



Definition of the  
**CIDOC**  
object-oriented  
**Conceptual Reference Model**

Produced by the ICOM/CIDOC  
Documentation Standards Group

Editors: Nick Crofts, Ifigenia Dionissiadou, Martin Doerr, Matthew Stiff.

September 1999

Copyright © 1998,1999 ICOM/CIDOC Documentation Standards Group



# Definition of the CIDOC object-oriented Conceptual Reference Model

Editors:            Martin Doerr,            Ifigenia Dionissiadu            Nick Crofts            Matthew Stiff  
                         ICS-FORTH,            Benaki Museum,            City of Geneva,            MDA  
                         Heraklion-Crete            Athens            Geneva            Cambridge

Creation Date : 11-07-1998

Last Modified : 01-11-1999

Comments:        Cross references controlled by SIS database.  
                         Corrections added following Nick's comments on 25/01/99 , Martin Doerr  
                         Scope Notes from Nick's hierarchies merged in, 21/6/99, Martin Doerr  
                         Scope Notes edited in Geneva meeting, 13-15/7/1999, Martin Doerr, I. Dionissiadu, Nick  
                         Crofts, Matthew Stiff  
                         Proof reading, inherited references added, comments to IC hidden, 25/8/99, by Martin Doerr.  
                         Introduction proofed and examples added by Nick Crofts 4/9/99

## **Acknowledgements**

The successful completion of this project was made possible through the combined efforts over several years of members of the CIDOC Documentation Standards Group:

### **Project Chairs:**

Nick Crofts (CH), co-chair

Pat Reed (USA), co-chair

### **Project Team:**

Costis Dallas (GR)

Ifigenia Dionissiadou (GR)

Martin Doerr (GR)

Siegfried Krause (Germany)

Per Enggaard Pedersen (DK)

Lene Rold (DK)

Anne Serio (USA)

Matthew Stiff (UK)

The group wishes to thank in particular Dr Martin Doerr and ICS-FORTH for both providing facilities for meetings on several occasions and for the use of SIS as a repository for the model.

Printing and distribution of the model during the 1998 Melbourne conference were funded by CIDOC.



## Introduction

This document is a formal definition of the **oo CIDOC Conceptual Reference Model** (referred to in the following as the “CRM”). It is the result of work done by the CIDOC Documentation Standards Group, from 1994 1999, as the result of an initiative to define the underlying semantics of database schemata and document structures needed in museum documentation for the support of good practice, document structure generation, and the mediation of heterogeneous sources.

The CRM is a domain ontology in the sense used in computer science. As such, the model is designed to be explanatory and extensible rather than prescriptive and restrictive. Currently, no specific formalism for semantic models has been widely accepted as standard, nevertheless the semantic deviations between the various available models are minimal. Consequently, the model has been formulated as an object-oriented semantic model<sup>1</sup>, which can easily be converted into other object-oriented models. It is our intention that this presentation format should be both natural and expressive for domain experts, and easily converted to other machine readable formats such as RDF and XML. Considerable effort has gone into achieving these goals, all cross-references and inheritance of properties, for example, are explicitly resolved. This has led to a high degree of redundancy, but makes the document more comprehensible to naïve readers and useable as a reference document, which does not require the use of electronic tools.<sup>2</sup>

The CRM is intended to cover all concepts relevant to museum documentation, but most particularly those needed for wide area data exchange. Due to the diversity of museum subjects, this goal can ultimately be achieved only by extensions to the model. In its current form, the scope of the CRM is limited to the concepts referred to in the *CIDOC Information Groups and Categories*, a widely accepted reference for the administration of material cultural heritage and other objects in museums. However, due to its object-oriented nature, the model comprises a backbone of powerful general concepts, which have a much wider area of application.

Of necessity, some concepts are less thoroughly elaborated than others: “Actor”, “Right” and “Conceptual Object”, for example. This is a natural consequence of focussing on specific functionality in an intrinsically unlimited field. These ‘undeveloped’ concepts can be considered as hook-in points for extensions compatible with the model. However, even without these extensions, the CRM is nevertheless ‘complete’ in that, through the use of free text fields, it allows information to be captured which is not modelled explicitly. Indeed, some information has deliberately *not* been developed into formal properties or links. This approach is preferable when detailed, targeted queries are not expected: a good text description, a drawing or diagram provides a better source of information. In general, only those concepts on which formal querying is required need to be made explicit - rather than all the information which needs to be stored and retrieved.

## Applied form

From the various terminologies in use for object-oriented models, we have selected the following for ease of understanding by non-computer experts:

“**Entity**” for anything that may be called “class”, “entity” or “node”.

“**links**” for anything that may be called “attribute”, “reference”, “link”, or “property”.

“**Superclass - Subclass**” relations refer to “isA” relations, “subclass – superclass”, “parent class - derived class”, “generalization - specialization”, etc.

Cardinality constraints are deliberately omitted as they are considered to be implementation details with only minimal explanatory value. By default, all links (or properties) are regarded as **optional**, and potentially **multiple**. For example, several persons together may transfer ownership of a set of objects in one legal act to another group of persons. Alternatively, ownership may be acquired from nobody, but by collection. (See entity E8).

*Links* are strictly **inherited** to subclasses (entities again). This applies symmetrically to both entities to the connecting link. Any instance of a subclass can instantiate inherited links, and any instance link can reference a

---

<sup>1</sup> Using the TELOS system.

<sup>2</sup> Additional explanatory documents are available which present the CRM in the form of object-oriented entity-relationship diagrams.

subclass of an entity to which it points.

Links may themselves have links, which point to other entities. Typically, these links are used for dynamically modified links such as roles.

The CRM is formulated in reference to a **metamodel**, such as that supported by TELOS. “**Metaclasses**” form sets of entities, typically used to handle lists of entities that form one subclass hierarchy. “**Metacategories**”, which are like links between metaclasses, group links by related meaning. For the current purposes of the **model**, references to the metamodel can simply be regarded as comments to assist reading.

We have applied the following naming rules:

- Entities are named using initial capitals.
- Entities are named using noun phrases (nominal groups)
- Links are named using lower case letters and are labelled in both directions.
- The direction of links, and hence their names, are in accordance with the following priority list:
  - Events
  - Objects
  - Actors
  - Other
- link names are to be read from left to right and, in brackets, from right to left. Implementers can choose the appropriate name according to the orientation of their link attachment.
- Links are named using verbal phrases. References to states are named in present tense, whereas actions are named in past tense.

