

## 8th CHIOS/CIDOC CRM Special Interest Group Meeting

*Venue: Randolph Hotel, Oxford, 6-9<sup>th</sup> October 2003-10-28*

*See separate notes for Workshop session held Monday 6<sup>th</sup> October,*

*Tuesday 7<sup>th</sup> October*

### **Present**

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### **9.00-10.30 – Entity Scope Notes**

**Decision:** Current version to be worked on is to be named 3.4.3.

The current version on the web is 3.4.2. Major issues were that all references to CIDOC Entities have been marked with E numbers. All examples start with lower case. There was a reference to Period Appellation in the examples. The version distributed no longer contains the editing history (they have been deleted). A further change from today is the term “monotonic” in the Terminology section, which has been corrected.

The changes from 3,4.2 to 3.4.2 resulted in two new properties for attribute assignment and the change of range of E6 – P13 Destroyed property (see version history).

The first session dealt with property scope notes, beginning with those amended in St Petersburg (E1-8).

**Note:** All decisions relate to the text as edited (version 3.4.3).

### **E1 CRM Entity**

**Decision:** Accepted

**Issue:** Would benefit from additional examples taken from elsewhere in the model. These will not be changed now because the DIS has been submitted.

**Issue:** Should tags (e.g. “Examples”) reflect the singular or the plural?

**E2 Temporal Entity**

**Decision:** Accepted

**E3 Condition State**

**Issue:** The dates given in E3 contradict the example used in E2.

**Action:** MD to check that the date 1946 is correct.

**Decision:** Accepted subject to checking of date.

**E4 Period**

**Decision:** Accepted

**E5 Event**

**Issue:** Change in the quantifier required for P12 (many:many, necessary)

**Decision (on P12):** Accepted

**Decision (on E5):** Accepted

**Issue:** More investment needs to be made in additional documentation to explain the model.

**Issue:** FAQ required. "To what degree does an Event require the presence of Persistent Items"?

**E6 Destruction**

**Issue:** KHL questioned the date for the last wolf shot in Germany.

**Action:** KHL to check date and provide details from collection

**Decision:** Accepted subject to checking the date of the example.

**E7 Activity**

**Decision:** Accepted

**E8 Acquisition Event**

**Decision:** Accepted

**Issue:** Check use of punctuation (e.g. use of commas with "however"). This is likely to be picked up during the ISO proof reading. We may wish to employ a proof reader prior to this, funds permitting.

**E9 Move**

**Decision:** Accepted

**E10 Transfer of Custody**

**Decision:** Accepted

At 10:40 the group broke for coffee, resuming at 11:00.

**E11 Modification Event**

**Action:** MS to check the term "Preventative Treatment"

**Action:** MS to check term for the treatment of the Vasa ship.

**Decision:** Accepted subject to checking of term "Preventative Treatment" and checking of the Vasa example.

**E12 Production Event**

**Decision:** Accepted

**E13 Attribute Assignment**

**Decision:** Accepted

**E14 Condition Assessment**

**Decision:** Accepted

**E15 Identifier Assignment**

**Decision:** Accepted

**E16 Measurement Event**

**Decision:** Accepted

**E17 Type Assignment**

**Decision:** Accepted

**E18 Physical Stuff**

**Decision:** Accepted

MS handed over responsibility for minute taking to TG at 12:25.

**E19 Physical Object**

**Decision:** Edited...

**Action:** MD must send NC a full citation for the Smith & Varzi reference(s) for the ISO text.

**Issue:** The group discovered that the revised scope notes for classes E21 - E40 had not been merged into version 3.4.2. MD reverted to copying these scope notes into v3.4.2 from the revised document.

