

# 10<sup>th</sup> CIDOC CRM Special Interest Group Meeting

**Venue: Germanisches Nationalmuseum, Nuremberg, 9-10th December 2004**

**Thursday 9<sup>th</sup> December**

## **Present**

|                                      |  |
|--------------------------------------|--|
| Christian-Emil Ore                   | (CEO) University of Oslo                             |
| Martin Doerr                         | (MD) ICS FORTH                                       |
| Matthew Stiff                        | (MS) English Heritage                                |
| Siegfried Krause                     | (SK) GNM   |
| Karl-H Lampe                         | (KHL) ZFMK   |
| Regine Stein                         | (RSt) Zuse Institut Berlin                           |
| Regine Scheffel (until early midday) | (RS) HTWK, Leipzig                                   |
| Jörn Sieglerschmidt                  | (JS) Bibliothekservice-Zentrum,<br>Baden Württemberg |
| Patrick Le Boeuf                     | (PLB) National Library of France<br>(AFNOR)          |
| Hans Rengman                         | (HR) META  |
| Carlos Lamsfus                       | (CL) Centre VICOMTECH                                |

## **The Making of the CRM**

### **9.00-10.30 – Housekeeping**

Martin Doerr welcomed the Group to the business meeting. He reminded the group that membership of the SIG is based on institutional support. Individuals are welcome to join the list.

Proposals were requested for topics for discussion:

- Family Relations
- Meta CRM
- Outreach
- FAQs/Didactic materials

MD made two announcements

The CRM text will be packaged in TMX (as suggested by Tyler Bell). There is a URI [www.lis.com](http://www.lis.com) (try TMX on Google). There are tools available to support this emerging standard. FORTH will carry out tests on this.

FORTH has a student working on establishing a wiki for the Group.

### **FAQs.**

There was a general view of the group that there was insufficient capacity for writing FAQs.

PLB announced that he will write a text with title "The CIDOC CRM for Dummies". He hopes to have his text completed by mid 2005. A possibility of a Swedish/Norwegian translations of both the "The CIDOC CRM for Dummies" and the CRM itself will be

investigated. MD stressed the importance of having the services of a professional translator who is sufficiently instructed about the meanings in the CRM.

MS to make available high-level information material for decision makers by January 2004. He is producing this for internal use at EH.

There are currently SIS-TELOS and RDFS encodings of the CRM (4.0) available on the CRM website. An evaluation licence of the SIS database and visualization tool is available for free.

FORTH is also working on an automatic 3-dimensional layout algorithm for partial views of the CRM. Possibly a Protégé plug-in could be produced, funds permitting.

MD announced that he had been approached by two people (from Springer and Kluwer) suggesting the production of a monograph on the CRM. 300-400 pages would seem appropriate. This will include the text of the CRM (copyright issues would need to be resolved on this). It is hoped that these problems could be resolved. Envisaged structure:

- An introduction
- A computer-science-oriented description of the CRM,
- parts from PLB's text,
- discussions of successful applications or details of CRM functional units (a CRM cookbook)
- The definition of the CRM.

PLB, MS, SK and CL to work on this.

### **Dissemination**

MS reported back on his presentation to the Dutch Digital Heritage Association conference in Arnhem. He suggested follow-up contact with those involved in the Dutch Heritage portal project, to be arranged in the New Year.

JS suggested further contacts with the library and archive communities, through conferences etc.

KHL suggested further mappings of domain-specific events, possibly through dedicated meetings. This would demonstrate the potential of the CRM for horizontal rather than vertical information transfer. This could be done under the umbrella of CIDOC. MD pointed out that this is on the same lines of the work with the Centre for Archaeology in the UK. He suggested that we could collect examples of domain-specific extensions or better specializations of the CIDOC CRM. KHL suggested that these domain-specific specializations could be brought together and published as a book. JS mentioned GBIF. MD discussed the importance of contacts with the archival community (e.g. the editors of EAD). RS mentioned that in Germany there is a different tradition in describing archival material. SK said that this is now changing and that EAD is now beginning to be used even in Germany.

CEO reported back on discussions on the TEI list on establishing a list for the discussion of ontologies. This was accepted by TEI, and there was further discussion at the TEI annual meeting in Baltimore. He also discussed the Master Project. MD felt that it would be worthwhile if more than one person could follow up on such application-specific issues. MS suggested engaging Richard Light. MS also agreed to engage in this work. Dolores will also be interested (and MD will do what he can!). KHL will be interested in biological applications.