## Examples

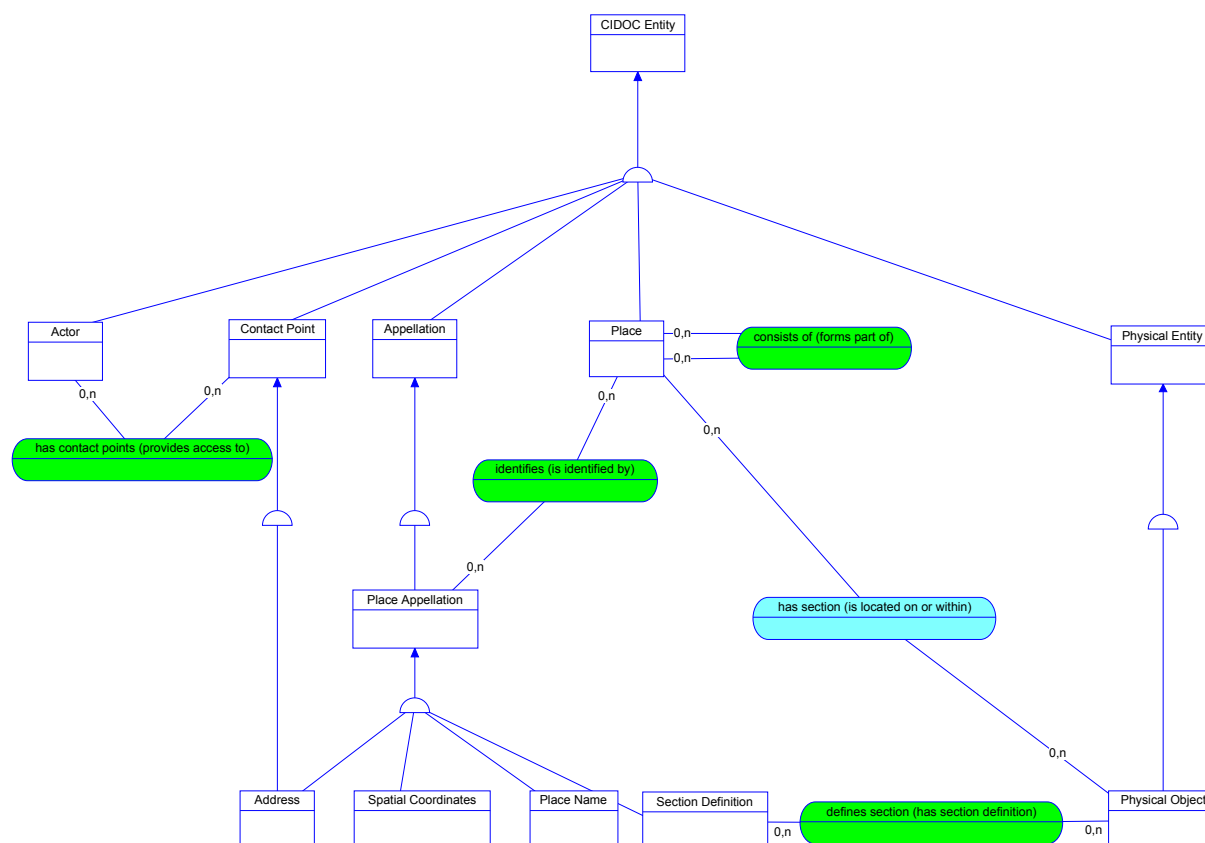


fig. 1 reasoning about spatial information

The diagram above shows a partial view of the CRM representing spatial information. Five of the main hierarchy branches are included in this view: Actor, Contact Point, Appellation, Place, and Physical Entity. The relationships between these main classes and their subclasses are shown as branching lines. Links between classes are shown as green ovals. A ‘shortcut’ link is included in this view: has section (is located on or within) between Place and Physical Object. In some cases the order of priority for link names has been modified in order to facilitate reading the model from left to right.

As can be seen, a Place is identified by a Place Appellation, which may be an Address, Spatial Coordinates, a Place Name, or a Section Definition such as ‘basement’, ‘pro’w’, or ‘lower left-hand corner’. A Place may consist of or form part of another place, thereby allowing a hierarchy of physical ‘containers’ to be constructed. An Address can be considered both as a Place Appellation – a way of referring to a place – and as a Contact Point for an Actor. An Actor may have any number of Contact Points.

An interesting aspect of the model is the *defines section* link between section definition and physical object, (and the corresponding shortcut from place to physical object). This effectively means that a section of a *physical object* may be the reference for a *place*. We may know, for example that Nelson died on a particular spot on the Victory, without being able to locate the exact position of the vessel in geospatial terms. Similarly, a signature or inscription can be located 'on the lower right hand corner' of a painting, regardless of where the painting is hanging.