**E20 Biological Object**

**Decision:** Accepted

**E21 Person**

**Decision:** Accepted

**E22 Man-Made Object**

**Decision:** Accepted

**E24 Physical Man-Made Stuff**

**Decision:** Accepted

**E25 Man-Made Feature**

**Decision:** Accepted

**E26 Physical Feature**

**Decision:** Accepted

**E27 Site**

**Decision:** Accepted

**E28 Conceptual Object**

**Decision:** Accepted

**E29 Design or Procedure**

**Decision:** Accepted

**E30 Right**

**Decision:** Accepted

**E31 Document**

**Decision:** Accepted

**E32 Authority Document**

**Decision:** Accepted

**E33 Linguistic Object**

**Decision:** Accepted

**E34 Inscription**

**Decision:** Accepted

17:30 MS returned and resumed note-taking.

**E35 Title**

**Decision:** Accepted

**E36 Visual Item**

**Decision:** Accepted

**E37 Mark**

**Decision:** Accepted

**E38: Image**

**Decision:** Accepted

**E39: Actor**

**Decision:** Accepted

**Note:** We can mention in any FAQ about actors that there is a useful paper (reference to be supplied by MD)

**Action:** MD to supply reference to paper.

**E40 Legal Body**

**Decision:** Accepted

**Action:** MD to create acknowledgements. Credit should be given to all those who have participated in the creation of the standard. This should be placed in an appropriate acknowledgement section of the document.

The meeting concluded at 18:00

## **Wednesday 8<sup>th</sup> October**

**9:30-12:45**

**Decision:** Following the work undertaken on Tuesday 7 October, an increment was made in the version number of the CRM to V.3.4.4. This was distributed meaning that the document edited during the course of 8 October is V.3.4.5.

The group returned to the approval and editing of the Introduction.

**Note:** See the edited text of 3.4.4 for full details of the changes made. Only decisions, actions and issues not reflected in the edited text are recorded in these minutes

### **Applied Form:**

**Decision:** Edited and accepted

### **Terminology:**

<b>“class”</b>	– Accepted
<b>“subclass”</b>	– Accepted
<b>“superclass”</b>	– Accepted
<b>“intension”</b>	– Accepted
<b>“extension”</b>	– Accepted
<b>“scope note”</b>	– Accepted
<b>“instance”</b>	– Accepted
<b>“property”</b>	– Accepted
<b>“sub-property”</b>	– Accepted
<b>“super-property”</b>	– Accepted
<b>“domain”</b>	– Accepted
<b>“range”</b>	– Accepted
<b>“inheritance”</b>	– Accepted

**Action:** MD to modify the introduction that the distinction between transitive and symmetric properties is made clear.

<b>“strict-inheritance”</b>	– Accepted
<b>“multiple-inheritance”</b>	– Accepted
<b>“instance”</b>	– Accepted
<b>“endurant, perdurant”</b>	– Accepted subject to reference

**Action:** MD to ask Gangemi for a reference.

**Action:** All literary references to be checked for consistency with Harvard 9n-text system.

“**shortcut**” – Accepted

“**monotonic**” – Accepted

“**disjoint**” – Accepted

“**primitive concept**” – Accepted

“**Open World**” – Accepted

“**complement**” – Accepted

“**query containment**” – Accepted

“**interoperability**” – Accepted

“**semantic interoperability**” – Accepted

“**property quantifiers**” – Accepted

“**universal**” – Accepted subject to clarification

**Action:** MD to ask Gangemi for clarification

**Action:** MD to move all references to end of document.

**Property Quantifiers:** – Accepted with edits

**Naming Conventions:** – Accepted with edits

The group broke for lunch at 12:45.

**Decision:** Mark all obviously transitive properties as transitive.

**Decision:** Introduce the full reading of all acronyms.

## ***Modelling Principles***

### **Monotonicity**

**Decision:** Accepted with edits

### **Minimality**

**Decision:** Accepted with edits.

It was noticed that for E59 Primitive Value the list of subclasses was missing. These were reintroduced.

