

MDA Spectrum CIDOC CRM mapping

Introduction

The following mapping is based on version 2 of MDA Spectrum, distributed as SPECTRUM Interactive, and the September 1999 revision of the CIDOC Conceptual Reference Model. This document should be read in conjunction with these two references.

The mapping is arranged in a tabular format.

- The first column contains the name of the Spectrum unit of information.
- The second gives a formal representation of the proposed mapping. Where appropriate, the names of the CRM entities are followed, in italics, by the relevant properties (attributes). Several possible mappings are sometimes presented. This column is left blank where no obvious mapping is available. This may be either because the CRM does not currently support the Spectrum unit of information, because no *specific* mapping is appropriate, or because the definition of the Spectrum unit of information is unclear.
- Units of information requiring modifications to the CRM have been indicated both textually in the notes and visually using a background tint.
- The third column contains explanatory notes about the mapping.

The mapping presented here should be considered only as a proposal. In many cases alternative approaches may be possible.

Of the 442 Spectrum Units of information analysed, 371 (84%) can be mapped directly to the CRM. Some of the remaining 71 simply require clarification, most, however, require modifications or extensions to the CRM. Not surprisingly, the majority of these fields concern legal and commercial transactions which fell outside the initial scope of the CRM. Wherever possible, I have indicated extensions that are consistent with the philosophy and intentions of the CRM.

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Units of Information

Access category	E17 Type Assignment <i>assigned E55 Type</i> <i>classified E1 CIDOC Entity</i>	The access category of an object can be handled as part of the E55 Type hierarchy. The E17 Type Assignment entity allows a type to be assigned to any E1 CIDOC Entity. Type Assignment is a subclass of E7 Activity, and therefore inherits links to actors responsible for the assignment, as well as date and place attributes.
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Access category date	E17 Type Assignment <i>has time-span: E52 Time-Span</i>	The date on which an access category was assigned. Since the CRM allows for a complete time-span, rather than just a single date, as well as multiple Type Assignment events, it becomes possible to construct a complete history of access categories.
Access category note	E17 Type Assignment <i>has note : String</i>	Using the timespan attribute of an E17 type assignment event, the current access category can be readily distinguished from any previous values. The Spectrum injunction that this attribute should be "Record[ed] once only for an object" becomes unnecessary.
Accession date	E10 Transfer of Custody <i>has time-span : E52 Time-Span</i> or E17 Type Assignment <i>has time-span: E52 Time-Span</i>	The notion of <i>Accession</i> as distinct from Acquisition and Custody is not applied systematically by all museums. (cf scope note to E8) The nearest equivalent in the CRM is E10 Transfer of Custody, which may apply to physical or legal custody of an object. The time-span attribute of this entity is used to store the date at which the transfer took place. If the notion of accession is taken simply as a change of <i>status</i> of an object, then E17 Type Assignment may be used.
Acquisition authorisation date	E7 Activity <i>has time-span : E52 Time-Span</i> <i>had specific purpose : E7 Activity</i>	The CRM does not explicitly model the notion of authorisation of acquisitions. However it can be handled simply as a form of E7 Activity, and given a suitable Type attribute if necessary. The <i>has time-span</i> attribute allows the authorisation to be dated. The <i>has specific purpose</i> attribute allows the act of authorisation to be linked directly to the actual acquisition event.
Acquisition authoriser	E7 Activity <i>carried out by : E39 Actor</i> E8 Acquisition <i>carried out by : E39 Actor</i> <i>(in the rôle of : E55 Type)</i>	The E7 Activity event can be subtyped to allow for acquisition authorisation. The carried out by attribute identifies the actor responsible for the authorisation. Alternatively, the authoriser can be treated simply as one of the actors involved in the acquisition, differentiated by the rôle. This treatment is less explicit, however, since the authorisation <i>event</i> is concealed.
Acquisition date	E8 Acquisition <i>has time-span : E52 Time-Span</i>	

Acquisition funding		Like ownership exchange price, this information has not been explicitly modelled in the CRM since the current scope covers publicly available information and excludes confidential information such as monetary values. However, the information could be included as part of the E8 Acquisition <i>has note</i> attribute. Alternatively, the CRM could be extended to incorporate a <i>has value</i> attribute for financial transactions and a corresponding <i>monetary primitive</i> type as a subclass of E59. (The scope note to E54 Dimension indicates that this entity could also be used to store monetary values.)
Acquisition funding source	E8 Acquisition <i>carried out by : E39 Actor</i> <i>(in the rôle of : E55 Type)</i>	Sources of funding can be treated as actors involved in an acquisition event, differentiated by their rôle.
Acquisition funding source provisos	E8 Acquisition <i>has note : string</i> <i>had specific purpose : E7 Activity</i>	The most natural place to store this type of information is the Acquisition note attribute. However, restrictions which apply to the purpose for which the acquisition is made (intended use) could be represented within the related Activity entity.
Acquisition method	E8 Acquisition <i>has type : E55 Type</i>	E8 Acquisition can be specialised into subclasses which represent different types of acquisition method. The CRM foresees the use of the E55 type hierarchy to model distinctions of this sort which do not require structural subclasses. It is important to note that the CRM takes a neutral position with respect to transfer of legal title. <i>Acquisition</i> , is transfer of title from one actor to another.
Acquisition note	E8 Acquisition <i>has note : String</i>	
Acquisition provisos	E8 Acquisition <i>has note : string</i>	
Acquisition reason	E8 Acquisition <i>had specific purpose : E7 Activity</i> <i>had as general purpose : E55 Type</i>	The CRM makes a distinction between specific purpose of acquisition (the reason for making this particular acquisition) and the general purpose (the reason for making acquisitions of this sort).
Acquisition source	E8 Acquisition <i>transferred title from : E39 Actor</i>	
Address - email	E51 Contact Point	The CRM does not supply details of the base level attributes needed for recording specific types of contact point information. The existing <i>has note</i> attribute may be sufficient.
Address - fax number	E51 Contact Point	idem.
Address - place	E45 Address	idem
Address - postcode	E45 Address	idem

Address - telephone number	E51 Contact Point	idem
Address - text	E45 Address	idem
Address type	E45 Address <i>has type : E55 Type</i>	
Administration name	E40 Legal Body	The CRM E40 Actor does not at present have an E41 Appellation attribute. This will most likely be modified by the next revision.
Age	E54 Dimension <i>value : E60 Number</i>	The E54 Dimension entity has both value unit attributes, which correspond to the Spectrum Age and Age unit items. However, it was originally intended for directly <i>observable</i> characteristics. Age is not necessarily an observable attribute. The CRM scope note may need to be revised or, if the distinction is felt to be significant, a new subclass of non observable but quantifiable properties will need to be created. Two links routes are provided between E18 Physical Entity and E54 Dimension. A direct short cut <i>has dimension</i> and a fully developed route through a E16 <i>Measurement</i> event. This latter enables the place time and actor responsible for the measurement to be recorded.
Age qualifier	E54 Dimension <i>has note : E62 String</i>	
Age unit	E54 Dimension <i>unit : E58 Measurement Unit</i>	cf. note for Age
Amendment history authoriser	E13 Attribute Assignment <i>carried out by : E39 Actor</i>	
Associated activity	E19 Physical Object <i>had as general use : E55 Type</i> E19 Physical Object <i>was used for : E7 Activity</i> E22 Man-Made Object <i>was intended for : E55Type</i>	The CRM allows for three levels of activity associated with objects. The <i>has as general use</i> link records the way in which certain objects were generally used. The <i>was used for</i> link to Activity records an occasion on which an object was actually employed. The <i>was intended for</i> link from Man-Made Object records the intended purpose of an artefact, whether or not it was in fact used to this end.
Associated concept	E17 Type Assignment <i>Classified : E55 Type</i> E28 Conceptual Object	The act of type assignment allows general concepts to be associated with any CIDOC Entity to be associated with general concepts contained in the E55 Type hierarchy. E28 Conceptual Object provides a means of recording information about identifiable conceptual objects such as designs, images, and rights. These are treated as properties of specific entities.
Associated cultural affinity	E17 Type Assignment <i>Classified : E55 Type</i>	

Associated date	E5 Event <i>has time-span : E52 Time-Span</i>	An associated date only makes sense in the context of an associated event. cf Associated event date
Associated people	E17 Type Assignment <i>Classified : E55 Type</i> or E39 Actor	Associated people could be handled in at least two ways. If a 'people' is considered primarily as a classification category, such as an ethnic group, then the E17 Type Assignment could be used to associate any CIDOC Entity with a 'People' type defined in the E55 Type hierarchy. However, if a people is considered to have attributes, and requires further description, or if it can be considered in some circumstances as a collective agent, performing actions, then it would be more appropriate to use E39 Actor. Actors can be related to Objects either via the Events for which they are responsible or as subjects of depiction.
Associated event date	E5 Event <i>has time-span : E52 Time-Span</i>	E5 Event allows information about events to be recorded. Event has a number of subclasses which identify specific types of events, such as E6 Destruction. Events are have specific links to different object types.
Associated event name	E5 Event <i>is called : E43 Period Appellation</i>	
Associated event name type	E5 Event <i>has type : E55 Type</i>	The name of this item is misleading. The scope note examples: "coronation, massacre, battle, garden party" indicated the type of event, rather than the type of name. The inherited <i>has type</i> attribute would seem to offer the most appropriate mapping.
Associated event organisation	E7 Activity <i>carried out by : E39 Actor (in the rôle of : E55 Type)</i>	E39 Actor can be specialised to E40 Legal body
Associated event people	E7 Activity <i>carried out by : E39 Actor (in the rôle of : E55 Type)</i>	cf. Associated people
Associated event person	E7 Activity <i>carried out by : E39 Actor (in the rôle of : E55 Type)</i>	E39 Actor can be specialised to E21 Person
Associated event place	E5 Event <i>took place at : E53 Lieu (in the rôle of : E55 Type)</i>	

