zero or more RT Treatment Record instances.
    - • **Open question: Can the input sequence also reference other SOP instances? Use case?**
    - • The output sequence references an RT Treatment Record.
  - ▪ **Workflow summary: Need flexibility to support the variety of current workflows**

- o CPs (1 hour) – deferred

  Adjourn for the day [1/25/10 @ 18:02]

- • Tuesday-AM [1/26/10 @ 8:30] - reordered agenda
  - o WG7 Report
    - ▪ Supp 147 (2nd Gen RT)
      - • Document prepared for presentation to DICOM WG-6 in March 2010 for release for Public Comment
      - • New features: Segmentations (Voxel, Mesh, 2D contours), Radiation Sets, RT Course, Physician Intent, Dose (Image, Points, Histogram)
      - • Does not yet have workflow instructions beyond those in Supp 74. A second document will extend these.
      - • Uses 4x4 matrices for Patient Positioning information (transformation between DICOM image coordinates and room/equipment coordinates. A second supplement will include instructions for applying corrections in device coordinate systems.

  - o Scheduled Treatment Delivery Workflow [1/26/10 @ 9:35]

- Name: Treatment Delivery Workflow??? – no consensus yet
- Keep boilerplate in for now
- Okay to use Treatment Management System (TMS), despite the fact that this actor is not the same as the TMS in other profiles. Similarly for TDD.
- Use TDW-RO-*nn* to identify transactions for now.
- Input sequences may optionally reference object instances beyond those required by the profile.
    - Additional objects must be pertinent to the delivery
    - Additional objects must not alter the interpretation of the delivery instruction
    - The TDD may ignore these instances
- For continuation of interrupted treatments
    - ~~Add Start Meterset (????,????) attribute (Type 1C) to RT Beams Delivery Instruction. This attributed is required to specify the meterset at which to resume treatment of a beam.~~ Superseded [1/26/10 @ 16:00] (see below).
    - RT Treatment Record instance(s) may be included as optional annotation.
- Study Instance UID provided by the TMS shall used by Performing Device (TDD) for any stored objects (overrides Study Instance UID of RT Plan, if different).
- Performed Workitem Code Sequence (0040,4019) must include one item with Code Value "RT Treatment with Internal Verification". Other items may be included, but may be ignored by the TMS.

- DPDW [1/26/10 @ 11:30]
    - Overview of DPDW Draft – Uli Busch
        - Uses 2nd Gen RT objects – need modality-based acquisition instructions (Christof Schadt is WG-7 contact)
        - UPS versus Modality Worklist – both may be needed
        - Variety of devices to be managed – need device identifiers
        - Profiles:
            - Discrete Positioning and Delivery Profile
            - Discrete Delivery and Monitoring Profile

- Tuesday-PM [1/26/10 @ 14:00]
    - DPDW
        - Review of DPDW Draft (Discrete Delivery and Monitoring)
            - **Need to define Beam-level Verification Request UPS**
            - **Add Sequence Diagrams for scenarios 2-5 in response to monitoring (Beam Stop) error signal:**
                - **Automatic correction of patient position**
                - **User manually adjusts patient position with info from PPMS**
                - **Adapt beam params to account for position error**
                - **Terminate treatment**
            - Treatment Session Manager (TSM) is in charge of choreography; human interaction is with TSM – requires communication between TSM and PPMS

- **Need a signal from TSM to PPVS to trigger start of verification**
- Discussion regarding separation of beam positioning and radiation generating components of a TDD – do we need to communicate independently with these components? NO – **We assume explicitly that beam positioning and radiation generating components are integrated in a single TDD.**
- [1/26/10 @ 16:00] Add the following attributes to RT Beams Delivery Instruction to specify parameters for resuming treatment of a beam:
  - **Primary Dosimeter Unit (300A,00B3)**
  - **Continuation Start Meterset (30xx,????)**
  - **Continuation End Meterset (30xx,????)**
  Attributes to be present if and only if delivery is a CONTINUATION.