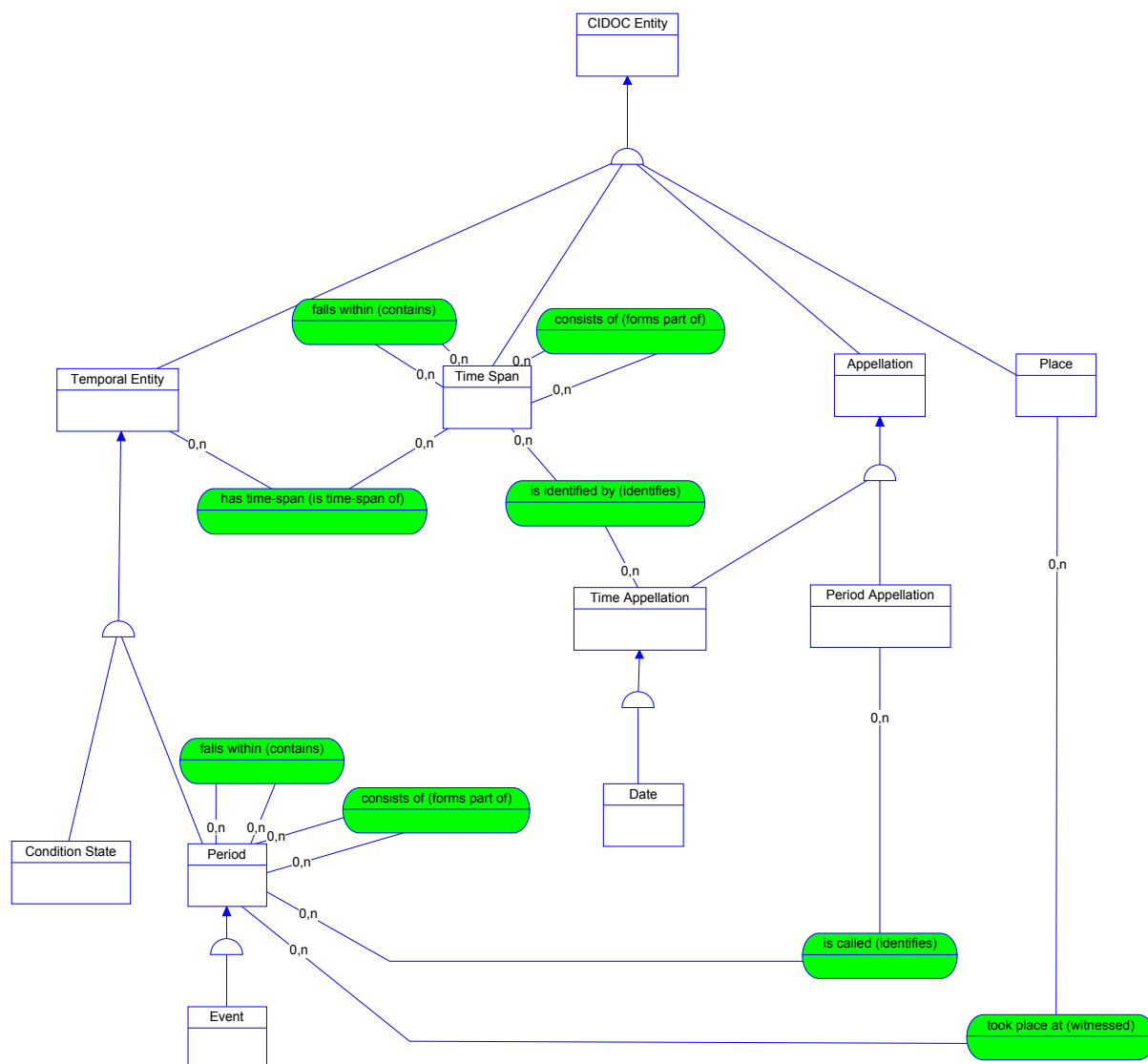


fig. 2 reasoning about temporal information

This second example shows how the model handles temporal information. Four of the main hierarchy branches are included in this view: Temporal Entity, Time-Span, Appellation and Place. The Temporal Entity class serves to group together all classes which have a temporal component, such as historical Periods, Events and Condition States. Typically, Periods and Events are identified by a name or Period Appellation. A Time Span is simply a temporal interval which does not make any reference to cultural or geographical contexts, unlike Periods, which *take place at* a particular Place. Time Spans are sometimes named, generally by reference to Dates. Time Appellations differ from Period Appellations in that one refers to a Period within a geo-cultural context while the other is purely temporal - a distinction which is often hard to recognise in natural language. Both Time-Span and Period have *consists of* and *falls within* reflexive links. Both of these allow part-whole hierarchies to be constructed. The distinction between the two types of link is that in first case the whole is thought to be *composed of* or defined by its parts whereas in the second the relationship is merely contingent. An example might be a period of national celebration, which could be said to be composed of the individual events, whereas the construction of a building might simply fall within the period of a particular government.



## The Entity List

The following is the list of all entities and links contained in the **model**. It consists of an index and the entity declarations themselves. The list is ordered by herarichic level, in a “depth first” manner, from the smaller to the larger subhierarchies, and alphabetically between equal siblings. From this sequence, a unique identifier for each entity emerges, which facilitates cross-referencing.

Entity declarations use the following format:

- Entity names (terms) are presented as headings in bold face, preceded by the unique identifier.
- The line “Belongs to:” refers to the metaclass the entity is a member of.
- The line “Subclass of:” declares the superclass of the entity, from which it inherits links.
- The line “Superclass of:” is a cross-reference to the following subclasses of this entity.
- The line “Scope note” contains the textual definition of the concept the entity represents.
- The title “Properties” announces the list of links.
- Links are grouped by related meaning under metacategories, i.e. a series of titles. e.g. “classifications” etc., in normal face.
- Each link is represented by its forward and backward name, and the entity it links to, separated by colon.
- Links declared directly for the entity are given in bold face.
- Inherited links are given in italics as cross-references to the respective superclasses, for better comprehension.
- Inherited links with a redefined (restricted ) target entity are given in bold face italics.
- Each link may be followed by a scope note for the link in an indented text in smaller characters.
- **Links of links** are given in an indented position in parenthesis under the respective link.
- The title “The entity is referenced by:” indicates the cross-reference list of links pointing to this entity (in the sequence called “incoming links”). In cases where there is no such link, the phrase “The entity is not referenced” is used.
- Each incoming link is represented by the entity it originates from, and its forward and backward name, separated by a colon, in normal face.
- The title “The entity inherits references:” indicates the cross-reference list of links pointing to any of the superclasses of this entity (“inherited incoming links”).
- Each inherited incoming link is represented by the entity it originates from, and its forward and backward name, separated by a colon, in italics.

**Index of the entities of the CIDOC CRM presented as a monohierarchy :**

E1 CIDOC Entity  
E2 - Temporal Entity  
E3 - - Condition State  
E4 - - Period  
E5 - - - Event  
E6 - - - - Destruction  
E7 - - - - Activity  
E8 - - - - - Acquisition  
E9 - - - - - Move  
E10 - - - - - Transfer of Custody  
E11 - - - - - Modification  
E12 - - - - - Production  
E13 - - - - - Attribute Assignment  
E14 - - - - - Condition Assessment  
E15 - - - - - Identifier Assignment  
E16 - - - - - Measurement  
E17 - - - - - Type Assignment  
E18 - Physical Entity  
E19 - - Physical Object  
E20 - - - Biological Object  
E21 - - - - Person  
E22 - - - Man-Made Object  
E23 - - - - Iconographic Object  
E24 - - Man-Made Entity  
*E22 - - - Man-Made Object*  
*E23 - - - - Iconographic Object*  
E25 - - - Man-Made Feature  
E26 - - Physical Feature  
E27 - - - Site  
*E25 - - - Man-Made Feature*  
E28 - Conceptual Object  
E29 - - Design or Procedure  
E30 - - Right  
E31 - - Document  
E32 - - - Authority Document  
E33 - - Linguistic Object  
E34 - - - Inscription  
E35 - - - Title  
E36 - - Visual Item  
E37 - - - Mark  
*E34 - - - - Inscription*  
E38 - - - Image  
*E23 - - Iconographic Object*  
E39 - Actor  
E40 - - Legal Body  
*E21 - - Person*  
E41 - Appellation  
E42 - - Object Identifier  
E43 - - Period Appellation  
E44 - - Place Appellation  
E45 - - - Address  
E46 - - - Section Definition  
E47 - - - Spatial Coordinates  
E48 - - - Place Name  
E49 - - Time Appellation  
E50 - - - Date  
*E35 - - Title*

E51 - Contact Point  
E45 - - *Address*  
E52 - Time-Span  
E53 - Place  
E54 - Dimension  
E55 Type  
E56 - Language  
E57 - Material  
E58 - Measurement Unit  
E59 Primitive value  
E60 - Number  
E61 - Time Primitive  
E62 - String

## E1 CIDOC Entity

Belongs to: MetaEntity  
Superclass of: Temporal Entity  
Physical Entity  
Conceptual Object  
Actor  
Appellation  
Contact Point  
Time-Span  
Place  
Dimension

Scope note: This is the abstract concept of the entities of our universe of discourse. It carries the rule that all entities can be classified by a type, which further refines the specific subclass an instance belongs to, and a free text field for anything we want to express and that is not captured by formal links.

### Properties:

classifications

**has type (is type of): Type**

other descriptions

**has note: String**

### The entity is referenced by:

Type Assignment: classified (was classified by)

## **Period Hierarchy**

All entities in this hierarchy are instances of the metaclass “Period\_Type”, which is the container for all these entities.

## E2 Temporal Entity

Belongs to: Period\_Type  
Subclass of: CIDOC Entity  
Superclass of: Condition State  
Period

Scope note: This is an abstract entity and has no examples. It groups together things such as events, states and other phenomena which are limited in time. It is specialized into Period, which holds on some geographic area, and Condition State, which holds for, on, or over a certain object.