HR mentioned the museum week in Gothenberg/Stockholm (late March). He suggested some kind of museum/library/archive-linking workshop.

[www.BAM-Portal.de](http://www.BAM-Portal.de)

MS discussed the problems of DC-Culture and its prevalence. It was felt that there could be a better, CRM-based proposal than DC-Culture with equal simplicity. MS and MD agreed to work together on approaches to dealing with DC-Culture and proposing alternatives.

### **Meta-CRM**

Following the workshop presentation of the “Meta-CRM” proposal by MD the day before, RG felt that although the discussion was interesting it was too early to pursue this. HR was concerned about using the CRM in this way. Introducing fuzzy notions such as “usually” may weaken the intellectual rigour of the CRM. MD pointed out that the Meta-CRM is only a logical interpretation and hence application of the CRM – it does not alter the semantics of the model. HJH asked for further examples to clarify the proposal. MD pointed out that it was the first study that FORTH had made of this. He was anxious to avoid the confusion feared by RS. He stated that he proposed it as an application of the CRM. MD also mentioned the criticism of the CRM that it uses the CRM typing mechanism as a “rubbish bin”. He talked about work undertaken to create type hierarchies parallel to the CRM (types of types). These will be labeled with ‘T’ numbers following older decisions of the Group. MS expressed interest in this approach.

PLB thought that the Meta-CRM would be useful in solving FRBR-CRM issues. RSt was interested but raised the question of what is ‘usual’. GG asked for more examples of the usage of this Meta-CRM, particularly in dealing with exceptions. The need for standard expectations. CEO pointed out that the Meta-CRM can be used to model instances of theories. MD asked GG if he had experience of such reasoning systems. GG confirmed that he did and elaborated some examples.

MD talked about the problem in modelling discussions of to distinguish between a class of like items or a collection of particular item – two viewpoints that are modeled completely differently but may not easily be distinguished in practice. MD stated that we need people with particular examples for the Meta-CRM in order to decide its utility and optimal form. KHL, CEO and GG all expressed interest. JS expressed his continuing concern about this modeling. He was worried about properties that might not be rigidly defined. MD emphasized that he was not making any proposal about the standard, only about a practical application derived from the standard. He also reminded the group that the CRM is full of properties that have cardinality (0,n), which means they describe *particular* things have particular *possibilities* rather than fixed properties.

The group endorsed the Meta-CRM application as a useful approach.

The group broke for coffee at 10:35.

### **Family Relations**

The CRM currently describes family relations by Birth events and assumed fatherhood. This is a maximal elementary analysis for genetically determined family relations except for loan-mothers and cloning. There are problems in describing family relations where the genetic intermediates (common ancestors) are not known.

There are also legal and social relations that have a status of family relations to be described.

CEO outlined some of the issues. E67 Birth has properties for the Mother (P96), the assumed father (P97) and the child (P98). This is has some problems with it. For example, it doesn't allow for adoption. CEO wondered about the use of the Acquisition event. MD considered that this was not appropriate. CEO agreed, but a similar event is required to deal with the legal aspects of adoption:

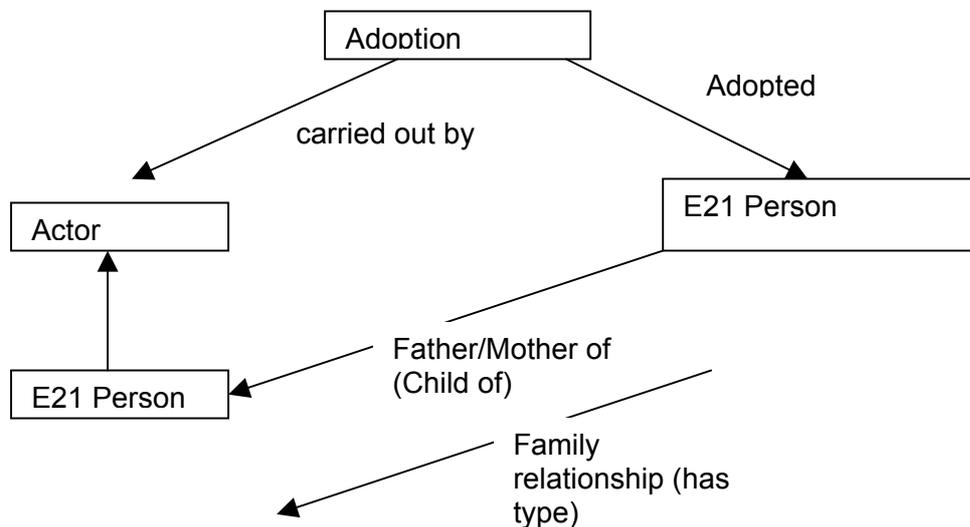
A legal relationship is established by an activity.