- **In the Repositioning Scenario with multiple, coupled PPDs…**
  - **Rename Actors as follows:**
    - **TDD → PPD Primary**
    - **PPD → PPD Aux**
  - **How should function of multiple PPDs be coordinated? Open Question:**
    - **Centrally, by the TSM?**
    - **By delegation in a cascaded arrangement with PPD Primary forwarding residuals to PPD Aux? (Configuration information must include spatial relationship between PPD Primary and PPD Aux.)**
  - **The RO-DPD-14 transaction is optional for the PPD Primary Actor. I.e., support for a PPD Aux Actor is Optional for the PPD Primary Actor.**

- Adjourn for the day [1/26/10 @ 17:50]

- Wednesday-AM [1/27/10 @ 8:30]
  - Change of agenda without objection

  - ARRA Update – Bruce Curran
    - HITECH Act
    - Meaningful Use is defined by 25 features of an EMR that must be meet
    - Patient access to EMR (via SOAP, REST, etc.)
    - ONC rules already active, Medicare rules go into effect in May 2010
    - Certification Commission for Health Information Technology (www.cchit.org)
    - Interoperability concerns, HL7 (v.2)

    - ASTRO working group (Chris Rose, Jatinder Palta, Bruce Curran, Mark Kessler, David Adler, …) is developing comments on the rules
      - Hospital-based physicians are excluded
      - Lack of focus toward specialties, including Rad Onc
      - Issue with e-Prescribing (minimum percentage of income)
      - Timeline

- Can IHE and IHE-RO be a certifying body? Separate organization (like Radiation Oncology Institute)?
- ASTRO talks with ASCO
  - Core components – requirements for EHRs
    - Encryption (128 bit)
    - Audit logs – any access, exchange must be in audit trails
    - Exchange data checks – ensure data exchanged safely
    - Cross-enterprise authentication (IHE profile)
    - Disclosure log – exchanges with outside parties
    - Standards-based data transport
    - Standards based content exchange (HL7)
    - Standardized Vocabulary
    - Privacy and security standards
    - ONC requests: better criteria for access by handicapped individuals, fraud/abuse detection
    - Candidate standards for next stage inplementation
  - Relationship to Enterprise Scheduling Integration Profile (IHE-RO Japan)? – addresses connection between TMS and HIS

- o VisionTree Update – Martin Pellinat (CEO, VisionTree)
  - Web portal development
  - Used for RTOG 0415 for collection of Patient Reported Outcomes
  - Clinical sites (Penn, Florida, UCSF, ProCure, …)
  - Clinical Groupware Collaborative
    - Meaningful Use Goals (from HIMSS)
    - Involvement in ASTRO PAAROT Maintenance of Certification program
    - Modular technologies for EHRs to deliver Meaningful Use criteria
    - Identity management, authorization using OpenID, OAuth
    - Working groups to address: a) identity management, b) data exchange, c) higher level of integration, d)patient context, e) federated directory
    - VisionTree Optimal Care products
    - ASTRO PAAROT – 22 quality measures
  - Possible Use Case: (Med Commons) web-based DICOM portal
  - Data Security/Privacy
  - Suggestions (IHE-RO TC):
    - Access to wiki.ihe.net
    - DICOM WG-27 (WADO)
    - Current focus is on clinical business processes: RT Planning and Treatment Delivery
  - Action Items:
    - VT to identify real-world problem(s) and communicate with IHE-RO Planning Committee (Colin Field and May Wahab, co-chairs)
    - VT to join IHE (see info at www.ihe.net under Governance)
    - Possible use cases: Rad Onc patient appointment management, clinical decision support
  -

- DICOM CP for Treatment Delivery Instruction [1/27/10 @ 10:50]
  - Issues for Ion spot scanning: Is specifying a starting meterset adequate to represent what was already delivered? Is meterset precision adequate? (may need better than 0.005 MU precision) What about re-ordering of spot path?
  - David Murray response:
    1) The intention of the CP is to specify resumption point (may not be the point at which the previous delivery was interrupted.
    2) For this purpose, the meterset should generally be adequate across arbitrary delivery techniques (provided the precision is sufficient). For protons, this may not be adequate.
    3) The other approach is to supply RT Treatment records in the Input Information Sequence of the UPS. From these records, the delivery device would potentially have all the information it needs to restart in a specific way from the previous treatment. This doesn't support starting from some other location, but is a legitimate approach, not precluded by this CP or IHE-RO profiles.
    4) If needed for ion therapy, it may be worth considering an ion-specific delivery instruction that supports these special attributes.

    The IHE-RO recommended way to handle the case where the delivery device needs to understand finer details of how the treatment was delivered is via exchange of treatment records.