### Properties:

classifications

*has type (is type of): Type*

temporal definitions

**has time-span (is time-span of): Time-Span**

structures

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Type Assignment: classified (was classified by)*

## E3 Condition State

Belongs to: Period\_Type  
Subclass of: Temporal Entity

Scope note: The state of an object characterized by a certain condition and a time-span, e.g. "In ruins from 1695 until 1952", where the qualifier "in ruins" is represented as the condition state type.

### Properties:

classifications

*has type (is type of): Type*

temporal definitions

*has time-span (is time-span of): Time-Span*

structures

**consists of (forms part of): Condition State**

**falls within (contains): Condition State**

other descriptions

*has note: String*

### The entity is referenced by:

Condition Assessment: has identified (identified by)

Physical Entity: has condition (condition of)

### The entity inherits references :

*Type Assignment: classified (was classified by)*

## E4 Period

Belongs to: Period\_Type  
Subclass of: Temporal Entity  
Superclass of: Event

Scope note: A period is characterized by a coherent set of phenomena and or manifestations (explicitly intended or not), which are assumed to have taken place over a certain space and time.

Examples: Glacial period, bronze period, Ming Dynasty, Impressionism, Neolithic Period, Mc Carthy Era, The Sixties, Niniveh, 'Sturm und Drang'.

There are different opinions as to whether a 'style' is defined by physical features or by the historical context.

### Properties:

identifications

**is called (identifies): Period Appellation**

classifications

*has type (is type of): Type*

spatial definitions

**took place at (witnessed): Place**

spatial definitions, short cut

**took place on or within (witnessed): Physical Object**

temporal definitions

*has time-span (is time-span of): Time-Span*

structures

**consists of (forms part of): Period**

**falls within (contains): Period**

other descriptions

*has note: String*

**The entity is referenced only by itself.**

**The entity inherits references :**

*Type Assignment: classified (was classified by)*



## E5 Event

Belongs to: Period\_Type  
Subclass of: Period  
Superclass of: Destruction  
Activity

Scope note: A change of state in cultural, social, physical systems, regardless of scale, brought about by a series or group of coherent physical, cultural, technological or legal phenomena.

Examples : World War II, Battle of Stalingrad, Earthquake in Lisbon, birth of Cleopatra, my birthday celebration 28-6-1995, the Yal ta Conference, "a tile fell from my roof", the CIDOC Conference 2005.

The distinction between and event and a period is partly a question of scale. Viewed at a broad scale, an event is an 'instantaneous' change of state. At a fine scale, the event can be analysed into its component phenomena within a space and time frame, i.e., a period. The reverse is not necessarily the case, not all periods give rise to a noteworthy change of state.

### Properties:

identifications

*is called (identifies): Period Appellation*

classifications

*has type (is type of): Type*

spatial definitions

*took place at (witnessed): Place*

spatial definitions, short cut

*took place on or within (witnessed): Physical Object*

temporal definitions

*has time-span (is time-span of): Time-Span*

structures

*consists of (forms part of): Period*

*falls within (contains): Period*

other descriptions

*has note: String*

### The entity is referenced by:

Man-Made Entity: depicts event (is depicted by)  
(mode of depiction : Type)

### The entity inherits references :

*Period : consists of (forms part of)*

*Period : falls within (contains)*

*Type Assignment: classified (was classified by)*

## E6 Destruction

Belongs to: Period\_Type  
Subclass of: Event

Scope note: An event which causes one or more objects to lose their identity as the current subjects of documentation. Some destructions are intentional, others are independent of human activity. The decision as to the point at which an object is destroyed rather than modified may be arbitrary in some cases. The same event may, in some cases, be documented both as a destruction of one or more objects and as the creation of others using parts or material from the original, or, alternatively, as a modification. In the former case, the object record would close, in the latter, it would continue.

For living beings, death is usually more clearly defined.

Examples: The Lisbon Earthquake, the destruction of Nineveh, “I broke a champagne glass yesterday”, the shooting of the last wolf in Germany in 1729.

### Properties:

identifications

*is called (identifies): Period Appellation*

classifications

*has type (is type of): Type*

passive participants

**destroyed (was destroyed by): Physical Object**

spatial definitions

*took place at (witnessed): Place*

spatial definitions, short cut

*took place on or within (witnessed): Physical Object*

temporal definitions

*has time-span (is time-span of): Time-Span*

structures

*consists of (forms part of): Period*

*falls within (contains): Period*

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Period : consists of (forms part of)*

*Period : falls within (contains)*

*Type Assignment: classified (was classified by)*

*Man-Made Entity: depicts event (is depicted by)*

*(mode of depiction : Type)*

## E7 Activity

Belongs to: Period\_Type  
Subclass of: Event  
Superclass of: Acquisition  
Move  
Transfer of Custody  
Modification  
Attribute Assignment

Scope note: An action or a series of actions, carried out by actors (people, groups or organisations) which follow a certain explicit or implicit intention and result as a collective effect in some change of state in the cultural, social, physical systems we are interested in. This notion includes both complex and long lasting actions such as the building of a settlement, or a war, as well as simple, short-lived actions such as the opening of a door. It does not include the notion of activity in the sense of professions and other non-targeted notions. These are seen rather as belonging to a part in the hierarchy above Event.

### Properties:

identifications

*is called (identifies): Period Appellation*

classifications

*has type (is type of): Type*

active participants

**carried out by (performed): Actor**

**(in the role of : Type)**

passive participants

**used object (was used for): Physical Object**

**(mode of use: String)**

motivations

**was intended use of (was made for): Man-Made Object**

**(mode of use: String)**

**had specific purpose (was purpose of): Activity**

**had as general purpose (was purpose of): Type**

spatial definitions

*took place at (witnessed): Place*

spatial definitions, short cut

*took place on or within (witnessed): Physical Object*

temporal definitions

*has time-span (is time-span of): Time-Span*

structures

*consists of (forms part of): Period*

*falls within (contains): Period*

other descriptions

*has note: String*

**The entity is referenced only by itself.**

**The entity inherits references :**

*Period : consists of (forms part of)*

*Period : falls within (contains)*

*Type Assignment: classified (was classified by)*

*Man-Made Entity: depicts event (is depicted by)*

*(mode of depiction : Type)*

## E8 Acquisition

Belongs to: Period\_Type  
Subclass of: Activity

Scope note: This entity describes the transfer of the legal ownership from one legal person to another. Either one of the actors may be omitted, unknown or not existing. The entity describes the beginning, the end or the transfer of an ownership, acquisition from unknown source or loss of title, depending on the circumstances. It takes a neutral position with respect to the actors involved. The museum notion of "accession" seems to differ between institutions. We preferred therefore to model the notions of legal ownership and physical custody instead, which are well defined in international business. Institutions can choose to model their specific notions as combinations of these.

Annexation, donation, purchase, field collection - where legal title is appropriated by the collector, are types of acquisition. Examples: a fish collected in international waters, a painting bequeathed to a museum.