Associated object	E19 Physical Object <i>is composed of : E19 Physical Object</i> E24 Man-Made Entity <i>depicts object : E19 Physical Entity</i>	The CRM offers two direct links between object. The first is a reflexive link <i>is composed of</i> , used to represent aggregation by composition. Any object may be composed of other objects. A second link <i>depicts object</i> allows Man-Made objects to depict other E19 Physical Entities. This link is intended for representation. (Arguably, this link should be attached to E23 Iconographic Object.) Other indirect links may be created via an E5 Event entity, or one of its subclasses. Several objects may participate in the same event.
Associated object type	E18 Physical Object <i>has type : E55 Type</i>	The type of an associated object maps directly to the CRM class Type attribute.
Associated person	E7 Activity <i>carried out by : E39 Actor (in the rôle of : E55 Type)</i>	In terms of the CRM this unit appears to have the same semantic function as Associated event person, since it refers to "a person associated with the object's history". Consequently the same mapping is proposed.
Associated place	E19 Physical Object <i>has current location : E53 Place</i> <i>has section : E53 Place</i>	The CRM provides to direct links between Physical Object and E53 Place. <i>Has current location</i> is a short cut link which, when developed, runs through a E9 Move event. The <i>has section</i> link allows part of objects to be defined as places. The E53 scope note provides a fairly detailed discussion of this point.
Associated organisation	E7 Activity <i>carried out by : E39 Actor (in the rôle of : E55 Type)</i>	In terms of the CRM this unit appears to have the same semantic function as Associated event Organisation, since it refers to "an Organisation associated with the object's history". Consequently the same mapping is proposed.
Association type		This unit corresponds to a number of CRM links. The CRM provides <i>specific</i> links for each type of association. The E55 Type hierarchy can also be used on many links to refine the rôle of actors participating in events.
Audit method	E7 Activity <i>has type : E55 Type</i>	The CRM does not at present represent collections management activities at this level of detail. Audit, along with many other Spectrum procedures, should be defined as a sub class of Activity. In the current version, Audit would have to be included as the <i>has type</i> attribute of an activity.

Audit reference number	E7 Activity <i>is called : E43 Period Appellation</i>	All Activities inherit the <i>is called</i> attribute from period. The CRM treats reference numbers, like object identifiers, as a type of appellation. The E43 Period Appellation entity could be extended to all for a specific <i>Activity Reference number</i> type if needed.
Audit type	E7 Activity <i>had as general purpose : E55 Type</i>	The scope note of this unit indicates that the Audit type is the reason or purpose of the audit. Consequently the <i>had as general purpose</i> attribute could be used.
Auditor	E7 Activity <i>carried out by : E39 Actor (in the rôle of : E55 Type)</i>	
Authorisation date	E7 Activity <i>has time-span : E52 Time-Span</i>	This general category actually covers a number of more specific units such as <i>Acquisition authoriser</i> . The CRM E7 Activity entity could be sub typed to allow for various <i>Authorisation</i> events. These could be linked to the Activity being authorised through the existing <i>had specific purpose</i> link. At present, the <i>has type</i> attribute could be used to indicate the nature of the activity. Cf Acquisition authoriser.
Authoriser	E7 Activity <i>carried out by : E39 Actor (in the rôle of : E55 Type)</i>	
Borrower	E10 Transfer of Custody <i>custody received by : E39 Actor</i>	Transfer of Custody is intended to model both physical and legal transfers, The <i>has type</i> attribute should be used to specify which. The CRM takes a neutral viewpoint to transactions between actors. Neither of the parties involved is implicitly 'us'.
Borrower's contact	E10 Transfer of Custody <i>custody received by : E39 Actor</i> ... E21 Person <i>is member of : E40 Legal Body has contact point : E51 Contact Point</i>	A person (individual) can be associated with the legal body such as a Museum or other organisation which is borrowing an object. All Actors have a contact information attribute for telephone numbers, email, address, etc.
Brief description	E19 Physical Object <i>has note : E62 String</i>	All entities in the CRM have a <i>has note</i> attribute for recording unstructured information.
Catalogue number	E19 Physical Object <i>is identified by : E42 Object Identifier.</i>	
Colour	E55 Type	At present, no specific link is provided in the CRM for colour attributes of objects. They can, however, be assigned via E13 Attribute assignment. Description of colour can, of course be included as part of the textual description of an object.

Comments		An extension could be added to the CRM to allow for <i>commenting</i> on an object as a subclass of E 7 Activity, or in certain cases as a subclass of E13 Attribute assignment. This would provide the detailed auditing suggested by Spectrum. At present, commenting could be included as a sub type of Activity.
Completeness	E18 Physical Entity <i>has condition : E3 Condition State</i>	Completeness can be seen as an aspect of the physical condition of an object. Cf Condition.
Condition	E18 Physical Entity <i>has condition : E3 Condition State</i>	The CRM allows for a history of E3 Condition States of a E18 Physical Entity is recorded. Each condition state can be assigned a specific time-span. Hence it becomes possible to document the history of an object's condition : complete, broken, repaired, restored, broken again, etc. The CRM also provides a direct short cut link to the current condition.
Condition check/assessment date	E14 Condition Assessment <i>has time-span : E52 Time-span</i>	
Condition check/assessment method	E14 Condition Assessment <i>has type : E55 Type</i>	
Condition check/assessment note	E14 Condition Assessment <i>has note : E62 String</i>	
Condition check/assessment reference number	E14 Condition Assessment <i>is called : E43 Period Appellation</i>	A specific <i>Condition Reference Number</i> sub type of E43 Period Appellation could be used if necessary.
Condition checker/assessor	E14 Condition Assessment <i>carried out by: E39 Actor</i>	
Condition note	E14 Condition Assessment <i>has note : E62 String</i>	
Confidentiality note		E30 Right is included in the CRM as a sub class of E28 Conceptual Object. Objects are subject to rights which are held by E39 Actors. Confidentiality notes are, in a sense, a form of restriction on implicit rights: <i>the actor may not do such and such</i> rather than <i>the actor may do such and such</i> . Restrictions could be included in the Conceptual Object hierarchy and handled in a similar way to rights. Alternatively, unstructured textual information could simply be included in the object's <i>has note</i> field.

Conservation material	E11 Modification <i>used general technique : E55 Type used specific technique : E29 Design or Procedure</i> E29 Design or Procedure <i>usually employs : E57 Material</i>	The CRM <i>used general technique</i> attribute is intended to incorporate both method and material. When a more detailed representation is required, the E29 Design or Procedure can be documented. In this case, the <i>usually employs</i> attribute allows the types of materials that are used to be documented.
Conservation method	E11 Modification <i>used general technique : E55 Type used specific technique : E29 Design or Procedure</i>	The E11 Modification entity can be subtyped to indicate the nature of the work being carried out, i.e. restoration. The <i>used general technique</i> attribute should be used for non specific techniques such as 'cleaning with ethanol'. If a specific, documented process or technique is used, then the <i>used specific technique</i> attribute is more appropriate.
Conservation note	E11 Modification <i>has note : E62 String</i>	
Conservation reference number	E11 Modification <i>is called : E43 Period Appellation</i>	A specific <i>Conservation Reference Number</i> sub type of E43 Period Appellation could be used if necessary.
Conservation treatment priority	E55 Type	At present, no specific link is provided in the CRM for conservation priority attributes of objects. They can, however, be assigned via E13 Attribute assignment. Definition of priority can, of course be included as part of the textual note of an object.
Conservator	E11 Modification <i>carried out by : E39 Actor</i>	
Content - activity	E22 Man-Made Object <i>depicts concept : E55 Type depicts event : E5 Event</i>	The CRM differentiates general activities from particular events. The first are recorded in the E55 Type hierarchy, whereas specific events are instances of E5 Event. Two attributes are included from E22 Man-Made Object. The E23 Iconographic Object scope note contains a brief discussion on the nature of representation.
Content - concept	E22 Man-Made Object <i>depicts concept : E55 Type</i>	
Content - date	E22 Man-Made Object <i>depicts concept : E55 Type depicts event : E5 Event</i>	It is unclear from the Spectrum scope note what constitutes the representation of a date. "4/4/1959" is a textual representation of a date. However, it may be that what is intended is here is representation of subjects which fall within a historical period. The same mapping as for Content – activity is proposed. Further clarification of the unit of information is required.
Content - description	E23 Iconographic Object <i>has note : E62 String</i>	
Content - event name	E5 Event <i>is called : E43 Period Appellation</i>	

Content - event name type	E5 Event <i>has type : E55 Type</i>	As with <i>Associated event name type</i> , the this unit seems to refer to the type of event rather than the type of name.
Content - note	E23 Iconographic Object <i>has note : E62 String</i>	General remarks about the content of an object can be incorporated in the <i>has note</i> attribute. However, the specific example given in the Spectrum scope note “The designs in the drawing will be used as the basis for a commissioned sculpture to mark the Millennium.” could also be recorded as a related activity. cf. <i>Associated activity</i>
Content - object	E24 Man-Made Entity <i>depicts object : E18 Physical Entity</i>	The <i>depicts object</i> link should perhaps be renamed to <i>depicts entity</i> .
Content - object type	E18 Physical Entity <i>has type : E55 Type</i>	The CRM E18 Physical Entity class applies both to physical objects and features of objects.
Content - organisation		Currently, the CRM allows for the representation of Physical Entities, Events and general concepts present in the E55 Type hierarchy. There is no link to E40 Legal Body. This could be included in the next revision.
Content - people	E24 Man-Made Entity <i>depicts concept : E55 Type</i>	cf. <i>Associated people</i>
Content - person	E24 Man-Made Entity <i>depicts Physical Entity : E18</i>	E21 Person is a subclass of E18 Physical Entity.
Content - place		Currently, no <i>depicts place</i> link is provided for representation. This hinges on the notion that a representation of a place is actually either a representation of some objects at a location, or of a 'conceptual' place rather than a physical location. However, much the same argument applies to the representation of events. This point will be discussed for the next revision of the model.