- DPDW [1/27/10 @11:15]
  - **Replace RO-17 in delivery workflow scenario with a new, more appropriate transaction.**
  - **In DPDW Sequence Diagram move RO-21, RO-25 to *after* (below) delivery of all beams.**
  - **Open Issue: Separate TMS and Archive Actors *versus* Integrated TMS/Archive Actor in Delivery Workflow Profiles**
  - **Subscription (for all event notification) of both PPMS and TDD should go via TSM.**
  - **In Delivery/Monitoring sequence diagram #2, continuation of the subsequent beam (callout A) is out of order.**
  - **TMS and TDD must agree on beam on/off signal**
  - **Existence of real-time beam on/beam off signaling is assumed.**
  - **Signaling must distinguish**
    - **Real-time signaling is used for *normal* pausing in gated delivery ("pause")**
    - **Out-of-tolerance condition requiring intervention ("stop") Note: this should not occur when no beam is active.**
  - **Use distinct delivery instructions to specify**
    - **Gating**
    - **Tracking with Patient repositioning**
    - **Tracking with Beam modification**
    - **Tracking for Dose accounting?**

Break for lunch [1/27/10 @12:30]

- Wednesday-PM [1/27/10 @ 14:05]
  - Dose Compositing (from Bruce Curran's notes)

    General

    > A review of the supplement was done to identify any areas needing clean-up, as has been noted by Keith Boone.

    Section 1.7

    > Clean up "Blah, blah, blah"

    Section X

    a. Should the Registered Dose Compositor be capable of receiving Composite Dose Instances. It currently can only receive Single Plan Dose Instances. [Yes]

    b. Simple Dose Storage should be "Single Plan Dose Storage" in table X.1-1 [Done]

    c. General Dose Retrieval should be used for RO-DC1 in all cases (all dose retrievals are General in this profile) [Done]

    d. Only three new transactions. Reorder transactions to make numeric sense. [Done]

    e. Discussion on the description of the Registered Dose Compositor Actor; prior and subsequent vs. primary and secondary FoR. Change to two or more General Dose Instances. [Done]

    f. There was a discussion on the structure of the Spatial Registration Objects. Each SRO shall contain only two registration sequences. Multiple SROs can be used to achieve a registration. (Rewording done).

    g. Changes to the Compositing Planner Actor to allow storage of a Single Plan Dose. [Done]

    h. Registered and General Dose Viewer wording improvements. [Done]

    i. **Should the Compositing Planner be a Registered Compositing Planner? YES** Is it required to support more than one input dose & SRO instance? **NO**

    j. Two inputs for the Dose Compositor and one input for the Compositing Planner are sufficient.

    k. Better description of actors, which produce transactions? How do we re-use in a reasonable way? → **Open Question**

    l. Some figures have mismatched {]. [Corrected]

  - Treatment Delivery Workflow [1/27/10 @16:40]

- In Process Flow Diagrams, what does the direction of the arrows indicate? Process initiation or Data flow? ➔ Use UML convention: arrows point from performing device to device acted upon (i.e. from SCU to SCP for DICOM).
- Pre-fetching input instances from TMS:
    - Should (potentially large) input instances be pre-fetched *before* a PS is put IN PROGRESS to avoid having to cancel the PS if the retrieval fails? I.e., should the TDD wait to put PS IN PROGRESS until all input instances have been retrieved?
    - TMS vendors present indicated their willingness to support early fetch of instances (before PS is put IN PROGRESS).
    - Make TDW-RO-4 Retrieive Dynamic Treatment Delivery Input Instances transaction mandatory, but occurring *either* <u>before</u> *or* <u>after</u> TW-RO-3 Treatment Delivery in Progress in Treatment Delivery Workflow Process Diagram.
- **The TMS Actor may have more than one AE Title for the following functions it supports:**
    - **Workflow query**
    - **RT Beams Delivery Instruction retrieval**
    - **RT Plan retrieval**
    - **Results (RT Treatment Record) storage**

Adjourn for the day [1/27/10 @ 19:55]

- Thursday-AM [1/28/10 @ 8:30]

    - DPDW Closeout
        - Rename PPVS to PPAS (Patient Position Acquisition System).
        - Open Question: What is the appropriate level of DPDW Actor granularity?
            - Separate Actors
                - All as separate actors (current draft) ensures flexibility in mapping to products
            - Combined Actors
                - Only a limited number of function combinations are seen in real-world systems.
                - Requiring fine-grained decomposition of functions may be burdensome to some and may make it difficult to achieve a quorum for testing.
                - Example: PPVS (PPAS) and PPRS store data separately. Challenge is for PPRS to share semantic interpretation of data from all potential PPVSs (PPASs).
            - Conclusion:
                - Proceed with definition of Separate Actors
                - Remove Section 2.1, which indicates combination of actors
                - Add note to re-assess need for combined actors later
                - One option is to introduce a limited number of "combined" actors