### Properties:

identifications

*is called (identifies): Period Appellation*

classifications

*has type (is type of): Type*

active participants

***transferred title to (acquired title of): Actor***

***transferred title from (surrendered title of): Actor***

*carried out by (performed): Actor*

*(in the role of : Type)*

passive participants

***transferred title of (changed ownership by): Physical Object***

*used object (was used for): Physical Object*

*(mode of use: String)*

motivations

*was intended use of (was made for): Man-Made Object*

*(mode of use: String)*

*had specific purpose (was purpose of): Activity*

*had as general purpose (was purpose of): Type*

spatial definitions

*took place at (witnessed): Place*

spatial definitions, short cut

*took place on or within (witnessed): Physical Object*

temporal definitions

*has time-span (is time-span of): Time-Span*

structures

*consists of (forms part of): Period*

*falls within (contains): Period*

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Period : consists of (forms part of)*

*Period : falls within (contains)*

*Activity: had specific purpose (was purpose of)*  
*Type Assignment: classified (was classified by)*  
*Man-Made Entity: depicts event (is depicted by)*  
*(mode of depiction : Type)*

## E9 Move

Belongs to: Period\_Type  
Subclass of: Activity

Scope note: This entity captures the change of physical location of a museum object for exhibitions, conservation, reorganization, loans, study etc.

e.g. Taking objects from storage and putting them on display is a type of move.

### Properties:

identifications

*is called (identifies): Period Appellation*

classifications

*has type (is type of): Type*

active participants

*carried out by (performed): Actor*

*(in the role of): Type*

passive participants

**moved (moved by): Physical Object**

*used object (was used for): Physical Object*

*(mode of use: String)*

motivations

*was intended use of (was made for): Man-Made Object*

*(mode of use: String)*

*had specific purpose (was purpose of): Activity*

*had as general purpose (was purpose of): Type*

spatial definitions

**moved to (occupied): Place**

**moved from (vacated): Place**

*took place at (witnessed): Place*

spatial definitions, short cut

*took place on or within (witnessed): Physical Object*

temporal definitions

*has time-span (is time-span of): Time-Span*

structures

*consists of (forms part of): Period*

*falls within (contains): Period*

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Period : consists of (forms part of)*

*Period : falls within (contains)*

*Activity: had specific purpose (was purpose of)*

*Type Assignment: classified (was classified by)*

*Man-Made Entity: depicts event (is depicted by)*

*(mode of depiction : Type)*

## E10 Transfer of Custody

Belongs to: Period\_Type  
Subclass of: Activity

Scope note: This entity describes the transfer of physical custody from one legal person to another. Either one of the actors may be omitted, unknown or not existing. The entity may describe the beginning, the end or the transfer of custody, field collection or declared loss of an object, depending on the circumstances. It takes a neutral position with respect to the actors involved.

The distinction between legal and physical custody can be modelled as types.

Some events can simultaneously be considered as acquisition, transfer of custody and move. For example, purchase of a Polynesian feather hat at a market. In other cases, separate events are involved, e.g. purchase by telephone of an object on auction, physical transportation, and reception by the new owner.

### Properties:

identifications

*is called (identifies): Period Appellation*

classifications

*has type (is type of): Type*

active participants

***custody surrendered by (surrendered custody): Actor***

***custody received by (received custody): Actor***

*carried out by (performed): Actor*

*(in the role of : Type)*

passive participants

***transferred custody of (custody changed by): Physical Object***

*used object (was used for): Physical Object*

*(mode of use: String)*

motivations

*was intended use of (was made for): Man-Made Object*

*(mode of use: String)*

*had specific purpose (was purpose of): Activity*

*had as general purpose (was purpose of): Type*

spatial definitions

*took place at (witnessed): Place*

spatial definitions, short cut

*took place on or within (witnessed): Physical Object*

temporal definitions

*has time-span (is time-span of): Time-Span*

structures

*consists of (forms part of): Period*

*falls within (contains): Period*

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Period : consists of (forms part of)*

*Period : falls within (contains)*

*Activity: had specific purpose (was purpose of)*

*Type Assignment: classified (was classified by)*  
*Man-Made Entity: depicts event (is depicted by)*  
*(mode of depiction : Type)*



## E11 Modification

Belongs to: Period\_Type  
Subclass of: Activity  
Superclass of: Production

Scope note: This entity comprises all activities which intentionally alter physical objects, regardless of the degree of intervention: creation of some item from raw material, restorations, use of ancient objects in jewelry, etc.. Since many cases the distinction between modification and creation is not clear, and the actions implied are basically the same, modification is regarded as the more general (and less ambiguous) concept. This implies that some items may be consumed or destroyed in a modification process, and others emerge from it. Typically, objects involved in the process, such as tools, materials, etc., which are foreseen by the applied technique are modeled as attributes of the Design or Procedure, for reasons of efficient data representation. Nevertheless, unusual and remarkable items used for a specific instance of a process should be referred to here.

This entity is thought to be collective, e.g. the printing of a thousand books should be one event. Conservation actions can be modeled as a type of modification.

### Properties:

identifications

*is called (identifies): Period Appellation*

classifications

*has type (is type of): Type*

active participants

*carried out by (performed): Actor*

*(in the role of: Type)*

passive participants

**has produced (was produced by): Man-Made Entity**

*used object (was used for): Physical Object*

*(mode of use: String)*

following

**used general technique (was technique of): Type**

**used specific technique (was used by): Design or Procedure**

motivations

*was intended use of (was made for): Man-Made Object*

*(mode of use: String)*

*had specific purpose (was purpose of): Activity*

*had as general purpose (was purpose of): Type*

spatial definitions

*took place at (witnessed): Place*

spatial definitions, short cut

*took place on or within (witnessed): Physical Object*

temporal definitions

*has time-span (is time-span of): Time-Span*

structures

*consists of (forms part of): Period*

*falls within (contains): Period*

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Period : consists of (forms part of)*

*Period : falls within (contains)*

*Activity: had specific purpose (was purpose of)*

*Type Assignment: classified (was classified by)*

*Man-Made Entity: depicts event (is depicted by)  
(mode of depiction : Type)*

## E12 Production

Belongs to: Period\_Type  
Subclass of: Modification

Scope note: This entity specializes the notion of modification into production, i.e. activities which are designed to and succeed in creating one or a series of new items, new in the sense that there is no obvious similarity to the consumed items and material. Examples: painting a watercolour, printing an etching, producing a series of household forks, the recasting of the mermaid in Copenhagen.