Content – position	E19 Physical Object <i>has section : E53 Place</i> <i>has current location : E 53 Place</i>	<p>The CRM foresees the possibility of defining a E53 Place as a section of a E19 Physical Object. “Bottom right hand corner” or “Behind the third panel” would be examples of names for section definitions. Any E19 Physical Entity can be given a current, former and permanent location, or indeed a location history. This allows the location of any E19 Physical Object to be defined with reference to another object.</p> <p>Content items, considered as physical manifestations, are best described by E26 Physical Feature. The current E19 Physical Object <i>bears feature</i> link allows features to be located on objects. Locating a physical feature on an object which is a section definition of a larger object allows its location to be defined.</p> <p>The precise relationship between Place location shortcuts, and section definitions needs to be clarified.</p>
Content note	E23 Iconographic Object <i>has note : E62 String</i>	cf. Content - note
Copy number	E19 Physical Object <i>is identified by : E42 Object Identifier</i> or Man-Made Entity <i>shows visual item : E36 Visual Item</i>	Two possible mappings exist for Copy number. If the number is considered as a means of identification, then the <i>is identified by</i> attribute can be used. However, if the number is considered primarily as an E34 Inscription on the object then the <i>shows visual item</i> link would be more appropriate. (E34 Inscription is a subclass of E35 Visual Item.)
Cost		The CRM does not currently recognise a monetary type. This could be included as an extension of the E59 Primitive Value class. (The scope note to E54 Dimension indicates that this entity could also be used to store monetary values.)
Cost note	E7 Activity <i>has note : E62 String</i>	
Credit line		
Current location	E19 Physical Object <i>has current location : E53 Place</i>	
Current location fitness		<p>This item can best be treated as an attribute of the link between an object and its location. The <i>has current location</i> link is a shortcut and, at present, has no attributes. E9 Move provides a fully developed link between object and place. This would be the logical place to record information about location fitness.</p> <p>This point requires discussion for the next revision.</p>

Current location note	E9 Move <i>had specific purpose : E7 Activity</i> <i>.. has note : E62 String</i>	The <i>had specific purpose</i> attribute of E9 Move allows the movement of an object to be associated with a particular event, such as an exhibition, or flooding. The general text note of the move can be used to record further details.
Current owner	E19 Physical Object <i>has current owner : E39 Actor</i>	
Date - earliest/single	E52 Time-Span <i>begins at : E61 Time Primitive</i>	
Date - earliest/single certainty	E52 Time-Span <i>begins at qualify : E62 String</i>	The CRM does not currently differentiate between qualifications about the certainty of a date and its precision.
Date - earliest/single qualifier	E52 Time-Span <i>begins at qualify : E62 String</i>	
Date - latest	E52 Time-Span <i>ends at : E61 Time Primitive</i>	
Date - latest certainty	E52 Time-Span <i>ends at qualify : E62 String</i>	The CRM does not currently differentiate between qualifications about the certainty of a date and its precision.
Date - latest qualifier	E52 Time-Span <i>ends at qualify : E62 String</i>	
Date - period	E4 Period <i>is called : E43 Period Appellation</i>	
Date association		The wide range of possible relationships mentioned in Spectrum are modelled in the CRM by specific links between E19 Physical Object and E5 Event. An example is the <i>took place on</i> attribute of E5 Event which allows the fact that an event took place on an object to be recorded.
Date text	E52 Time-Span <i>is identified by : E49 Time Appellation</i>	The CRM differentiates between E52 Time-Span and E4 Period.
Dating method	E16 Measurement <i>has type : E55 Type</i>	
Deaccession date	E10 Transfer of Custody <i>has time-span : E52 Time-Span</i> or E17 Type Assignment <i>has time-span: E52 Time-Span</i>	The notion of <i>Accession</i> as distinct from <i>Acquisition</i> and <i>Custody</i> is not applied systematically by all museums. (cf scope note to E8) The nearest equivalent in the CRM is E10 Transfer of Custody, which may apply to physical or legal custody of an object. The time-span attribute of this entity is used to store the date at which the transfer took place. If the notion of accession is taken simply as a change of <i>status</i> of an object, then E17 Type Assignment may be used.
Delivery date	E10 Transfer of Custody <i>has time-span : E52 Time-Span</i>	
Depositor	E10 Transfer of Custody <i>custody surrendered by : E39 Actor</i>	
Depositor's requirements	E10 Transfer of Custody <i>has note : E62 String</i>	

Despatch date	E10 Transfer of Custody <i>has time-span : E52 Time-Span</i>	
Despatch destination	E10 Transfer of Custody <i>custody received by : E39 Actor</i>	
Despatch method	E10 Transfer of Custody <i>has type : E55 Type</i>	
Despatch note	E10 Transfer of Custody <i>has note : E62 String</i>	
Despatch reference number	E10 Transfer of Custody <i>is called : E43 Period Appellation</i>	
Dimension	E54 Dimension <i>has type : E55 Type</i>	
Dimension measured part	E16 Measurement <i>measured : E19 Physical Object</i>	
Dimension measurement unit	E54 Dimension <i>unit : E58 Measurement Unit</i>	
Dimension value	E54 Dimension <i>value : E60 Number</i>	
Dimension value date	E16 Measurement <i>has time-span : E52 Time-Span</i>	
Dimension value qualifier	E54 Dimension <i>has note : E62 String</i>	The E54 Dimension entity does not have a specific <i>qualifier</i> attribute. However, the note field could be used for this information.
Display recommendations	E19 Physical Object <i>has note : E62 String</i> or E9 Move <i>has note : E62 String</i>	The CRM does not include any specific attribute for this unit of information. Display recommendations can be included as part of the object <i>has note</i> field. Alternatively, recommendations for a specific exhibition could be included as notes for the E9 Move event when the object is placed on display.
Disposal date	E6 Destruction <i>has time-span : E52 Time-Span</i> or E10 Transfer of Custody <i>has time-span : E52 Time-Span</i>	If disposal involves the effective destruction of the object, then E6 Destruction is an appropriate mapping. If not, then E10 Transfer of Custody would be more appropriate.
Disposal method	E6 Destruction <i>has type : E55 Type</i> or E10 Transfer of Custody <i>has type : E55 Type</i>	
Disposal new object number	E19 Physical Object <i>is identified by : E42 Object Identifier</i>	The CRM takes a neutral viewpoint to property. An accession number assigned by one institution has the same relative value as another.
Disposal note	E10 Transfer of Custody <i>has note : E62 String</i>	
Disposal price		The CRM does not currently include an attribute for the cost of activities such as disposal. This point will be discussed for the next revision.

Disposal proposed recipient	E10 Transfer of Custody <i>custody received by : E39 Actor</i>	The CRM does not currently distinguish between a proposed recipient and the actual recipient.
Disposal provisos	E10 Transfer of Custody <i>has note : E62 String</i>	The CRM could be extended to handle provisos in a similar way to E30 Right
Disposal reason	E10 Transfer of Custody <i>had as general purpose : E55 Type</i> <i>has note : E62 String</i>	The general motive for disposal can be recorded using the <i>has as general purpose</i> attribute. More specific details could be included in the note field.
Disposal recipient	E10 Transfer of Custody <i>custody received by : E39 Actor</i>	The CRM does not currently distinguish between a proposed recipient and the actual recipient.
Disposal reference number	E10 Transfer of Custody <i>is called : E43 Period Appellation</i>	
Distinguishing features	E19 Physical Object <i>has note : E62 String</i> or E19 Physical Object <i>is identified by : E42 Object Identifier</i>	The obvious mapping for this description is the object note attribute. However, the Spectrum scope note for this unit of information indicates that the purpose is to provide a "description of features which could <i>uniquely</i> identify an object". Consequently, the description could be regarded as an E42 Object Identifier.
Edition number	E19 Physical Object <i>is identified by : E42 Object Identifier</i>	An object can be composed of a number of other objects.
Entry date	E10 Transfer of Custody <i>has time-span : E52 Time-Span</i>	
Entry method	E10 Transfer of Custody <i>has type : E55 Type</i>	
Entry note	E10 Transfer of Custody <i>has note : E62 String</i>	
Entry number	E10 Transfer of Custody <i>is called : E43 Period Appellation</i>	
Entry reason	E10 Transfer of Custody <i>had as general purpose : E55 Type</i> <i>has note : E62 String</i>	The general motive for entry can be recorded using the <i>has as general purpose</i> attribute. More specific details could be included in the note field.
Environmental condition date	E9 Move	This attribute concerns the relationship between an object and a location. It could be included as part of the E9 Move entity.
Environmental condition note	E9 Move	idem
Environmental recommendations	E19 Physical Object <i>has note : E62 String</i> or E9 Move <i>has note : E62 String</i>	The CRM does not include any specific attribute for this unit of information. Storage environment recommendations can be included as part of the object <i>has note</i> field. Alternatively, recommendations for a specific exhibition could be included as notes for the E9 Move event when the object is placed on display.
Exhibition begin date	E7 Activity <i>has time-span : E52 Time-Span</i> E52 Time-Span <i>begins at : E62 Time Primitive</i>	Exhibitions are a sub type of E7 Activity. (A specific Exhibition sub class could be included as an extension to the CRM.)

Exhibition end date	E7 Activity <i>has time-span : E52 Time-Span</i> E52 Time-Span <i>ends at : E62 Time Primitive</i>	
Exhibition organiser	E7 Activity <i>carried out by : E39 Actor</i>	
Exhibition reference number	E7 Activity <i>is called : E43 Period Appellation</i>	
Exhibition title	E7 Activity <i>is called : E43 Period Appellation</i>	
Field collection date	E8 Acquisition <i>has time-span : E52 Time-Span</i> or E10 Transfer of Charge <i>has time-span : E52 Time-Span</i>	Where collection entails acquiring ownership, it can be handled as a sub type of E8 Acquisition. If collection does not entail property, then E10 Transfer of Charge would be more appropriate.
Field collection event name	E8 Acquisition <i>is called : E43 Period Appellation</i>	
Field collection event reference number	E8 Acquisition <i>is called : E43 Period Appellation</i>	
Field collection method	E8 Acquisition <i>has type : E55 Type</i>	The collection method can be handled as a refined sub type of Acquisition. If a detailed description of the procedure employed is required, the CRM could be extended to allow a link from Acquisition to E20 Design or Procedure such as exists with E11 Modification.
Field collection note	E8 Acquisition <i>has note : E62 String</i>	
Field collection number	E19 Physical Object <i>is identified by : E42 Object Identifier.</i>	Field numbers are a sub type of E42 Object Identifier.
Field collection place	E8 Acquisition <i>took place at : E53 Place</i>	
Field collection source	E8 Acquisition <i>transferred title from : E39 Actor</i>	
Field collector	E8 Acquisition <i>carried out by : E39 Actor</i>	The Spectrum description of field collection requires a Field collection beneficiary unit to render it institution neutral. This would be provided by the CRM <i>transferred title to</i> attribute.
Form	E11 Modification <i>has type : E55 Type</i> <i>used general technique : E55 Type</i> <i>used specific technique : E29 Design or Procedure</i>	This unit of information can be recorded simply as a subtype of Modification, as a more general technique attribute, or if necessary, as a specific, detailed procedure.
Geological complex name	E8 Acquisition <i>took place at : E53 Place</i>	E8 Acquisition can be subtyped for collection. The <i>took place attribute</i> allows a particular geological formation to be documented
Group disposal price		The CRM does not currently include an attribute for the cost of activities such as disposal. This point will be discussed for the next revision.