- 2010 Profile Development
    - Residual Dose Optimization [1/28/10 @ 10:35]
        - http://wiki.ihe.net/index.php?title=IHERO_2007UseCase_Residual_Dose_Optimization on IHE Wiki
        - Use Case Variations
            - Boost plan with multiple treatment modalities
            - Recovery from equipment failure: treatment on another machine
            - Re-treatment after recurrence

        - Dose Compositing Profile does not address the use RT Plans. Registered Composite Planner may store a plan, but details are out-of-band.
        - The bulk of the work from the dose handling point of view is handled by the Dose Compositing Profile

        - Gaps
            - Biological interpretation of prior dose?
                - Physical dose may be acceptable for now
                - Access to fractionation information from RT Plan and/or RT Treatment Record
                - Modeling of effective dose?
            - How does one identify the appropriate dose object?
                - Some situations require human intervention using information exposed by the Archive.
                - Prospectively using information already in the TMS

        - Possible responses
            1. Won't do
            2. Wait for DICOM 2nd Gen RT objects
            3. Offer Dose Compositing Profile as the ??% path to the solution
            4. New Profile with Treatment Record Consumer Actor
            5. New Profile allowing plans to be used

        - Open questions
            1. Is Query/Retrieve a key feature?
            2. Do we need a minimal plan for multiple plan types?
            3. How do we find the correct doses?
            4. Do we need the archive to expose the "Dose Comment" in the archive?
            5. Could a workflow manager allow linkage to be established?

            6. New Profile allowing plans to be used

        - Response
            - Offer Dose Compositing Profile as a 70-80% solution
            - Remaining issues:

- Identifying appropriate dose objects via Q/R, workflow, or 2nd Gen RT Course mechanism. TC is willing to develop new profile(s) to address these issues, but they represent substantial effort – we need to prioritize.
- Fractionation information and models needed to interpret prior dose(s).

- Thursday-PM [1/28/10 @ 13:30]

  - TDW Continued
    - Review of updated TDW Profile draft (D. Murray)
      - Incorporate UML notation for alternation to indicate that Retrieval of Dynamic Treatment Delivery Input Instances may occur before or after Treatment Delivery in Progress event.
      - What does 0% Progress mean? → No beam has been delivered.
      - Progress updates at 0% and 100% are required. An arbitrary number of updates are permitted between 0% and 100%, inclusive. Percent progress is in reference to the entire work item (plan to be delivered). Update also references current beam number (coded value).
      - Keys to be used for UPS queries:
        - **Scheduled Station Name is optional for SCU, required (must be populated) for SCP**
        - **Scheduled Station Class Name → Intentionally left unspecified in the profile**. May be a useful concept in the future for "matched" machines.
      - Review of requirements for PS query keys
      - **This profile places no requirements for display of attributes by Query SCPs.**
      - **Need AE Titles for (a) Worklist Service (PS query), (b) Delivery Instruction fetch and (c) RT Plan fetch, and (d) Treatment Record storage.**
        - **All services are supported by the TMS Actor.**
        - **AE Titles are specified using a Static Configuration, not dynamically in the Treatment Delivery Instruction. AE Titles in the Input Information sequence shall be consistent with this configuration.**
      - **RT Beams Treatment Record is fetched from the same AE Title as RT Plan.**
      - **RT Beams Treatment Record is stored to the same AE Title from which RT Plan is fetched.**

      - **Changes to Treatment Delivery Instruction (CP 1046) have been submitted to DICOM WG-6.**

  - 2010 Profile Development [1/28/10 @17:15]
    - IHE ITI Cross-enterprise User Assertion (XUA)
      - EUA is Kerberos-based

- XUA uses Web services
  - See IHE_ITI_TF Rev. 6.0 Final Text 2009-08-10 at
    http://www.ihe.net/Technical_Framework/upload/IHE_ITI_TF_6-0_Vol1_FT_2009-08-10-2.pdf
  - Chris Pauer to evaluate XUA Profile with respect to IHE-RO Use Case

  Adjourn for the day [1/28/10 @17:50]

- Friday-AM

  o Single Sign-On [1/29/10 @ 8:30]

    - Use Case includes both Authentication and Authorization, but addressing Authentication alone is a good first step.