**Action:** NC to check for other missing super/sub classes.

### **Shortcuts**

**Decision:** Accepted with edits

### **Disjointness**

**Decision:** Decision required on the use of italics.

**Decision:** Accepted

### **About Types**

**Decision:** Accepted

### **Completeness**

**Decision:** “Completeness” paragraph renamed “Coverage”

**Decision:** Accepted

**Action:** NC to provide additional paragraph on use of Type.

### **Extensions**

**Decision:** Ordering of Extensions and Completeness to be reversed.

**Action:** NC to add to Completeness paragraph a statement about covering the intended scope with high-level concepts.

**Decision:** Accepted

### **Examples**

**Action:** MD to add Entity and Property numbers to the diagrams.

**Decision:** Accepted

The model was then saved as Version 3.4.5 (TG and SDS took a copy for safe keeping)

### **Issues**

**Issue 18:** Should there be a new name for the CRM?

**Decision:** ISO uses a different title for the model. The document states that it is derived from the CRM. Issue closed.

#### **Issue 22: How to deal with implementation guidelines**

**Decision:** Issue left open. The idea of writing an implementation manual has been abandoned. Instead the group will act as a forum bringing together practical experience from projects and research,

**Issue 23:** Where does temporal validity fit in with short cuts and indirection?

**Decision:** The model has been changed – dealt with by Issue 127. Issue closed.

**Issue 28:** How to organise outreach: collaboration, teaching and training, transfer of know-how

**Decision:** CHIOS dissemination plan adopted and implemented. Issue closed.

Issue 39: Creation of test data sets for validating CRM compliance.

Decision: Definition of “compliance” changed – see v.3.4.5 introduction. Issue obsolete. Issue closed.

Issue 44: Modelling states

Decision: Issue remains open.

Issue 51: mappings may depend on object type

Decision: This has been subsumed into the more general issue 129: Develop a general mapping methodology and tools..... Issue closed

Issue 54: Create a list of FAQs

Decision: MS and NC to confer and supply. Issue open.

Issue 55: Difference between museum and library information

Decision: This has been covered by Patrick Le-Boeff's paper. Issue closed.

Issue 57: Effort to teach use of the CRM

Decision: Issue open.

Issue 60: Identify new communities for collaboration

Decision: A great deal of progress has been made.

Decision: This is a never-ending task! Effort continues as part of the work of the group. Issue closed

**Issue 65:** Implementation guidelines for compounds

**Decision:** This is part of Issue 129: Mapping. Issue closed

**Issue 98:** Physical object exhibits general features....

**Decision:** A model has been made for this in Monterey. A heading will be made on the website for suggestions for extensions. The text created in Monterey will also be added to the website. Issue closed.

**Action:** NC to provide copy of text from St Petersburg.

**Issue 99:** Birth of non-humans....

**Decision:** Done by Karl-Heinz Lampe. MD to mount on website. Issue closed.

**Issue 116:** The new CIDOC CRM website

**Decision:** Website built and running. Some pages still under construction. Some information needs updating. Page of users of the CRM being created. Authorisation required. Issue closed.

**Action:** MD to send draft to all those mentioned. All to send information on their use and any other requests for changes in details. MD to circulate once collated and ask for consent to publish as phrased.

**Issue 123:** Reclassification needs to be considered

**Decision:** Currently out of practical scope. Could be dealt with by an extension. Issue closed.

**Issue 126:** Explanation of Allen operators

### ***Thursday 9 October***

Jen-Sing Hong joined the group.

See edited document of Places, Periods and Allen Operators. (MS to transfer actions).

Further minor editorial changes were made to the introduction.

**Decision:** The current version of the CRM (now saved as 3.4.6) will be harmonised with the ISO approach. This will be used for future editing.



## ***Editorial Style***

ISO has its own editorial guidelines. Where possible, the group's version will follow this style.

There are grammatical and typographical problems. NC will try to incorporate changes made since 3.4.2 but can make no promises. Any changes made to date can be included in the final version of the standard. Once the text goes out to ballot it will be published on the NISO website.

Issue. Should we make a major number change?

Decision: Yes – next version to be 3.5

Decision: The word "Draft" to be removed from the title.

MS raised a question of carrying over editorial changes from the ISO draft of 3.4.2 to 3.5.

Action: MD to ask student to do a compare and contrast.

**Issue:** use of italics

**Decision:** only the terms defined in the glossary to be put in italics (in the introduction only). Species names will continue to be in italics. Issue closed.