Group purchase price	E19 Physical Object <i>has dimension : E53 Dimension</i>	The CRM allows the cost of an object to be documented as a dimension. (The CRM could be extended to incorporate a specific <i>has value</i> attribute for financial transactions.) NB An object can be composed of other objects. Cf. Object acquisition price
Habitat	E8 Acquisition took place at : E53 Place	Habitat could be represented as a E55 Type of E 53 Place. However, it may also be necessary to add a <i>Habitat type</i> attribute to Place
Habitat note	E53 Place <i>has note : E62 String</i>	
Handling recommendations		Handling recommendations may be represented as E29 Design or Procedure. However, the CRM has no specific link from E19 Physical Object. This could be included as an extension to the CRM.
Hazard	E19 Physical Object <i>was classified by E13 Attribute Assignment</i>	
Hazard date	E13 Attribute Assignment <i>has time-span : E52 Time-Span</i>	
Hazards note	E13 Attribute Assignment <i>has note: E62 String</i>	
Indemnity confirmation date	E7 Activity <i>has time-span : E52 Time-Span</i>	The CRM does not explicitly model the notion of Indemnity confirmation. However it can be handled simply as a form of E7 Activity, and given a suitable Type attribute if necessary. The <i>has time-span</i> attribute allows the confirmation to be dated.
Indemnity note	E7 Activity <i>has note: E62 String</i>	
Indemnity reference number	E7 Activity <i>is called : E43 Period Appellation</i>	
Indemnity renewal date	E7 Activity <i>has time-span : E52 Time-Span</i> E52 Time-Span <i>ends at : E61 Time Primitive</i>	E52 Time-Span has both <i>starts at</i> end <i>ends at</i> attributes
Information source	E13 Attribute Assignment <i>carried out by : E39 Actor</i>	
Information source date	E13 Attribute Assignment <i>ends at : E61 Time Primitive</i>	
Information usage	E31 Document <i>refers to : E19 Physical Object</i>	The scope note of this item is not very explicit. Consequently, this mapping may not be correct. E31 Document <i>refers to</i> is intended for bibliographic references and citations.
Inscriber		E34 Inscription is not currently a subclass of E24 Man-Made Entity. Consequently, it is not possible to document the author of an inscription. This point will be examined for the next revision of the CRM.

Inscription content	E34 Inscription <i>has translation : E33 Linguistic Object</i>	To avoid confusion it would be preferable to add a <i>has transcription</i> attribute to Inscription to correctly differentiate from translations of the content. The difference between this unit of information and Inscription transliteration is unclear.
Inscription date		E34 Inscription is not currently a subclass of E24 Man-Made Entity. Consequently, it is not possible to document the E11 Modification activity which lead to its creation. This point will be examined for the next revision of the CRM. cf. Inscriber.
Inscription description	E37 Mark <i>has note : E62 String</i>	The definition of this unit of information makes it clear that this is intended to refer to "non textual marks". This corresponds to the CRM E37 Mark. (The distinction between E37 Mark and E34 Inscription needs clarification.)
Inscription interpretation	E34 Inscription <i>has note : E62 String</i>	The CRM does not currently offer structured attribute which corresponds to this unit of information. However, it could be simply be included in the E34 Inscription note field.
Inscription language	E34 Inscription <i>has language : E56 Language</i>	
Inscription language		Repetition in the MDA list of units of information - presumably an error.
Inscription method		E34 Inscription does not currently support this unit of information.
Inscription position	E22 Man-Made Object <i>shows visual item : E36 Visual Item</i> <i>has section : E53 Place</i>	E34 Inscription is a sub class of E36 Visual Item. The attribute <i>shows visual item</i> documents the fact that a visual item is on a particular object. A precise location can be given by referring to a section definition. However, these attributes are not related at present. This will be discussed for the next revision of the model.
Inscription script	E34 Inscription	No script or alphabet attributes have as yet been defined for E34 Inscription. However, as the scope note indicates, this extension is already foreseen.
Inscription translation	E34 Inscription <i>has translation : E33 Linguistic Object</i>	
Inscription transliteration		cf Inscription content.
Inscription type	E34 Inscription <i>has type : E55 Type</i>	

Insurance note		<p>The CRM does not at present offer an adequate representation of Insurance policy information.</p> <p>An insurance policy could be treated as a subclass of Temporal Entity, since if is valid for a certain period of time. It requires links to E19 Physical Object, E39 Actor, and E31 Document. This will be discussed for the next revision of the model.</p>
Insurance policy number		idem
Insurance reference number		
Insurance renewal date		idem
Insurer		idem
Label/raisonné text	E19 Physical Object <i>has note : E62 String</i>	The <i>was used for</i> attribute allows E19 Physical Objects to be used in an E7 Activity such as an exhibition. In the case of exhibitions, this link requires an additional attribute for the label. Used. This will be discussed for the next revision of the model.
Label text date		idem
Legal/licence requirements		The CRM needs to be extended to included a subtype of E31 for legal documents, and an <i>applies to</i> link between E19 Physical Object (or possibly E18 Physical Entity) and Legal Document.
Legal/licence requirements held	E30 Right <i>applies to E19 Physical Object is possessed by : E39 Actor</i>	In the sense required here, a licence is similar to a E30 Right. Rights apply to E19 Object and are held by E39 Actor(s). However, a specific subtype needs to be created for <i>licences</i> with an inheritance link to E4 Period, which would allow the period of validity to be defined. A separate <i>renewal</i> date attribute is also required. This will be discussed for the next revision of the model.
Legal/licence requirements held begin date		idem.
Legal/licence requirements held end date		idem.
Legal/licence requirements held number		idem.
Legal/licence requirements held renewal date		idem.

Lender	E10 Transfer of Custody <i>custody surrendered by : E39 Actor</i>	It is important to note that the CRM takes an institution neutral position to loans. Loans are from one institution to another. The notion of a 'loan in' does not exist as such since there is no implicit base institution.
Lender's authorisation date	E7 Activity <i>has time-span : E52 Time-Span</i> <i>had specific purpose : E7 Activity</i>	The CRM does not explicitly model the notion of authorisation of loans. However it can be handled simply as a form of E7 Activity, and given a suitable Type attribute if necessary. The <i>has time-span</i> attribute allows the authorisation to be dated. The <i>has specific purpose</i> attribute allows the act of authorisation to be linked directly to the actual loan event.
Lender's authoriser	E7 Activity <i>carried out by : E39 Actor</i> E10 Transfer of Custody <i>carried out by : E39 Actor</i> <i>(in the rôle of : E55 Type)</i>	The E7 Activity event can be subtyped to allow for loans authorisation. The <i>carried out by</i> attribute identifies the actor responsible for the authorisation. Alternatively, the authoriser can be treated simply as one of the actors involved in the loan, differentiated by the rôle. This treatment is less explicit, however, since the authorisation <i>event</i> is concealed.
Lender's contact	E10 Transfer of Custody <i>custody surrendered by : E39 Actor</i> ... E21 Person <i>is member of : E40 Legal Body</i> <i>has contact point : E51 Contact Point</i>	A person (individual) can be associated with the legal body such as a Museum or other organisation which is lending an object. All Actors have a contact information attribute for telephone numbers, email, address, etc.
Loan in conditions	E10 Transfer of Custody <i>has note : string</i> <i>had specific purpose : E7 Activity</i>	The most natural place to store this type of information is the E10 Transfer of Custody note attribute. However, restrictions which apply to the <i>purpose</i> for which the loan is made (intended use) could be represented within the related Activity entity.
Loan in contact	E10 Transfer of Custody <i>custody received by : E39 Actor</i> ... E21 Person <i>is member of : E40 Legal Body</i> <i>has contact point : E51 Contact Point</i>	A person (individual) can be associated with the legal body such as a Museum or other organisation which is borrowing an object. All Actors have a contact information attribute for telephone numbers, email, address, etc. It is important to note that the CRM takes an institution neutral position to loans. Loans are from one institution to another. The notion of a 'loan in' does not exist as such since there is no implicit base institution.
Loan in note	E10 Transfer of Custody <i>has note : E62 String</i>	

Loan in reference number	E10 Transfer of Custody <i>is called : E43 Period Appellation</i>	All Activities inherit the <i>is called</i> attribute from period. The CRM treats reference numbers, like object identifiers, as a type of appellation. The E43 Period Appellation entity could be extended to all for a specific <i>Loan Reference number</i> type if needed.
Loan out note	E10 Transfer of Custody <i>has note : E62 String</i>	
Loan out reference number	E10 Transfer of Custody <i>is called : E43 Period Appellation</i>	All Activities inherit the <i>is called</i> attribute from period. The CRM treats reference numbers, like object identifiers, as a type of appellation. The E43 Period Appellation entity could be extended to all for a specific <i>Loan Reference number</i> type if needed.
Loaned object status	E19 Physical Object <i>was classified by E13 Attribute Assignment</i> E13 Attribute assignment <i>had specific purpose : E7 Activity</i>	An E13 Attribute Assignment event allows a particular status to be associated with an object. The <i>had specific purpose</i> attribute can be used to relate this status to E10 Transfer of Custody. A short cut of this mapping might be a useful addition to the CRM.
Loaned object status date	E13 Attribute Assignment <i>has time-span : E52 Time-Span</i>	
Location access note	E53 Place <i>has note: E62 String</i>	
Location address	E53 Place <i>is identified by: E44 Place Appellation</i>	E45 Address is a subclass of E44 Place Appellation.
Location condition note	E53 Place <i>has note: E62 String</i>	
Location condition note date		The CRM recommends that the date of creation and modification of records should be registered automatically. However, no explicit attribute is assigned for the dating of note fields. This point will be discussed for the next revision of the model.
Location date	E9 Move <i>has time-span : E52 Time-Span</i>	E52 Time-Span has both begins at and ends at attributes.
Location security note	E53 Place <i>has note: E62 String</i>	
Location type	E53 Place <i>has type: E55 Type</i>	