A genetic relationship is established by birth (except for loan-mothers)

A social relationship is established by "bringing up" someone.

MD suggested creating an adoption event. He warned against modeling events for which we have no evidence in databases.

MD proposed:



The importance of parenthood as a legal construct was discussed. Different cultures approach this issue differently. MD expressed the importance of the Adoption event in establishing the relationship. This is different to characterizing a longer-lasting social activity that establishes a de-facto bond.

MD asked how the deassignment of adoption should be modeled (in order to preserve the symmetry of the model). CEO stated that adoption should be modeled in the same way as Transfer of Custody/Acquisition.

MD talked about other relationships with open numbers of intermediates – e.g. uncles, aunts, cousins etc.

**Proposal:** There should be a CRM extension dealing with family relationships. JS suggested that this should be done by someone with ethnological knowledge to ensure that we do not impose a Western construct to family relationships.

**Action:** CEO to discuss these issues with anthropologists. These relationships to be discussed in terms of the activities that lie behind them. MS and CEO to collaborate in formulating requirements for the expression of relationships between people.

**Corrections to CRM Text.**

The group then undertook obvious corrections to the CRM text that were proposed by groups translating the CRM. The version used was the current official release (4.0).

PLB focused on problems remaining.

MD stated that the word Event was used to add clarity. MS said that, if this clarification is to be retained, then the word Activity should be used. There was no consensus if this should be proposed as change to the standard.

**Decision/Action:** Change to 'Activity' to be raised as formal Issue for later decision by the group.

**Issue:** The suggestion to change 'Stuff' to 'Thing'. MD was opposed to introducing terminological discussion. He felt that this should not be opened up if there was not an urgent need to do so. He expressed the view that the term 'Stuff' has already its own history. These should be gathered for the next edition with input from a wider group. RSt felt that we should avoid changing terms if at all possible as it is being used already. MD raised the issues of translation – The concept is defined by the scope note, not the term. We seek a term in language best suited to the concept rather than attempting to translate the English term where no direct equivalent exists.

**Decision:** To be noted as Issue for resolution in a later edition of the CRM

**Pending Issue:** E28 The definition of Conceptual Object is too narrow. A photo is not a product of our mind, but it can be analyzed by our mind. The very nature of the photo seems to reside in its signal or sensory nature. To be refined.

**Decision:** Post as issue to list for discussion and later decision.

**Issue:** Paragraph, Naming Conventions: 4<sup>th</sup> bullet point: 'P2 has note' should read 'P3 has note'.

**Decision:** Accepted

**Issue:** Paragraph, About Types: "This enables the specific instance of the casting to be associated with the entire class of manufacturing devices known as moulds ..." replace with "This enables the specific instance of the casting to be associated with the entire type of manufacturing devices known as moulds ..."

**Decision:** Accepted

**Issue:** The diagrams in the introductory text have been transposed.

**Decision:** Accepted

**Issue:** E8 Acquisition Event

Replace: 'any other instances of E30 Right' with 'any other types of E30 Right'. Discussion ensued. Suggested rewording 'any other kinds of right'. This gets over ambiguities in E30.

**Decision:** Accepted.

**Issue:** E8 Acquisition Event

Replace: 'require the donor and/or recipient to be included' with 'The recording of the donor and/or recipient is optional. It is possible that in an instance of E8 Acquisition Event there is either no donor or no recipient.'

**Decision:** Accepted

**Issue:** E8 Acquisition Event

3<sup>rd</sup> example "the loss of my stuffed '*Fringilla coelebs* ...'" should read "the loss of my stuffed chaffinch '*Fringilla coelebs* ..."

**Issue:** E10 Transfer of Custody

See above. See amended text for new version (as above).

Add 'The receipt of custody from an unknown source'.

**Decision:** Accepted

**Issue:** E28 Conceptual Object.

Replace 'Instances of E28 Conceptual Object need not have a particular carrier', with 'Instances of E28 Conceptual Object may be found on more than one particular carrier'.