### Properties:

identifications

*is called (identifies): Period Appellation*

classifications

*has type (is type of): Type*

active participants

*carried out by (performed): Actor*

*(in the role of : Type)*

passive participants

*has produced (was produced by): Man-Made Entity*

*used object (was used for): Physical Object*

*(mode of use: String)*

following

*used general technique (was technique of) : Type*

*used specific technique (was used by): Design or Procedure*

motivations

*was intended use of (was made for): Man-Made Object*

*(mode of use: String)*

*had specific purpose (was purpose of): Activity*

*had as general purpose (was purpose of): Type*

spatial definitions

*took place at (witnessed): Place*

spatial definitions, short cut

*took place on or within (witnessed): Physical Object*

temporal definitions

*has time-span (is time-span of): Time-Span*

structures

*consists of (forms part of): Period*

*falls within (contains): Period*

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Period : consists of (forms part of)*

*Period : falls within (contains)*

*Activity: had specific purpose (was purpose of)*

*Type Assignment: classified (was classified by)*

*Man-Made Entity: depicts event (is depicted by)*

*(mode of depiction : Type)*

## E13 Attribute Assignment

Belongs to: Period\_Type  
Subclass of: Activity  
Superclass of: Condition Assessment  
Identifier Assignment  
Measurement  
Type Assignment

Scope note: This entity comprises the actions of making assertions about properties of an object. It serves the documentation of how the respective assessment came about, and whose opinion it was. All the attributes or properties assigned in such an action can also be seen as directly attached to the respective object, possibly as a collection of contradictory values. All cases of direct links from objects to values which are, in this model, also referred to indirectly through an action, are characterized as "short cuts" of this action. This redundant modeling of two alternative views is preferred because many implementations may have good reasons to model either the action or the short cut, and the relation between both alternatives can be captured by simple rules.

In addition, the entity describes the actions of people making propositions and statements during certain museum procedures, e.g. the person and date when a condition statement was made, an identifier was assigned, the museum object was measured, etc.. Which kinds of such assignments and statements need to be documented explicitly in schema structures rather than free text, depends on a museum's practice. In the latter case shortcuts may be used which refer directly to the museum object.

### Properties:

identifications

*is called (identifies): Period Appellation*

classifications

*has type (is type of): Type*

active participants

*carried out by (performed): Actor*

*(in the role of: Type)*

passive participants

*used object (was used for): Physical Object*

*(mode of use: String)*

motivations

*was intended use of (was made for): Man-Made Object*

*(mode of use: String)*

*had specific purpose (was purpose of): Activity*

*had as general purpose (was purpose of): Type*

spatial definitions

*took place at (witnessed): Place*

spatial definitions, short cut

*took place on or within (witnessed): Physical Object*

temporal definitions

*has time-span (is time-span of): Time-Span*

structures

*consists of (forms part of): Period*

*falls within (contains): Period*

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Period : consists of (forms part of)*

*Period : falls within (contains)*

*Activity: had specific purpose (was purpose of)*

*Type Assignment: classified (was classified by)*

*Man-Made Entity: depicts event (is depicted by)*  
*(mode of depiction : Type)*

## E14 Condition Assessment

Belongs to: Period\_Type  
Subclass of: Attribute Assignment

Scope note: This entity describes the action of assessing the condition of preservation of an object over a particular period, either by inspection, measurement or historical studies.

### Properties:

identifications

*is called (identifies): Period Appellation*

classifications

*has type (is type of): Type*

active participants

*carried out by (performed): Actor*

*(in the role of: Type)*

passive participants

**concerns (assessed by): Physical Object**

*used object (was used for): Physical Object*

*(mode of use: String)*

attributions

**has identified (identified by): Condition State**

motivations

*was intended use of (was made for): Man-Made Object*

*(mode of use: String)*

*had specific purpose (was purpose of): Activity*

*had as general purpose (was purpose of): Type*

spatial definitions

*took place at (witnessed): Place*

spatial definitions, short cut

*took place on or within (witnessed): Physical Object*

temporal definitions

*has time-span (is time-span of): Time-Span*

structures

*consists of (forms part of): Period*

*falls within (contains): Period*

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Period : consists of (forms part of)*

*Period : falls within (contains)*

*Activity: had specific purpose (was purpose of)*

*Type Assignment: classified (was classified by)*

*Man-Made Entity: depicts event (is depicted by)*

*(mode of depiction : Type)*

## E15 Identifier Assignment

Belongs to: Period\_Type  
Subclass of: Attribute Assignment

Scope note: This entity describes the action of assigning an identifier, such as a museum number, to an object. The interest in this action arises when objects are exchanged, and multiple identifiers are used, or the identification system of an organization is changed. In order to cover these cases, it is important to document by whom, when and for what purpose an identifier is assigned to a museum object.

### Properties:

identifications

*is called (identifies): Period Appellation*

classifications

*has type (is type of): Type*

active participants

*carried out by (performed): Actor*

*(in the role of: Type)*

passive participants

**registers (registered by): Physical Object**

*used object (was used for): Physical Object*

*(mode of use: String)*

attributions

**assigns (is assigned by): Object Identifier**

**deassigns (is deassigned by): Object Identifier**

motivations

*was intended use of (was made for): Man-Made Object*

*(mode of use: String)*

*had specific purpose (was purpose of): Activity*

*had as general purpose (was purpose of): Type*

spatial definitions

*took place at (witnessed): Place*

spatial definitions, short cut

*took place on or within (witnessed): Physical Object*

temporal definitions

*has time-span (is time-span of): Time-Span*

structures

*consists of (forms part of): Period*

*falls within (contains): Period*

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Period : consists of (forms part of)*

*Period : falls within (contains)*

*Activity: had specific purpose (was purpose of)*

*Type Assignment: classified (was classified by)*

*Man-Made Entity: depicts event (is depicted by)*

*(mode of depiction : Type)*

## E16 Measurement

Belongs to: Period\_Type  
Subclass of: Attribute Assignment

Scope note: This entity describes actions of measuring physical properties by counting or use of some tool, whether by simple yardstick or complex radiation detection device. The interest is in the method and care applied, in order to decide afterwards on the reliability of the result. For properties which may change value over time, such as length, due to shrinkage, the date is of direct relevance as well. Details of methods and devices are best handled as free text, whereas basic methods such as "C14" should be encoded in the type field.

### Properties:

identifications

*is called (identifies): Period Appellation*

classifications

*has type (is type of): Type*

active participants

*carried out by (performed): Actor  
(in the role of: Type)*

passive participants

**measured (was measured): Physical Object**

*used object (was used for): Physical Object  
(mode of use: String)*

attributions

**observed dimension (was observed): Dimension**

motivations

*...was intended use of (was made for): Man-Made Object  
(mode of use: String)*

*had specific purpose (was purpose of): Activity*

*had as general purpose (was purpose of): Type*

spatial definitions

*took place at (witnessed): Place*

spatial definitions, short cut

*took place on or within (witnessed): Physical Object*

temporal definitions

*has time-span (is time-span of): Time-Span*

structures

*consists of (forms part of): Period*

*falls within (contains): Period*

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Period : consists of (forms part of)*

*Period : falls within (contains)*

*Activity: had specific purpose (was purpose of)*

*Type Assignment: classified (was classified by)*

*Man-Made Entity: depicts event (is depicted by)*

*(mode of depiction : Type)*



## E17 Type Assignment

Belongs to: Period\_Type  
Subclass of: Attribute Assignment

Scope note: This entity describes the act of scientifically classifying some entity, an object, a work, an action or whatever. The value of classification depends critically on general and personal knowledge and the scientific system used. Therefore the interest lies in the author and date.