Loss/damage date	<p>E7 Event <i>has time-span : E52 Time-Span</i></p> <p>E10 Transfer of Custody <i>has time-span : E52 Time-Span</i></p> <p>E13 Attribute Assignment <i>has time-span : E52 Time-Span</i></p>	<p>Damage may not be intentional, in which case it can be recorded as a subclass of E7 Event. (E7 can be used for intentional damage.) However, at present, the CRM does not allow links to E19 Physical Object other than through the E6 Destruction Class. A “non intentional modification” subclass similar to destruction may be needed. (Of which Destruction may, be a subclass.)</p> <p>Loss is an E10 Transfer of custody event with an unknown recipient.</p> <p>In either case, if the date of <i>recording</i> is the point of interest, rather than the date the event took place, then E13 Attribute Assignment should be used.</p>
Loss/damage method	<p>E7 Event <i>has type : E55 Type</i></p> <p>E6 Destruction <i>has type : E55 Type</i></p> <p>E10 Transfer of Custody <i>has type : E55 Type</i></p>	<p>If the method of damage followed some documented procedure, then E29 Design or Procedure may be used.</p>
Loss/damage note	<p>E7 Event <i>has note : E65 String</i></p> <p>E6 Destruction <i>has note : E65 String</i></p> <p>E10 Transfer of Custody <i>has note : E65 String</i></p>	
Loss/damage reference number	<p>E7 Event <i>is called : E43 Period Appellation</i></p> <p>E6 Destruction <i>is called : E43 Period Appellation</i></p> <p>E10 Transfer of Custody <i>is called : E43 Period Appellation</i></p>	
Loss/damage reporter	<p>E13 Attribute Assignment <i>carried out by : E39 Actor</i></p>	
Material	<p>E18 Physical Entity <i>consists of : E57 Material</i></p>	
Material component	<p>E19 Physical Object <i>is composed of : E19 Physical Object</i></p> <p>E19 Physical Object <i>consists of : E57 Material</i></p>	<p>An E19 Physical Object may <i>consist of</i> a number of components, each of which can be <i>composed of</i> different E57 Materials.</p>
Material component note	<p>E19 Physical Object <i>has note : E62 String</i></p>	

Material name	E55 Type	Names of materials are currently stored in the type hierarchy. However, a link between the E28 Conceptual Object class and E41 Appellation might be useful for cases where elaborate materials require more detailed documentation – e.g. ceramics produced by certain processes.
Material source		Currently this unit of information cannot be mapped conveniently onto the CRM. It suggests a need for a more elaborate treatment of the notion of materials than is currently supported. Material <i>could</i> be modelled as a subclass of E28 Conceptual Object. A <i>has source</i> link with E53 Place could then be included. (NB The typical source of the material may be different from the actual source, e.g. Bath Stone, which is a form of oolitic limestone, is actually quarried throughout the West of England and not just in Bath.) However, this goes against the spirit of the Conceptual Object scope note. This point will be discussed for the next revision of the CRM.
Movement contact	E9 Move <i>carried out by : E39 Actor (in the rôle of)</i>	
Movement method	E9 Move <i>has type : E55 Type</i>	
Movement note	E9 Move <i>has note : E62 String</i>	
Movement reference number	E9 Move <i>is called : E43 Period Appellation</i>	
Museum courier	E9 Move <i>carried out by : E39 Actor (in the rôle of)</i>	E10 Transfer of Custody may also be appropriate if physical responsibility for an object is transferred from one Actor to another.
Next condition check/assessment date	E14 Condition Assessment <i>has time-span : E52 Time-span</i>	
Normal location	E19 Physical Object <i>has current permanent location : E53 Place</i>	
Number of objects	E19 Physical Object <i>has number of parts: E60 Number</i>	
Object audit category	E17 Type Assignment <i>assigned : E55 Type</i>	
Object audit date	E17 Type Assignment <i>has time-span : E52 Time-Span</i>	It might be worth including auditing as a sub class of E7 Activity. At present it can be specified as a sub type of E17 attribute assignment. (E17 is preferable to E7 Activity since it allows the <i>result</i> of the audit to be recorded as a type.)
Object audit note	E17 Type Assignment <i>has note : E62 String</i>	

Object audit result	E17 Type Assignment <i>assigned : E55 Type</i>	
Object component information		<p>“The unit of information describing an Object component name... Use single terms without punctuation to name the unit of information describing the Object component name. Maintain a list of standard terms...e.g. Object production person”</p> <p>This may be English, just not as we know it... I suspect that this is an example of an attempt to give a “flat file” description of a relational data structure.</p>
Object component name	<p>E19 Physical Object <i>is composed of : E19 Physical Object</i></p> <p>E19 Physical Object <i>has type : E55 Type</i></p>	An E19 Physical Object may <i>consist of</i> a number of components, each of which can be assigned as specific E55 Type.
Object display status	E19 Physical Object <i>was classified by E13 Attribute Assignment</i>	<p>An E13 Attribute Assignment event allows a particular status to be associated with an object.</p> <p>A short cut of this mapping, (allowing a status to be directly assigned to an object without documenting by whom, when, etc.) might be a useful addition to the CRM.</p>
Object display status date	E13 Attribute Assignment <i>has time-span : E52 Time-Span</i>	
Object history note	E19 Physical Object <i>has note : E62 String</i>	An object’s history can also be recorded as a series of events. The examples given in the Spectrum documentation: “ Why the object was produced; Who produced it; Who owned it, sold it and why; Individuals who used the object and for what purpose; Where the object is known to have been” Can all be mapped directly to specific E5 Event sub classes.
Object name	E19 Physical Object <i>has type : E55 Type</i>	The Spectrum scope note and examples make it clear that this unit of information refers to a classification category used for an object and not a proper name for an individual. This maps directly to the E55 Type attribute. (Proper names are treated as E 35 Title)
Object name/title language	<p>E19 Physical Object <i>has title E35 Title.</i></p> <p>E35 Title <i>has language : E56 Language</i></p>	Title should perhaps be subsumed as a subclass of E42 Object Identifier. This would eliminate the need for separate <i>is identified by</i> and <i>has title</i> links.

Object name author	E15 Identifier Assignment <i>carried out by : E39 Actor</i>	<p>The scope note for this unit of information is slightly unclear: “The name of the Person or Organisation responsible for identifying the Object name” could be interpreted as referring to the person who originally invented the name or title of an object, or, alternatively, to the person who succeeded in discovering what the name or title was. Furthermore, the notion of what constitutes the <i>name</i> of an object is unclear: either the category or its title.</p> <p>The CRM E15 Identifier Assignment allows the person responsible for making an assignment to be recorded. However, E35 Title is not, currently, a subclass of E42 Object Identifier. The <i>has title</i> link from E19 Physical Object is in fact a <i>short-cut</i>, comparable to <i>is identified by</i>. The act of assigning a title could be incorporated either by including <i>title</i> as a subclass of E42 Object Identifier, or by creating a separate <i>Title assignment</i> subclass of E13 Attribute Assignment.</p> <p>E35 Titles is also a subclass of E28 Conceptual Object. The CRM does not currently allow the originator of a conceptual object to be documented. This could be corrected by including conceptual objects as a subclass of E24 Man-Made Entity.</p> <p>All these points will be discussed for the next revision of the model.</p>
Object name currency	E35 Title <i>has type : E55 Type</i>	Currency of a title could be included as a subtype of Title.
Object name identification date	E17 Type Assignment <i>has time-span : E52 Time-Span</i>	<p>The Spectrum scope note “The date when the name assigned to the object or specimen was first identified”, would appear to refer to the date when a new classification category was created. (Such as the date when a new <i>species</i> was identified.) The CRM does not currently support this unit of information. It could be handled by extended the CRM to include <i>classification</i> as a subclass of E33 Linguistic Object, and also creating a multiple inheritance link with E24 Man-Made Entity.</p> <p>Cf. Object name author.</p> <p>An alternative interpretation is the date on which an object was classified. (e.g the date on which a <i>specimen</i> was identified as belonging to a particular species.) This maps directly to E17 Type Assignment</p>

Object name identification method	E17 Type Assignment <i>has type : E55 Type</i>	The 'object name' appears here to refer to the classification of the object.
Object name level		This information is implicit in the depth at which a term is found in the E55 Type hierarchy.
Object name note	E28 Conceptual Object <i>has note : E65 String</i>	At present, object categories are stored in the E55 Type hierarchy. Types do not, at present have a note attribute. Two solutions are possible. a) A has note attribute could be added to the Entities in the E55 Type hierarchy. b) If object categories are seen as a subclass of E28 Conceptual Object, or even as a subclass of E33 Linguistic object, then the existing <i>has note</i> attribute can be used.
Object name system	E32 Authority Document	
Object name type		Currently, this information can be derived from the E 55 Type hierarchy branch in which a term is found. However, it could also be handled explicitly as meta-class data.
Object number	E19 physical Object <i>is identified by : E42 Object Identifier</i>	
Object offer price	E7 Activity	An offer could be treated as a subclass of Activity, related to an eventual acquisition by the <i>had specific purpose</i> link. The offer price would be an attribute of this Activity. As already mentioned, the CRM does not yet offer much support for monetary values.
Object production date	E12 Production <i>has time-span : E52 Time-Span</i>	
Object production note	E12 Production <i>has note : E62 String</i>	
Object production organisation	E12 Production <i>carried out by : E39 Actor (in the rôle of : E55 Type)</i>	
Object production people		What is the Spectrum distinction difference between a People and a Person? I thought that a People referred to some ethnic or cultural group, but the scope note here indicates that a people may have a first-name and surname...
Object production person	E12 Production <i>carried out by : E39 Actor (in the rôle of : E55 Type)</i>	
Object production place	E12 Production <i>took place at : E53 Place</i>	
Object production reason	E12 Production <i>had specific purpose : E7 Activity had as general purpose : E55 Type</i>	The CRM distinguishes between specific use such as production for a commission or event and general use – such as production for use as a cooking utensil.