**Decision:** Accepted

**Issue:** E36 Visual Item.

Replace: 'This class does not intend to describe the idiosyncratic characteristics of an individual physical embodiment of an inscription, but the underlying prototype' with 'This class does not intend to describe the idiosyncratic characteristics of an individual physical embodiment of a visual item, but the underlying prototype. (Obviously a "cut and paste" effect from E34)

**Decision:** Accepted

**Issue:** E41 Appellation

The phrase: 'Because of this, there are no properties linking to values of E41 Appellation' is obsolete.

**Decision:** Accepted

**Issue:** E41 Appellation

Replace: 'Specific subclasses of E41 Appellation should be used when instances of E41 Appellation of a characteristic form are used for particular objects' with 'Specific subclasses of E41 Appellation should be used when instances of E41 Appellation of a characteristic form are used for particular kinds of items'.

**Decision:** Accepted

**Issue:** E44 Place Appellation

Scope note for E44 Place Appellation: A the beginning of the 3<sup>rd</sup> line it should read 'the same instance of E44 Place Appellation.'

**Decision:** Accepted

**Issue:** E45 Address

E48 Place Appellation should read E44 Place Appellation

**Decision:** Accepted

**Issue:** E45 Address

This class comprises mainly postal addresses used for mailing."...and what else? Replace with 'This class comprises identifiers expressed in coding systems for places, such as postal addresses used for mailing'

**Decision:** Accepted

**Issue:** E55 Type

The last paragraph of Scope note:

E56 Language, E57 Material and E58 Measurement Unit have been defined explicitly as elements of the E55 Type hierarchy because they do not correspond to an explicit class in the Model, e.g., the property instance “ consists of : gold” does not refer to a particular instance of gold.

Replace with

E56 Language, E57 Material and E58 Measurement Unit have been defined explicitly as elements of the E55 Type hierarchy because they are used categorically in the model without reference to instances of them, i.e. the Model does not foresee the description of instances of instances of them, e.g., the property instance “*P45 consists of* : gold” does not refer to a particular instance of gold.

**Issue:** E56 Language

Replace “This class is a specialization of E55 Type and comprises the names identifying natural languages” with “This class is a specialization of E55 Type and comprises the types of measurement units: feet, inches, centimetres, litres, lumens, etc.”

**Issue:** E56 Language

Replace “This type does not correspond to an explicit class in the Model” with “It is used categorically in the model without reference to instances of it, i.e. the model does not foresee the description of instances of instances of E56 Language, e.g.: “instances of Mandarin Chinese”.

**Issue:** E56 Language

Replace “ISO codes, such as those defined in ISO 639:1988, should be used as instances of E56 Language, if the respective language is defined” with “It is recommended that internationally or nationally agreed codes and terminology are used to denote instances of E56 Language, such as those defined in ISO 639:1988.” (this paragraph moved at the end of Scope note)

**Decision:** Accepted

**Issue:** E57 Material

Replace “This class is a specialization of E55 Type and comprises the names used to identify materials.” with This class is a specialization of E55 Type and comprises the concepts of materials.

**Decision:** Accepted

**Issue:** E57 Material

Replace “This type does not correspond to an explicit class in the Model” with “It is used categorically in the model without reference to instances of it, i.e. the model does not foresee the description of instances of instances of E57 Material, e.g.: “instances of gold”.

**Decision:** Accepted

**Issue:** E57 Material

Order of phrases: International codes... Move this phrase to end of scope note as separate paragraph. Rephrase as ‘It is recommended that internationally or nationally agreed codes and terminology are used.

**Decision:** Accepted

**Issue:** E58 Measurement Unit

Replace “This class is a specialization of E55 Type and comprises terms for all types of measurement units: feet, inches, centimetres, litres, lumens, etc..” with “This class is a specialization of E55 Type and comprises the types of measurement units: feet, inches, centimetres, litres, lumens, etc..”

**Decision:** Accepted

**Issue:**E58 Measurement Unit

Replace “This type does not correspond to an explicit class in the Model” with “It is used categorically in the model without reference to instances of it, i.e. the model does not foresee the description of instances of instances of E58 Measurement Unit, e.g.: “instances of cm”.

**Decision:** Accepted

**Issue:** E58 Measurement Unit

The paragraph” Système International (SI) units or internationally ...” moved at the end of Scope note.

**Decision:** Accepted

**Issue:** E63 Beginning of Existence and E64 End of Existence

PLB raised the use of the term termini postquem and antequem. These are grammatically incorrect. These should be written terminus postquem and terminus antequem (singular form) or termini postquos and antequos (plural form).