### Properties:

identifications

*is called (identifies): Period Appellation*

classifications

*has type (is type of): Type*

active participants

*carried out by (performed): Actor*

*(in the role of : Type)*

passive participants

**classified (was classified by): CIDOC Entity**

*used object (was used for): Physical Object*

*(mode of use: String)*

attributions

**assigned (was assigned by): Type**

motivations

*was intended use of (was made for): Man-Made Object*

*(mode of use: String)*

*had specific purpose (was purpose of): Activity*

*had as general purpose (was purpose of): Type*

spatial definitions

*took place at (witnessed): Place*

spatial definitions, short cut

*took place on or within (witnessed): Physical Object*

temporal definitions

*has time-span (is time-span of): Time-Span*

structures

*consists of (forms part of): Period*

*falls within (contains): Period*

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Period : consists of (forms part of)*

*Period : falls within (contains)*

*Activity: had specific purpose (was purpose of)*

*Type Assignment: classified (was classified by)*

*Man-Made Entity: depicts event (is depicted by)*

*(mode of depiction : Type)*

## Object Hierarchy

All entities in this hierarchy are instances of the metaclass “Object\_Type”. Two submetaclasses are defined, the “Physical\_Object\_Type” for the hierarchy of the “Physical Objects”, the kinds of things which have weight, are created once and can be destroyed, and the “Concept\_Type” for the “Concepts”, the intellectual or other products which are created once, and can exist on multiple carriers, and hence can rather be forgotten or lost than destroyed.

**Physical Objects:**

## E18 Physical Entity

Belongs to: Physical\_Object\_Type  
Subclass of: CIDOC Entity  
Superclass of: Physical Object  
Man-Made Entity  
Physical Feature

Scope Note: Physical entity is an abstract notion that groups all physical objects, man made and natural, as well as physical features of objects, such as holes. We use the term 'feature' to refer to anything of a material nature, such as scratches, holes, rivers, and stains, which it would be strange to refer to as 'objects'.

### Properties:

classifications

*has type (is type of): Type*

physical status, short cut

**has dimension (is dimension of): Dimension**

**has condition (condition of): Condition State**

structures

**consists of (is incorporated in): Material**

other descriptions

*has note: String*

### The entity is referenced by:

Man-Made Entity: depicts object (is depicted by)  
(mode of depiction: Type)

### The entity inherits references :

*Type Assignment: classified (was classified by)*

## E19 Physical Object

Belongs to: Physical\_Object\_Type  
Subclass of: Physical Entity  
Superclass of: Biological Object  
Man-Made Object

Scope note: An discrete, real item of material nature which constitutes a unit for documentation. The decision as to what constitutes a complete item, rather than parts or components, may be purely administrative.

Examples : John Smith, Aphrodite of Milos, the Palace of Knossos, the Cullinan diamond, Apollo 13 a the time of launch.

### Properties:

identifications, short cut

**is identified by (identifies): Object Identifier**

identifications

**has title (is title of): Title**

**(has type : Type)**

**preferred identifier is (is preferred identifier of): Object Identifier**

classifications

*has type (is type of): Type*

legal status

**is subject to (applies to): Right**

legal status, short cut

**right held by (owns rights to): Actor**

**(has type: Type)**

**(has note: String)**

**has former/current keeper (is former/current keeper of) : Actor**

**has current keeper (is former/current keeper of) : Actor**

**has former/current owner (is former/current owner of): Actor**

**has current owner (is current owner of): Actor**

physical status, short cut

*has dimension (is dimension of): Dimension*

*has condition (condition of): Condition State*

locations, short cut

**has former/current location (is former/current location of) : Place**

**has current permanent location (is current permanent location of): Place**

**has current location (currently holds) : Place**

structures

**bears feature (is found on): Physical Feature**

**has number of parts: Number**

**is composed of (forms part of): Physical Object**

**has section definition (defines section): Section Definition**

*consists of (is incorporated in): Material*

structures, short cut

**has section (is located on or within): Place**

other descriptions

**had as general use (was use of): Type**

*has note: String*

### The entity is referenced by:

Period: took place on or within (witnessed)

Destruction: destroyed (was destroyed by)  
Activity: used object (was used for)  
(mode of use: String)  
Acquisition: transferred title of (changed ownership by)  
Move: moved (moved by)  
Transfer of Custody: transferred custody of (custody changed by)  
Condition Assessment: concerns (assessed by)  
Identifier Assignment: registers (registered by)  
Measurement: measured (was measured)  
Physical Object: is composed of (forms part of)  
Document: refers to (is referred to by)

**The entity inherits references :**

*Type Assignment: classified (was classified by)*  
*Man-Made Entity: depicts object (is depicted by)*  
(mode of depiction: Type)

## E20 Biological Object

Belongs to: Physical\_Object\_Type  
Subclass of: Physical Object  
Superclass of: Person

Scope note: An individual, real item of material nature, which lives, has lived, or is a natural products of living organisms. Artificial objects which incorporate biological elements, such as Victorian butterfly frames, can be classified as both natural and man-made objects.

Examples : Me, Tut-Ankh-Amun, Boukephalas.

### Properties:

identifications, short cut

*is identified by (identifies): Object Identifier*

identifications

*has title (is title of): Title*

*(has type : Type)*

*preferred identifier is (is preferred identifier of): Object Identifier*

classifications

*has type (is type of): Type*

legal status

*is subject to (applies to): Right*

legal status, short cut

*right held by (owns rights to): Actor*

*(has type: Type)*

*(has note: String)*

*has former/current keeper (is former/current keeper of) : Actor*

*has current keeper (is former/current keeper of) : Actor*

*has former/current owner (is former/current owner of): Actor*

*has current owner (is current owner of): Actor*

physical status, short cut

*has dimension (is dimension of): Dimension*

*has condition (condition of): Condition State*

locations, short cut

*has former/current location (is former/current location of) : Place*

*has current permanent location (is current permanent location of): Place*

*has current location (currently holds) : Place*

structures

*bears feature (is found on): Physical Feature*

*has number of parts: Number*

*is composed of (forms part of): Physical Object*

*has section definition (defines section): Section Definition*

*consists of (is incorporated in): Material*

structures, short cut

*has section (is located on or within): Place*

other descriptions

*had as general use (was use of): Type*

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Period: took place on or within (witnessed)*

*Destruction: destroyed (was destroyed by)*  
*Activity: used object (was used for)*  
*(mode of use: String)*  
*Acquisition: transferred title of (changed ownership by)*  
*Move: moved (moved by)*  
*Transfer of Custody: transferred custody of (custody changed by)*  
*Condition Assessment: concerns (assessed by)*  
*Identifier Assignment: registers (registered by)*  
*Measurement: measured (was measured)*  
*Type Assignment: classified (was classified by)*  
*Physical Object: is composed of (forms part of)*  
*Man-Made Entity: depicts object (is depicted by)*  
*(mode of depiction: Type)*  
*Document: refers to (is referred to by)*



## E21 Person

Belongs to: Actor\_Type  
Physical\_Object\_Type  
Subclass of: Biological Object  
Actor

Scope note: A real person, who lives or is assumed to have lived.