Object purchase price	E8 Acquisition or E54 Dimension	The CRM does not currently recognise a <i>cost</i> attribute for the financial aspects of transactions. This could be added to the E8 Acquisition entity. Alternatively, E54 Dimension could be used to record the value of an object, although this would lose the connection with the acquisition event.
Object status	E17 Type Assignment assigned : E55 Type classified : E1 CIDOC Entity	The full CRM E17 Type assignment model is required to represent the logic of biological types correctly. The person responsible for determination of the species (the “Determinator”) and the date on which the determination was made, also have to be recorded.
Object valuation	E16 Measurement <i>observed dimension : E54 Dimension</i>	The E16 Measurement class offers the structures needed to document object valuation. E54 Dimension specifically includes monetary values as an example. However, it might be preferable to rename these entities to something less ‘physical’.
Object valuation date	E16 Measurement <i>has time-span : E52 Time-Span</i>	
Object valuation note	E16 Measurement <i>has note : E62 String</i>	
Object valuation renewal date	E52 Time-Span <i>ends at : E61 Time-Primitive</i>	
Object valuation type	E54 Dimension <i>has type : E55 Type</i>	
Organisation's additions to name	E40 Legal Body	The CRM E39 Actor entity does not at present have an <i>is identified by</i> attribute to link it with E41 Appellation. This will be discussed for the next revision. As mentioned elsewhere, the name of the E40 Legal Body class may be modified to something less formal.
Organisation's address	E40 Legal Body <i>has contact points : E51 Contact Point</i>	E45 Address is actually a subclass of E51 contact point, which includes telephone numbers and others forms of access.
Organisation's association	E7 Activity <i>carried out by : E39 Actor in the role of : E55 Type</i>	This is not a specific data item in the CRM but is implicit in the link attributes and the subclass of E7 Activity which is used. The <i>in the role of</i> attribute allows precise distinctions to be expressed.
Organisation's contact name	E21 Person <i>is member of : E40 Legal Body possesses : E30 Right</i>	The <i>is member of</i> attribute allows a person to be associated with an organisation. The <i>possesses right</i> attribute could be used to allows the individual's ‘role’ as contact to be defined. However, the CRM could be extended to allow a specific attribute of E40 Legal Body for <i>preferred contact</i> .

Organisation's group	E40 Legal Body <i>belongs to E40 Legal Body</i> or E40 Legal Body <i>was classified by : E17 Type Assignment</i>	The Spectrum scope note indicates that 'Organisation' should be taken here in a very broad sense to include things like tribes. The 'group' classification is a "social, socio professional, ethnic, or culture group to which the organisation belongs." If the group classification is considered as being a larger group, such as an ethnic category, then the recursive <i>belongs to</i> attribute of E40 legal body may be used. If the group classification is simply a classification term, with no further semantic connotations then the E17 Type assignment <i>classified</i> link is more suitable.
Organisation's history	E40 Legal Body <i>has note : E62 String</i>	The CRM allows the history of an organisation to be recorded in a structured manner as a series of E7 Activity events. Typically, the organisation has a role as an actor in. The CRM does not currently allow Legal Bodies to be passive participants in an event. The <i>has note</i> field can also be used to store a simple textual commentary.
Organisation's main body		"The name of an Organisation." As already mentioned, the CRM E39 Actor entity does not at present have an <i>is identified by</i> attribute to link it with E41 Appellation. This will be discussed for the next revision.
Organisation's MDA code		idem.
Organisation's reference number		idem
Organisation's sub-body	E40 Legal Body <i>consists of E40 Legal Body</i>	
Original object purchase price denomination	E54 Dimension <i>unit : E58 Measurement Unit</i>	The names E54 <i>Dimension</i> and E58 <i>Measurement unit</i> are misleading, however, they can be used to represent the logic of monetary values correctly.
Original object purchase price		The CRM E8 Acquisition class does not currently have a <i>value</i> attribute to record the cost of the transaction. This will be discussed for the next revision.
Other number	E19 Physical Object <i>is identified by : E42 Object Identifier</i>	An object can have several identifiers. The <i>preferred identifier</i> is distinguished by a specific link.
Other number type	E42 Object Identifier <i>has type : E55 Type</i>	
Owner	E8 Acquisition <i>Transferred title to : E39 Actor</i>	E39 is has two subclasses, E21 Person and E40 Legal body, which map to the Spectrum People, Person and Organisation headings.

Ownership access	E39 Actor <i>possesses: E30 Right</i> Or E39 Actor <i>owns rights to: E19 Physical Object</i>	The <i>possesses : RIGHT</i> attribute of E39 Actor, allows specific legal rights to be represented. The E55 Type hierarchy can be used to add supplementary levels of detail. The 'owns rights to' link from E39 Actor to E19 Physical Object is a shortcut which can be used for specific access rights.
Ownership category	E39 Actor <i>possesses: E30 Right</i> Or E39 Actor <i>owns rights to: E19 Physical Object</i>	As for ownership access, the <i>possesses : RIGHT</i> attribute of E39 Actor, allows specific legal rights to be represented. The E55 Type hierarchy can be used to add supplementary levels of detail. The 'owns rights to' link from E39 Actor to E19 Physical Object is a shortcut which can be used for specific property rights.
Ownership dates	E8 Acquisition <i>has time-span : E52 Time-Span</i>	E8 Acquisition is a subclass of E2 Temporal Entity, from which it inherits a timespan attribute. This E61 Time Primitive on which this attribute is based uses two date intervals to represent ranges of uncertainty about the start and end of a time span. The CRM adopts a neutral viewpoint with respect to acquisition. Acquisition events are regarded as transfers of title between two actors. (An exception being the initial creation of an artefact or the discovery of a specimen.)
Ownership exchange method	E8 Acquisition <i>has type : E55 Type</i>	E8 Acquisition can be specialised into subclasses which represent different types of means of transfer. The CRM foresees the use of the E55 type hierarchy to model distinctions of this sort which do not require structural subclasses.
Ownership exchange note	E8 Acquisition <i>has note : String</i>	
Ownership exchange price		This information has not been explicitly modelled in the CRM since the current scope covers publicly available information and excludes confidential information such as monetary values. However, the information could be included as part of the E8 Acquisition <i>has note</i> attribute. Alternatively, the CRM could be extended to incorporate a <i>has value</i> attribute for financial transactions and a corresponding <i>monetary primitive</i> type as a subclass of E59. (The scope note to E54 Dimension indicates that this entity could also be used to store monetary values.)

Ownership place	<p>E8 Acquisition <i>Took place at : E53 Place</i></p> <p>Or</p> <p>E9 Move <i>Moved to : E53 Place</i> <i>Moved from : E53 Place</i></p>	<p>The CRM does not recognise the notion of ownership being located in a specific place, as distinct from the location of the object. However, The act of acquisition does have a <i>took place at</i> attribute. This is intended to represent the place where legal transfer of title is recognised and would therefore correspond closely to the Spectrum notion of place of ownership. Additional information could, of course, be included in the <i>E8 has note</i> attribute.</p> <p>Alternatively, the E9 Move entity has two attributes to represent the location of a physical object.</p>
Packing note	<p>E10 Transfer of custody <i>has note : String</i></p>	<p>This information could most readily be included in the has note attribute of E10 transfer of custody. Alternatively, E9 Move could be used if no transfer of custody is involved.</p>
Packing recommendations	<p>E19 Physical Object <i>has note : string</i></p> <p>or</p> <p>E9 Move <i>Has note : string</i></p>	<p>The CRM does not explicitly model specific recommendations for packing. These could be incorporated as part of the note field of E19 Physical Object. Alternatively, the CRM could be extended with a <i>has packing recommendations</i> attribute for museum objects.</p> <p>The CRM foresees that packing recommendations relating to a <i>particular</i> move can be included in the E9 Move entity. However, this would appear to be ruled out by the Spectrum injunction that the information should be «Record[ed] once only for an object at any one time.» This would, of course, mean that the <i>history</i> of packing recommendations for a particular object would be lost.</p>