**Decision:** Accepted

**Issue:** E65 Creation Event

In the Scope note replace: “classes “ with “types”

**Issue:** E69 Death

Subclass of: “E63 End of Existence” should read “E64 End of Existence”

**Decision:** Accepted

**Action:** Check all E numbers!

**Issue:** E69 Deth

“If the E21 Person was killed, the E69 Death event should also be instantiated as an E7 Activity. The E69 Death or perishing of other living beings should be documented using E64 End of Existence. “

: rubbish insertion of E numbers... Replace with: ‘If a person is killed, their death should be instatiated as E69 Death and as E7 Activity. The death or perishing of other living beings should be documented using E64 End of Existence.

**Decision:** Accepted

**Issue:** E83 Type Creation

In the Scope note replace: “classes “ with “types”

**Issue:** P20 had specific purpose (was purpose of)

bad syntax first phrase. “This property describes the relationship between an E7 Activity and an activity that it is intended as a preparation for”. Replace with “This property describes the relationship between a preparatory activity and the activity it is intended for”.

bad example. Use archaeological example (Knossos workshop?). See amended text

**Decision:** Accepted.

**Issue:** P21 had general purpose (was purpose of): “type” not “class of Activity,

**Decision:** Accepted

**Issue:** P21 Examples – Replace example with archaeological example. e.g. half-finished statue from Easter Island.

**Action:** SK to find archaeological example.

**Issue:** P25 moved (moved by).

Date of Exhibition should be 1874

**Decision:** Accepted

**Issue:** P25 moved (moved by).

The example ““Impression sunrise” (E22) ...” should read “Monet’s “Impression sunrise” (E22) ...”

**Decision:** Accepted

**Issue:** P27 moved from (was origin of) – Example should read The Egyptian Museum

**Decision:** Accepted

**Issue:** P34 concerned (was assessed by)

At 2<sup>nd</sup> line of Scope note should read “Stuff does NOT need...”

**Decision:** Accepted.

**Issue:** P34 concerned (was assessed by)

should read E14 Condition Assessment not E14 Conditional Assessment

**Decision:** Accepted

**Issue:** P35 has identified (identified by)

as above.

**Decision:** Accepted

**Issue:** P39/40 E-numbers are missing, E number inserted into edited text. See amended text.

**Decision:** Accepted

**Issue:** P48/50/52/54/55: “was instantiated” replace with “was recorded”.

**Decision:** Accepted

**Issue:** P65 shows visual item (is shown by)

The example should read Impression\_Sunrise.jpg (E38).

**Decision:** Accepted

**Issue:** P102 has title (is title of)–

2<sup>nd</sup> line of Scope note. Change P02 to P102.

**Decision:** Accepted

**Issue:** Ref. to Allen missing.

Competed in P114/115/116/117/118/119/120

**Issue:** P128 carries (is carried by)

this property is a super-property of P65 is missing.

**Decision:** Accepted

**Issue:** P129 is about (is subject of)

Typo – E73 InformationI should be E73 Information.

**Decision:** Accepted

**Issue:** P135 created type (was created by) –  
Change example to read “The description of a new ribbon worm species by Würger (E83) *created type* ‘*Lineus coxinus* (Bürger, 1892)’(E55)  
**Decision:** Accepted

**Issue:** P136 was based on (supported type creation)  
Change example to read “the taxon creation of the plant species ‘*Serratula glauca* Linné, 1753.’ (E83) *was based on* Object BM000576251 of the Clayton Herbarium (E20) *in the taxonomic role* original element (E55)”  
**Decision:** Accepted

**Issue:** P140 assigned attribute to (was attributed by)  
Second example should read ‘assigned attribute to’ not ‘registered’.  
**Decision:** Accepted

**Issue:** P141 assigned (was assigned by)  
Typo – remove full stop after E16  
**Decision:** Accepted

### **Translation Guidelines**

Amendments were made to the translation guidelines. See amended text. The guidelines are hereby accepted by the Group.

The group finished work at 17:10.