## ***Strategies for continuing***

### 1. Dissemination

- Dissemination needs to continue along with production of didactic material - additional documentation.
- How do we keep the website maintained? There are navigation issues.

**Issue:** All to ask national standards bodies to get the CRM adopted as a national standard.

### 2. Methodological collaborations with communities

- Harmonisation – FRBR-CRM-FRANAR, linking to DC, HUML, LOM, ISAD (G), EAD
- Knowledge Representation Community

### 3. Community-specific extensions such as social and genetic family relations, temporal indeterminacy, media history, learning objects – LOM....., biology?

### 4. Project collaborations

- Taiwan National Digital Archives Project
- SCULPTEUR
- EH-Heritage Data – (MS private note: look at Caché as possible database engine)
- Artstor
- Norwegian Museum Project
- DANA-WH
- EPOCH

### 5. Technology and Application

- CACHÉ implementation and other reference implementation
- Enabling technologies, tools, formats
- Sets of discipline-specific DTDs + mappings
- Reference architectures
- Mapping technology
- Visualisation technology - 3D flight simulator in the CRM hyperspace.....!
- KR formalisations

- Hiding the complexity, application-specific upper CRM level “simple” associations made of complex paths,
6. Local Centres of Excellence/Support Centres GNM, EH, UKOLN?,NMSI, IST-NSF
  7. Documentation services for CRM-related products such as mapping registries

**Decision:** SD to propose to CIDOC Board the registration of domain name [www.cidoc\\_crm.org](http://www.cidoc_crm.org) or [www.cidoc\\_crm.info](http://www.cidoc_crm.info).

**Decision:** There should be at least one meeting a year of the group, to be held at the same time as the CIDOC Conference. Conference work should be directed mainly at dissemination activities.

MD felt that a dedicated meeting day is required.

SD felt that dissemination could go into the Working Group slots, but that more in-depth workshops might be required. He also considered it suitable to hold a separate working-group meeting before the Conference. This should only be advertised to existing members of the group.

At least one additional meeting is required in-between. It has been suggested (on Monday) that a workshop be held. MD asked if this should be the form for future meetings.

Proposal: Transform the character of the meetings to technical/scientific discussions in a scientific workshop/symposium style with relatively long dedicated discussion space for issues. This would involve making a call for papers, announce topics. 2 days.

MS suggested a need for a working-group style meeting to discuss specific issues such as deferred issues. MD concurred.

So, the group will operate as the place where applications are discussed.

MD proposes to open up involvement in the CRM SIG to anyone interested. SDS pointed out that the CIDOC CRM SIG can only have a certain percentage of non-CIDOC members. MD considered this to be a non-issue – he felt it appropriate to encourage membership. It was decided to see what happens.

**Decision:** Il to be encouraged to support the CRM and the CRM SIG, and to become members of ICOM.

**Decision:** A distinction will be maintained between membership of the CRM SIG list and the CRM SIG.

**Decision:** Voting will be maintained for membership of the CRM SIG.

The group broke for lunch at 12:40.

Need to identify 3-4 tasks with a finite outcome allowing the creation of a work programme.

Register ideas of related projects people from this group and others can do. It is particularly important to do national projects. European grants are becoming more competitive.

There is still a deliverable for CHIOS: didactic material. The idea was to take up the earliest document of the CRM (mapping of CIDOC categories, undertaken in 1996). Experience of working with the CRM shows that we understand it by picking up partial views of the model. MD and SDS will work up into a readable document.

### ***European application for the CRM.***

Dolores Iorizzo joined the group after lunch.

#### **Title:** CRM-Based Knowledge Sharing

- Requirements
- State of the art
- Research issues
- Know-how exchange with implementers/projects
- Guidelines
  
- Intellectual relations of Application semantics and CRM semantics
- Mapping tools
- Mapping methodology
- URI generation – duplicate detection and reconciliation
- Interchange formats
- Reference architectures (Webservices to communicate with metadata repositories based on CRM concepts, OAI extension?)