<p>People's association</p>	<p>i) E19 Physical Object <i>Used object : E7 Activity</i></p> <p>E7 Activity <i>Carried out by : E39 Actor (in the role of : type)</i></p> <p>ii) E19 Physical Object <i>Has current owner : E39 Actor has current keeper : E39 Actor right held by : E39 Actor</i></p> <p>iii) E24 Man-Made Entity <i>Depicts object : E18 Physical Entity</i></p> <p>iv) E13 Attribute assignment. <i>Carried out by : E39 Actor (in the role of : E 55 Type)</i></p>	<p>The CRM provides a rich level of structural support for representing the multiple relationships between people and objects. Most of these links are focused on E7 Activity, or one of its subclasses. In many cases the type of Activity is sufficient to indicate the role of the actor. However, an additional <i>in the role of</i> attribute is provided on the Activity → Actor link to allow for further precision. The <i>used object</i> attribute links E19 Physical Object and E7 Activity. This approach can be used to handle the following Spectrum units:</p> <ul style="list-style-type: none"> • Acquisition source • Associated event people • Associated people • Depositor • Disposal proposed recipient • Field collection source • Inscriber • Lender • Object production people • Owner • Place owner <p>Some links between objects and actors are also modelled directly as short cuts. (cf. E19 Physical Object) These short cuts can be used to model the following Spectrum units:</p> <ul style="list-style-type: none"> • Current owner • Disposal recipient • Reproduction/performance rights holder <p>Certain objects, such as E23 Iconographic Object, <i>depict</i> other objects. This is modelled by the <i>depicts object : E18 Physical Entity</i> attribute of E34 Man-Made Entity. Since E21 Person is also a subclass of E18, this provides the means for recording, say, the subject of a portrait. This structure is used to represent the Spectrum unit:</p> <ul style="list-style-type: none"> • Content – people. <p>Meta data relating to the source of information about an object can be recorded using the E13 Attribute Assignment entity. The <i>in the role of</i> attribute on the carried out by link allows fine distinctions to be recorded. This structure is used to represent the Spectrum unit:</p> <ul style="list-style-type: none"> • Information source <p>cf. also Associated people</p>
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People's culture	E4 Period <i>Is called E43 Period Appellation</i>	<p>The distinction between this unit of information and the People's Group is not immediately obvious. I have interpreted <i>culture</i> as referring to an 'acquired' characteristic whereas <i>group</i> refers to more concrete ethnic or racial origins. The mapping proposed here may therefore need to be revised.</p> <p>The CRM does not currently model an unconstrained notion of 'culture'. However, if cultures are seen as fixed in time and space, the class E4 Period offers a very close match. The <i>is called</i> attribute links to E43 Period Appellation which is the name generally used. The examples given in the E43 scope note are similar to those used in Spectrum.</p>
People's group	E39 Actor <i>Has type : E55 Type</i>	<p>The CRM does not at present have a subclass of E39 Actor for representing groups which are not legal bodies. Such groups are simply instances of E39. However, this would be a natural extension to the model.</p> <p>The E55 Type hierarchy is specifically intended for recording detailed classification information which does not have a direct counterpart in the class hierarchy itself. This technique could be used to differentiate different ethnic or racial groups.</p>
People's linguistic group	E56 Language	<p>The CRM offers E56 Language as a subclass of the E55 Type hierarchy. This hierarchy could be organised so as to incorporate language groups as well as individual languages.</p> <p>If language group is used as a descriptive characteristic of a people, then an additional <i>has language group</i> attribute would need to be incorporated in the CRM from E39 Actor, or a possible <i>People</i> sub class.</p>
Person's additions to name	E21 Person <i>has title : E35 Title</i>	
Person's address	E21 Person <i>has contact points : E51 Contact Point</i>	Address is a subclass of E51 Contact Point
Person's association	E21 Person <i>performed : E7 Activity</i> <i>in the rôle of : E55 Type</i> E7 Activity <i>..used object : E19 Physical Object</i>	The relationships between a person and an object are defined in the CRM by different link types, particularly by the type of intersecting E7 Activity class. The <i>in the rôle of</i> attribute can be used to further refine the relationship.
Person's biographical note	E21 Person <i>has note : E62 String</i>	
Person's birth date		The CRM does not currently support this attribute directly. A <i>date of birth</i> attribute can be added to E21 Person.

Person's death date		The CRM does not currently support this attribute directly. A <i>date of death</i> attribute can be added to E21 Person.
Person's forenames		At present, title and object identifier are the only appellation types supported for E21 Person. A <i>ForeNames</i> attribute should be added.
Person's gender	E21 Person <i>has type : E55 Type</i>	
Person's group	E21 Person <i>is member of : E40 Legal Body</i>	The name of E40 Legal Body may be revised.
Person's initials		At present, title and object identifier are the only appellation types supported for E21 Person. An <i>initials</i> attribute may be added.
Person's name notes	E41 Appellation <i>has note : E62 String</i>	
Person's nationality		The CRM does not currently support this attribute.
Person's occupation	E21 Person <i>had as general use : E55 Type</i>	A person's occupation is actually a specialisation of the <i>had as general use</i> attribute inherited from Object. A more appropriate name may be needed for this attribute.
Person's place of birth		The CRM does not currently support this attribute. A Creation event class needs to be created Biological Objects and a link added to E53 Place
Person's place of death		idem.
Person's reference number	E21 Person <i>is identified by : E42 Object Identifier</i>	
Person's salutation		The CRM does not currently support this attribute, although salutation could be interpreted as a form of E41 Appellation.
Person's school/style	E21 Person <i>was classified by : E17 Type Assignment</i>	
Person's surname		At present, title and object identifier are the only appellation types supported for E21 Person. A <i>Surname</i> attribute should be added.
Person's title	E21 Person <i>has title : E35 Title</i>	
Phase	E20 Biological Object <i>was classified by : E17 Type Assignment</i>	
Physical description	E19 Physical Object <i>has note : E62 String</i>	
Place - context date	E27 Site	E27 Site corresponds fairly well to the Spectrum notion of "context". The CRM does not currently offer a time or date attribute for Site. This will be discussed for the next revision of the model

Place - context level	E27 Site	The CRM does not currently offer a level attribute for Site. This will be discussed for the next revision of the model
Place - context	E27 Site	Unlike Physical Object the E27 Site class does not have an identifier number attribute. This will be discussed for the next revision of the model.
Place - feature type	E27 Site <i>has type : E55 Type</i>	
Place - feature date	E27 Site	The CRM does not currently offer a time or date attribute for Site. This will be discussed for the next revision of the model
Place - feature	E27 Site	The CRM does not currently offer an appellation attribute for Site. This will be discussed for the next revision of the model.
Place - type system	E27 Site <i>has type : E55 Type</i> <i>E32 Authority Document</i>	E32 Authority Document is specifically intended for classification systems. However, there is currently no attribute linking specific terms in the E55 type hierarchy with Authority Documents. This will be discussed for the next revision of the model.
Place association	E5 Event <i>took place at : E53 Place</i>	The CRM supports multiple links between objects and places, each of which covers a specific type of association, Typically, places are related to objects through an E5 Event, or one of its subclasses, through the <i>took place at</i> attribute.
Place coordinate qualifier	E47 Coordinates <i>has note : E62 String</i>	A <i>qualification</i> attribute could be added to E47 if necessary.
Place coordinate type	E47 Coordinates <i>has type : E55 Type</i>	
Place coordinates	E47 Coordinates	
Place environmental details	E53 Place <i>has note : E62 String</i>	
Place name	E53 Place <i>is identified by : E44 Place Appellation</i>	
Place name type	E53 Place <i>has type : E55 Type</i>	The name of this unit of information is misleading. The scope notes indicate that the unit refers to type of <i>place</i> rather than type of <i>name</i> .
Place note	E53 Place <i>has note : E62 String</i>	
Place owner	E53 Place	The CRM does not currently offer an owner attribute for E53 Place. This will be discussed for the next revision of the model.
Place position	E53 Place <i>falls within : E53 Place</i>	
Place reference number	E53 Place <i>is identified by : E44 Place Appellation</i>	

Place reference number type	E44 Place Appellation has type : E55 Type	The example provided by Spectrum "FLG1992" appears to have been copied erroneously from Place reference number.
Place status	E53 Place	Unlike E19 Physical Object, E53 Place does not currently have any attributes to indicate legal status. This will be discussed for the next revision of the model.
Planned removal date	E9 Move has time-span : E52 Time-Span	
Procedure date begun	E7 Activity has time-span : E52 Time-Span E52 Time-Span begins at : E61 Time Primitive	
Procedure date ended	E7 Activity has time-span : E52 Time-Span E52 Time-Span ends at : E61 Time Primitive	
Procedure manager	E7 Activity carried out by E39 : Actor	
Procedure note	E7 Activity has note : E62 String	
Procedure title	E7 Activity is called : E43 Period Appellation	
Process person/organisation	E11 Modification carried out by E39 : Actor (in the rôle of : E55 Type)	The Spectrum distinction between Procedure and Process seems to depend partly on scale, Procedures involve a number of steps, and partly on the idea that a process, like framing, in some way alters an object. Accordingly, they have been mapped here to E7 Activity and E11 Modification respectively.
Process reference number	E11 Modification is called : E43 Period Appellation	
Process date	E11 Modification has time-span : E52 Time-Span E52 Time-Span ends at : E61 Time Primitive	
Process method	E11 Modification used general technique : E55 Type used specific technique : E29 Design or Procedure	
Process note	E11 Modification has note : E62 String	
Reason	E7 Activity had specific purpose : E7 Activity had as general purpose : E55 Type	"The reason for the procedure taking place." The CRM distinguishes between general and specific purpose.
Recall date	E7 Activity has time-span : E52 Time-Span E52 Time-Span ends at : E61 Time Primitive	

Record type	E18 Physical Entity <i>has type : E55 Type</i>	“Describes the level of description which the record contains.” This information is implicit in the depth of the record in an instance hierarchy of Physical Entity or Physical Object records. However, it could also be encoded using the has type attribute.
Recorder	E13 Attribute Assignment <i>carried out by : E 39 Actor</i>	The CRM assumes that the identity of person performing data entry will be recorded automatically. This is different from the source of information or judgement being recorded, which is handled explicitly.
Recording date	E13 Attribute Assignment <i>has time-span: E52 Time-Span</i>	
Recording progress		The CRM does not currently support this attribute. It could be handled using type assignment. This point will be discussed for the next revision of the model.
Reference	E19 Physical Object <i>is referred to by: E31 Document</i>	
Reference association		At present the CRM does not support this attribute. <i>An in the rôle of</i> attribute could be added to the link between E19 Physical Object and E31 Document.
Reference note		At present the CRM does not support this attribute. NB it would be incorrect to use the <i>has note</i> attribute of E31 Document. A <i>has note</i> attribute could be added to the link between E19 Physical Object and E31 Document.
Reference number	E31 Document	The CRM E31 Document class does not at present have any E41 Appellation attributes. This will be discussed for the next revision of the model.
Reference type	E31 Document <i>has type : E55 Type</i>	
Related object association	E19 Physical Object <i>is composed of</i> E7 Activity <i>used object : E19 Physical Object</i>	The CRM supports multiple links between objects, each of which covers a specific type of association, Typically, objects are related to objects through a recursive <i>consists of</i> link, or through E7 Activity, or one of its subclasses, through the <i>used object</i> attribute.
Related object number	E19 Physical Object <i>is identified by : E42 Object Identifier</i>	This is just the identifier assigned to the related object. Its inclusion in Spectrum is as warranted only as a foreign key. All foreign keys are <i>implicit</i> in the CRM.
Removal date	E9 Move <i>has time-span : E52 Time-Span</i>	
Reproducer	E7 Activity <i>carried out by : E39 Actor</i>	The CRM does not have a specific “Reproduction” subclass of Activity. The Activity subtype should be used.