### **Friday 10<sup>th</sup> December 2004**

The group was joined by

|                 |      |                                  |
|-----------------|------|----------------------------------|
| Dolores Iorizzo | (DI) | Newton Project, Imperial College |
| Dirk Witthart   | (DW) | AdLib Information Systems        |
| Georg Hohmann   | (GH) | Köln Univeristät                 |
| Axel Ermert     | (AE) | Berlin                           |

### **Housekeeping (continued)**

**Outstanding Action:** MD to make proposal to CRM SIG on how to format examples for translation purposes.

**Outstanding Action:** MS to produce list of FAQs by Mid January 2005.

**Outstanding Action:** Mapping repository to part of wiki tiki

**Outstanding Action:** FRB/CRM Harmonisation – Document needs refinement to be carried out at next CRM/FRBR meeting.

**Outstanding Action:** Graphical representation – MD and SDS have produced a text for CIDOC categories. This could be a good starting point (it also contains a list of FAQs. MD to send copy to MS. MS and PLB to work on text to go with illustrations.

**Outstanding Action:** Tutorial – Still in progress

**Outstanding Actions:**

MD emphasised that CRM encoding is a political issue. RDFS or OWL encoding should be seen as interpretations of the CRM, not recommendations. DI suggested that the CRM SIG should publish a note on this issue.

**Action:** MD to write short note covering CRM encodings. This should cover their respective limitations.

**Action:** RL's mapping tool. MS reported that work on this is on hold – Will report back in March 2005.

**Action:** MS to send Allen operator paper to MD by Christmas 2004.

**Action:** MS to discuss teaching the CRM with Tyler Bell.

**Action:** Checking of Diagrams. RSt agreed to work on this.

MD outlined work undertaken covering thesaurus proposals and treatments of events and time. Papers delivered to CAA – To be placed on CRM SIG website.

### ***The Future of the CRM – CHIOS 2***

MD outlined the range of possibilities. He emphasised that a larger project would have more limited chance of success. He stated that a proposal has been encouraged for the 6<sup>th</sup> Framework 5<sup>th</sup> call (September 2005).

DI reported back on presentations on EC funding. 300-500,000 euros would be a good range to pitch for over a 3 year period. MD suggested that we should not ask for more than 300,000 euros. DI suggested finding ways of including Daniel Pitti. This should be possible with the inclusion of a budget for travel.

A discussion ensued on prioritisation of themes for CHIOS 2

1. Dissemination
  - a. Training
  - b. CRM MonographTo make the CRM available and accessible to a wide range of communities – Showing how it relates to other people's data structures.

Rich impact

Map texts

In to science

Historic view on experiments

Bringing together overlapping info

2. Extensions
  - a. Dialogue
  - b. Enforcing coherence of interpretation
  - c. "Approval"

DI talked about need for a more formalised structure for the further development of the CRM.

3. Community building
  - a. National Centres of Excellence

**Decisions:**

Meta CRM cannot be funded as work as part of a support action. More research work is required for this.

A requirement exists to extend influence to the United States. TEI, EAD, RLG communities required. DI stated that Imperial College is a member of RLG.

**Overall objective:**

Foundations for interoperating - Archives, Libraries, Museums →  
Science/Humanities repositories

**Measures for CHIOS 2 Proposal**

1. Organisation of Centres of Excellence, dialogue with interest groups – MS, TB & DI.
2. \*Harmonisation work (FRBR, TEI etc.) – DI, PLB
3. Approval service
  - Domain specialisations – SK, KHL
  - Extensions
4. Coordinating formalisations – CL & MD
  - “Ontological commitment”
5. Didactic material - PLB
  - \*Formulate a model for the CRM Lifecycle – a paper to use to initiate political bargaining. (an alternative to the Semantic Web)

**Action:** DI, KHL, SK and MS agreed to assist in formulating proposal. Other to assist as outlined above. MD to compose introductory text. MS to provide editorial support.

**Timetable:**

Information is available on CORDIS 6<sup>th</sup> Framework IST Programme – Latest update of the work programme and underline all political statements. Each country has an IST contact point.

Announcements are made for calls. These include lists of topics – Check those on the list for the 5<sup>th</sup> call. Download the template – Guide for proposers. Look only at the technical descriptions (the first parts). Needs to show how this fits in with European policies and initiatives.

**Action:** All to check URL on CORDIS website and submit URL to CRM SIG list to confirm correct documentation.

**Action:** First thoughts to be submitted by mid-late January (initial draft).

**Action:** Mid February first draft to be produced in template format.

**Action:** 11<sup>th</sup> CIDOC CRM Meeting – Crete. June/July 2005. Programme should relate to DI, SK, CEO and MD to act as Programme Committee.

**Action:** CRM/FRBR meeting to be held at Imperial College, London, February 2005. Announcement to be made to list ASAP.

Further discussion to be held on list.

The Workshop closed at 12:30. The group thanked SK for his organisation.