    - Questions/Issues:
      1. Relationship between EUA and XUA? Reason for limited traction of EUA? Superseded by XUA?
      2. Can XUA handle both authentication and authorization?
      3. Kerberos, Active Directory, SAML specifics

    - Action:
      - **Chris Pauer:** Contact implementers who have participated in IHE-ITI Connectathons to learn what is supported.   EUA: GE Healthcare; XUA: IBM, …
      - **Bruce, Sam, Walter:** RT vendors are considering a shared resource for authentication: How would this be supported in the clinic? What path would be acceptable to you? Political issues? Technical issues?

  o Vote TDW and IPDW Profiles to Public Comment [1/29/10 @ 9:30]
    - Review TDW Profile (David)
      - **Motion (David Murray), Second (Uli Busch) to move TDW Profile to Public Comment (at least 30 days): Passed without objection with quorum (10 voting members) present.**
      - Bruce to release on Feb. 3, 2010.
      - Comment period to end Mar. 3, 2010.

    - Review IPDW Profile draft v. 3.1.2 (Uli)
      - How to document which optional (non-treatment) transactions are supported? Is this to be specified in the Integration Statements? Define classes of transactions to group workitem codes? with the same input objects?
      - The Profile should ensure interoperable *communication* and appropriate response, even if requested step cannot be performed. Thus, the Profile must be clear about what a device does if it gets a code it does not support. Since all steps go IN PROGRESS at once, the PDS must check that all steps are supported before putting any IN PROGRESS.

- Action:
  - Members to communicate directly with Uli in the next 10 days.
  - Uli to edit profile draft for next release on Mar. 1, 2010.
  - Stuart to create wording for machine capabilities for Vol. 1.

  - Domain Pre-Testing
    - Profiles expected to be tested:
      - 2010 TDW,
      - 2010 Dose Compositing
      - 2007 Basic RT (Contouring)
      - 2009 ARTI

    - Exchange of DICOM test objects to verify geometric understanding of 4x4 matrix representation to be used for Patient Positioning. → Mark Sinclair to generate data dictionary, test objects for informal exchange at Domain Pre-Testing. Add "Verification of Patient Positioning Geometry" to June 2010 TC meeting agenda.
    - Review of Connectathon fee schedule

  - Uli to post question regarding Equipment identification for resampled or combined CT image series in 2007 Basic RT Profile on BBS

  - Structure Name Templates – deferred
  - CPs (1 hour) – deferred
  - Adjournment [1/29/10 @ 12:04]

IV. Future Meetings

  a. Face-to-face Meetings:
    1. Domain Pre-Testing (Granada, Spain, June 2-11, 2010).
       1. Dose Compositing
       2. Integrated Positioning and Delivery Workflow
       3. Treatment Delivery Workflow
       4. Advanced RT Objects Interoperability (If there is sufficient interest, but does not guarantee)

    2. 2010 Connectathon – Sept 20-26, 2010
       - Mon 9/20 judge, setup day
       - Sat 9/25 TC meeting (all day)
       - Sun 9/26 (9am–12pm) TC meeting at Residence Inn
         (Profiles to be tested depend on results of Domain Pre-Testing)

    3. ASTRO 2010 Oct 31 – Nov 4, 2010 in San Diego, CA
       - Thus 11/4 – Sat 11/6 at or near ASTRO meeting
       - Hotel arrangements? Scripps?

  b. IHE-RO Future Teleconferences:

1. Thursday, February 25, 12:00 – 2:00pm ET
2. Thursday, March 25, 12:00 – 2:00pm ET
3. Thursday, April 29, 12:00 – 2:00pm ET
4. Thursday, May 20, 12:00 – 2:00pm ET
5. Thursday, July 29, 12:00 – 2:00pm ET
6. Thursday, August 26, 12:00 – 2:00pm ET
7. Thursday, October 21, 12:00 – 2:00pm ET
8. Thursday, December 16, 12:00 – 2:00pm ET

c. Related meetings
   1. ESTRO Sept 12-15, 2010, Barcelona, SP
   2. AAPM Annual Meeting July 18-22, Philadelphia, PA
   3. WG-7
      - March 16-19, 2010, at MITA. Starting 9:00 a.m. Tuesday, finishing 12:00 Friday. The positioning group may possibly meet just prior to that meeting.
      - Tentative scheduling for 22-24 July, Philadelphia PA (after AAPM, finish noon on 24th).

V. Adjourn [1/29/10 @ 12:04]