Reproduction/performance rights authorisation date	E7 Activity <i>has time span : E52 Time-Span</i>	As mentioned earlier. "Autorisation" may be incorporated as a subclass of Activity. At present it can be represented as a subtype.
Reproduction/performance rights authoriser	E7 Activity <i>carried out by : E39 Actor</i>	idem
Reproduction/performance rights begin date		The CRM does not currently support this unit of information. An time-span attribute could be added to <i>right held by</i> link between object and right. This point will be discussed for the next revision of the model.
Reproduction/performance rights consent status	E17 Type Assignment <i>assigned : E55 Type</i>	The CRM does not currently support this unit of information. directly, although E17 Type Assignment could be used. Alternatively, A status attribute could be added to a suitable subclass of E7 Activity.
Reproduction/performance rights consent status date	E17 Type Assignment <i>has time-span : E52 Time-Span</i>	"The date on which an (sic) Reproduction/performance rights consent status was recorded."
Reproduction/performance rights end date		The CRM does not currently support this unit of information. An time-span attribute could be added to <i>right held by</i> link between object and right. This point will be discussed for the next revision of the model.
Reproduction/performance rights holder	E19 Physical Object <i>right held by : E39 Actor</i>	
Reproduction/performance rights note	E19 Physical Object <i>right held by : E39 Actor</i> <i>(has note : E62 String)</i>	
Reproduction/performance rights reference number	E7 Activity <i>is called : E43 Period Appellation</i>	Cf. Reproduction/performance rights consent status.
Reproduction/performance rights request	E7 Activity <i>has note : E62 String</i>	"Rights Request" can be handled as a subtype of E7 Activity. However, it could be added as a subclass with a status attribute and link to the specific right being requested.
Reproduction/performance rights request date	E7 Activity <i>has time-span : E52 Time-Span</i>	
Reproduction/performance rights requester	E7 Activity <i>carried out by : E39 Actor</i>	
Reproduction/performance rights type	E19 Physical Object <i>right held by : E39 Actor</i> <i>(has type : E55 Type)</i>	"Rights Request" can be handled as a subtype of E7 Activity. However, it could be added as a subclass with a status attribute and link to the specific right being requested.
Reproduction date	E12 Production <i>has time-span : E52 Time-Span</i>	The act of reproduction could be included as a subtype of E12 Production.
Reproduction description	E23 Iconographic Object <i>has note : E62 String</i>	

Reproduction dimensions	E23 Iconographic Object <i>has dimension : E54 Dimension</i>	
Reproduction location	E23 Iconographic Object <i>has current location : E53 Place</i>	The CRM offers <i>current, permanent</i> and <i>former location</i> attributes.
Reproduction material	E23 Iconographic Object <i>consists of : E57 Material</i>	
Reproduction method	E12 Production <i>used general technique : E55 Type</i> <i>used specific technique : E29 Design or Procedure</i>	The CRM distinguishes between general technique – such as photography – which are simply referred to by name, and specific techniques which require documentation.
Reproduction note	E23 Iconographic Object <i>has note : E62 String</i> or E12 Production <i>has note : E62 String</i>	The <i>note</i> attribute of Iconographic Object or Production should be used depending on whether the Reproduction note concerns the act of reproduction or the physical reproduction itself.
Reproduction number	E23 Iconographic Object <i>is identified by : E42 Object Identifier</i>	
Reproduction reference number	E23 Iconographic Object <i>is identified by : E42 Object Identifier</i>	Apparently identical to “Reproduction Number”
Reproduction type	E23 Iconographic Object <i>has type : E55 Type</i>	NB this is closely related to “Reproduction material”
Request date	E7 Activity <i>has time-span : E52 Time-Span.</i>	Requests can be handled as a subtype of Activity. A request is related to the requested Procedure by the <i>had specific purpose</i> attribute
Requested action date	E7 Activity <i>has time-span : E52 Time-Span.</i>	“The date on which a requester wishes for a procedure to occur.” This can be interpreted as the start date of an Activity set in the future. However, the <i>status</i> of the requested Activity needs to be indicated to avoid ambiguity. The requested date could also be included as a new attribute of the <i>has specific purpose</i> link. This point will be discussed for the next revision of the model.
Request	E7 Activity <i>has note : E62 String.</i>	Requests can be handled as a subtype of E7 Activity. A request is related to the requested Procedure by the <i>had specific purpose</i> attribute. It may be preferable to extend the CRM to include a specific “Request for Action” sub class of E7 Activity.
Requester	E7 Activity <i>carried out by : E39 Actor</i>	

Research/use of object date	E7 Activity <i>used object : E19 Physical Object</i>	Research or use of an object can be treated as a subtype of E7 Activity, or more specifically as a form of E13 Attribute Assignment where the research results in the creation of knowledge about the object. This CRM construct offers the possibility of documenting the use of objects within some <i>other</i> Activity either as instruments or as passive participants.
Research/use of object method	E7 Activity <i>used object : E19 Physical Object mode of use : E62 String</i>	Currently the <i>mode of use</i> attribute is of type string. This may be revised to E55 Type.
Research/use of object note	E7 Activity <i>has note : E62 String.</i>	
Research/use of object provisos	E7 Activity <i>has note : E62 String.</i>	"Record once only for each occurrence or research or use." General restrictions applying to research/use of an object should be attached directly to the object itself.
Research/use of object reference number	E7 Activity <i>is identified by: E43 Period Appellation.</i>	Except in cases of destructive analysis, the reference to "documentation about the disposal" is presumably an error.
Research/use of object result	E13 Attribute Assignment	The attribute used depends of the subclass of Attribute Assignment.
Researcher/user	E7 Activity <i>carried out by : E39 Actor</i>	
Return date	E10 Transfer of Custody <i>has time-span : E52 Time-Span</i>	Return date is the <i>ends at</i> attribute of E52 Time-Span.
Salvage priority code	E17 Type Assignment <i>assigned : E55 Type</i>	
Salvage priority code date	E17 Type Assignment <i>has time-span : E52 Time-Span</i>	
Scheduled begin date	E7 Activity <i>has time-span : E52 Time-Span</i>	
Scheduled end date	E7 Activity <i>has time-span : E52 Time-Span</i>	
Security recommendations	E19 Physical Object <i>has note : E62 String</i>	
Sex	E20 Biological Object	Although E17 Type Assignment can be used to document the sex of a specimen, the CRM should probably be extended to include a direct attribute.
Shipper	E9 Move <i>carried out by : E39 Actor (in the rôle of : E55 Type)</i>	
Shipper's contact	E9 Move <i>carried out by : E39 Actor</i> ... E21 Person <i>is member of : E40 Legal Body has contact point : E51 Contact Point</i>	A person (individual) can be associated with the legal body such as a Removal agency other organisation which is transporting an object. All Actors have a contact information attribute for telephone numbers, email, address, etc.

Shipping note	E19 Physical Object <i>has note : E62 String</i> E9 Move <i>has note : E62 String</i>	General information about shipping the object should be included in the object's note field. Information relating to a specific move in the E9 Move note.
Special conditions of loan	E10 Transfer of Custody <i>has note : E62 String</i>	
Special requirements	E19 Physical Object <i>has note : E62 String</i>	
Status	E19 Physical Object <i>was classified by E13 Attribute Assignment</i>	The Spectrum notes on this unit of information are unclear. Does the Status relate to an object or, more plausibly, to a process? An E13 Attribute Assignment event allows a particular status to be associated with an object. The <i>had specific purpose</i> attribute can be used to relate this status to a particular E7 Activity. As mentioned earlier. The CRM does not currently support the notion of process status directly. A <i>status</i> attribute may be added to E7 Activity. This point will be discussed for the next revision of the model.
Status date	E13 Attribute Assignment <i>has time-span: E52 Time-Span</i>	begins at
Status review date	E13 Attribute Assignment <i>has time-span: E52 Time-Span</i>	ends at
Storage recommendations	E19 Physical Object <i>has note : E62 String</i>	
Stratigraphic unit name	E4 Period <i>is called : E43 Period Appellation</i>	
Stratigraphic unit note	E4 Period <i>has note : E62 String</i>	
Stratigraphic unit type	E4 Period <i>has type : E55 Type</i>	
Style	E17 Type Assignment <i>assigned E55 Type</i> <i>classified E1 CIDOC Entity</i>	
Technical assessment	E14 Condition Assessment	
Technical attribute	E54 Dimension or E55 Type	The scope note for this unit of information: "The name of a technical attribute possessed by the object which can be described and quantified " is in contradiction with one of the examples: "magnetic tape type". If technical attributes are always quantifiable, then they can be mapped to E54 Dimension. If not, then E55 Type is more appropriate.
Technical attribute measurement unit	E54 Dimension <i>unit : E58 Measurement unit</i>	
Technical attribute measurement	E54 Dimension <i>value : E60 Number</i>	

Technique	E12 Production <i>used general technique : E55 Type</i>	
Technique type	E55 Type	This information is implicit in the branch of the E55 Type hierarchy from which the branch is drawn. Domain specific branches can be added to this hierarchy.
Title	E19 Physical Object <i>has title : E35 Title</i>	
Title translation	E35 Title <i>has translation : E33 Linguistic Object</i>	
Title type	E19 Physical Object <i>has title : E35 Title</i> <i>(has type : E55 Type)</i>	
Transfer of title number	E8 Acquisition <i>is called : E43 Period Appellation</i>	
Treatment date	E11 Modification <i>has time-span : E52 Time-Span</i>	
Treatment report	E11 Modification <i>has note : E62 String</i>	
Unit of information added	E13 Attribute Assignment	The subclass of E13 Attribute Assignment which is used will depend on the nature of the unit of information begin added to the record.
Unit of information scheme	E32 Authority Document	
Usage	E19 Physical Object <i>had as general use : E55 Type</i>	
Usage note	E19 Physical Object <i>had as general use : E55 Type</i> <i>(has note : E62 String)</i>	
Valuation reference number	E16 Measurement <i>is called : E43 Period Appellation</i>	As mentioned earlier E16 Measurement may be renamed to Evaluation.
Valuer	E16 Measurement <i>carried out by : E39 Actor</i>	
Venue	E7 Activity <i>carried out by : E39 Actor</i>	Exhibition can be treated as a subtype of E7 Activity.
Venue authorisation date	E7 Activity <i>has time-span : E52 Time-Span</i>	Authorisation can be treated as a subclass of E7 Activity. The link with the Action being authorised is given by <i>has as specific purpose</i> .
Venue authoriser	E7 Activity <i>carried out by : E39 Actor</i>	idem.