**Issue:** There is an embarrassment of riches in the CRM that have applications beyond the domain of the CRM. There is a need to make it more accessible beyond the museum domain.

**Action:** Contact MD saying who would like to participate, and who will undertake substantial work in proposal-writing. MD will not undertake more than 30% of the preparation of the proposal.

NC to check on status of Swiss participation.

MD wanted to find ways of drawing the Smithsonian closer in to the CRM. Carl Lugosi may well be interested in supporting a project.

Skills required in developing mapping registries. More excellence needed for computer science. More resources required for dissemination.

MD expressed concern about the need for more technical expertise in what is essentially a technical subject. People with a high reputation in associated theoretical issues required. He referred to the standardisation efforts for URI generation – e.g. the DOI Foundation.

European initiatives: ECHO Project (FP5 project) working on European DL architecture

**Action:** All to send MD names of projects and people about relevant projects and activities. Important to credibility of proposal.

James, Steven, Jen-Sing and Christian offered help in formulating the proposal. MD suggested asking Jane Hunter.

### ***Related projects***

Dolores raised the question of a need for core funding for the work of the project. Suggested need to link up with the Text Encoding Initiative.

**Action:** MS to talk to Lou Bernard about further involvement in the work of the CRM. Dolores suggested an AHRB project to marry up the CRM with TEI.

Issue: MD mentioned message on CRM looking for English texts for use in a research project.

MD also talked of collaboration in the area of natural language translation and linguistic analysis.

Dolores raised the question of whether the work of the CRM could help with the field of computational philology.

**Action:** MS to see if he can find data to be made available for research project in Finland.

### ***Graphical representations***

1. Entering the contents of inventory books (of a museum)
2. Entering the contents of inventory cards
3. Entering conservation records
4. Modelling accession as a purchase or a donation
5. Photographs of objects and photographs as objects
6. Paintings
7. Databases
8. Exhibition catalogues
9. Websites (static and dynamic)
10. Architectural or technical drawings
11. Historical audit records
12. Creation of objects
13. Modification and transformation
14. Object labels as documentation and as objects in their own right
15. Digital surrogates
16. Virtual realities and 3-D reconstructions
17. Multimedia presentations including ordering
18. Peoples' names
19. Temporary and touring exhibits including customs documentation
20. How to deal with permanent storage
21. Loans in and loans out
22. Performances of music or plays
23. Demonstrations of the functions of a museum's objects
24. How to document damage through use (before or after entry to museum)
25. Dealing with the validity of classifications or names through time
26. Annotations of and on originals
27. Buildings and archaeological sites
28. Remains of objects (e.g. Stephenson's "Rocket")
29. Building changes
30. Collections changing ownership

31. Collection-level descriptions
32. How to model states and copies of prints
33. Family relations
34. Facsimiles
35. Derived works
36. Taxonomic discourse
37. Expedition records
38. Origins of place names
39. Natural history specimens destructively derived from natural history specimens
40. Modifying digital objects without destruction of the original
41. Publication of texts

The group agreed to buy Steve a beer (or two) (or three) (or more) (multiple instantiation of beer)

The extant examples can be used as a template.

SDS asked for help in undertaking this work. Deliverable required by the end of the year.

**Action:** KHL to draw diagram “how to model life stages”.

**Issue:** Diagrams need to be consistent. What style should be used for diagrams? What tools? MD suggested nodes and arrows with the ISA symbology used to date.

**Decision:** Microsoft tools to be used – the examples used in the PowerPoint tutorials. This will provide a template to keep text sizes constant.

**Action:** MS to add Time uncertainty, certainty and duration to the article he is to write on Allen operators, places etc. See P82: *at some time within*.

### ***Final issues:***

**Issue:** The general principle that we do not shortcut if more than one field is involved.

**Issue:** Is a collection as whole, being donated to a new museum, a transformation? A collection is currently defined as belonging to a specific actor.

The meeting closed at 16:00, the final editorial decisions having been made for the ISO draft. MD thanked all for taking part and a toast was drunk to the success of the model.