Examples : John Smith, Tut-Ankh-Amun.

Legendary figures, such as Ulysses and King Arthur, who may have existed, fall into this class if the documentation refers to them as historical figures. In cases where doubt exists as to whether several persons are in fact identical, multiple instances can be created and linked to indicate their relationship.

### Properties:

identifications, short cut

*is identified by (identifies): Object Identifier*

identifications

*has title (is title of): Title*

*(has type : Type)*

*preferred identifier is (is preferred identifier of): Object Identifier*

classifications

*has type (is type of): Type*

legal status

*is subject to (applies to): Right*

legal status, short cut

*right held by (owns rights to): Actor*

*(has type: Type)*

*(has note: String)*

*has former/current keeper (is former/current keeper of) : Actor*

*has current keeper (is former/current keeper of) : Actor*

*has former/current owner (is former/current owner of): Actor*

*has current owner (is current owner of): Actor*

physical status, short cut

*has dimension (is dimension of): Dimension*

*has condition (condition of): Condition State*

locations, short cut

*has former/current location (is former/current location of) : Place*

*has current permanent location (is current permanent location of): Place*

*has current location (currently holds) : Place*

structures

*bears feature (is found on): Physical Feature*

*has number of parts: Number*

*is composed of (forms part of): Physical Object*

*has section definition (defines section): Section Definition*

*consists of (is incorporated in): Material*

structures, short cut

*has section (is located on or within): Place*

other descriptions

**is member of (has members): Legal Body**

*had as general use (was use of): Type*

*possesses (is possessed by): Right*

*has contact points (provides access to): Contact Point*

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Period: took place on or within (witnessed)*

*Destruction: destroyed (was destroyed by)*

*Activity: used object (was used for)*

*(mode of use: String)*

*Activity: carried out by (performed)*

*(in the role of : Type)*

*Acquisition: transferred title of (changed ownership by)*

*Acquisition: transferred title to (acquired title of)*

*Acquisition: transferred title from (surrendered title of)*

*Move: moved (moved by)*

*Transfer of Custody: transferred custody of (custody changed by)*

*Transfer of Custody: custody surrendered by (surrendered custody)*

*Transfer of Custody: custody received by (received custody)*

*Condition Assessment: concerns (assessed by)*

*Identifier Assignment: registers (registered by)*

*Measurement: measured (was measured)*

*Type Assignment: classified (was classified by)*

*Physical Object: is composed of (forms part of)*

*Physical Object: right held by (owns rights to)*

*(has type : Type)*

*(has note : String)*

*Physical Object: has former/current keeper (is former/current keeper of)*

*Physical Object: has current keeper (is former/current keeper of)*

*Physical Object: has former/current owner (is former/current owner of)*

*Physical Object: has current owner (is current owner of)*

*Man-Made Entity: depicts object (is depicted by)*

*(mode of depiction: Type)*

*Document: refers to (is referred to by)*

## E22 Man-Made Object

Belongs to: Physical\_Object\_Type  
Subclass of: Physical Object  
Man-Made Entity  
Superclass of: Iconographic Object

Scope note: An discrete real item of material nature, which is an artifact of technological actions.

Example : My car, chassis no. AMT-9566-XXX9384,  
The Portland Vase,  
The Colloseum, The Parthenon.

### Properties:

identifications, short cut

*is identified by (identifies): Object Identifier*

identifications

*has title (is title of): Title*

*(has type : Type)*

*preferred identifier is (is preferred identifier of): Object Identifier*

classifications

*has type (is type of): Type*

legal status

*is subject to (applies to): Right*

legal status, short cut

*right held by (owns rights to): Actor*

*(has type: Type)*

*(has note: String)*

*has former/current keeper (is former/current keeper of) : Actor*

*has current keeper (is former/current keeper of) : Actor*

*has former/current owner (is former/current owner of): Actor*

*has current owner (is current owner of): Actor*

intellectual contents

*depicts concept (is depicted by): Type*

*(mode of depiction : Type)*

*depicts event (is depicted by): Event*

*(mode of depiction : Type)*

*depicts object (is depicted by): Physical Entity*

*(mode of depiction : Type)*

physical status, short cut

*has dimension (is dimension of): Dimension*

*has condition (condition of): Condition State*

locations, short cut

*has former/current location (is former/current location of) : Place*

*has current permanent location (is current permanent location of): Place*

*has current location (currently holds) : Place*

structures

*bears feature (is found on): Physical Feature*

*has number of parts: Number*

*is composed of (forms part of): Physical Object*

*shows visual item (is shown by): Visual Item*

*has section definition (defines section): Section Definition*

*consists of (is incorporated in): Material*

structures, short cut

*has section (is located on or within): Place*  
other descriptions

**was intended for (was intention of): Type**

*had as general use (was use of): Type*

*has note: String*

**The entity is referenced by:**

Activity: was intended use of (was made for)

(mode of use: String)

**The entity inherits references :**

*Period: took place on or within (witnessed)*

*Destruction: destroyed (was destroyed by)*

*Activity: used object (was used for)*

(mode of use: String)

*Acquisition: transferred title of (changed ownership by)*

*Move: moved (moved by)*

*Transfer of Custody: transferred custody of (custody changed by)*

*Modification: has produced (was produced by)*

*Condition Assessment: concerns (assessed by)*

*Identifier Assignment: registers (registered by)*

*Measurement: measured (was measured)*

*Type Assignment: classified (was classified by)*

*Physical Object: is composed of (forms part of)*

*Man-Made Entity: depicts object (is depicted by)*

(mode of depiction: Type)

*Document: refers to (is referred to by)*

## E23 Iconographic Object

(former E22, former E24)

Belongs to: Physical\_Object\_Type  
Subclass of: Man-Made Object  
Conceptual Object

Scope note: This entity comprises objects which are designed primarily or in addition to another functionality to represent or depict something in an optical manner, be it concrete or abstract. Examples: Paintings, Sculpture, a vase in form of a head, a decoration on a medieval gun.

This entity has a certain pragmatic value in the fine arts since it conveniently groups together objects such as paintings, drawings, watercolours and other similar objects. From a philosophical point of view, representation is an 'intentional' act. Natural objects may resemble other objects by chance but they can represent only as a result of intervention by some fairly sophisticated semiotic arrangements.

### Properties:

identifications, short cut

*is identified by (identifies): Object Identifier*

identifications

*has title (is title of): Title*

*(has type : Type)*

*preferred identifier is (is preferred identifier of): Object Identifier*

classifications

*has type (is type of): Type*

legal status

*is subject to (applies to): Right*

legal status, short cut

*right held by (owns rights to): Actor*

*(has type: Type)*

*(has note: String)*

*has former/current keeper (is former/current keeper of) : Actor*

*has current keeper (is former/current keeper of) : Actor*

*has former/current owner (is former/current owner of): Actor*

*has current owner (is current owner of): Actor*

intellectual contents

*depicts concept (is depicted by): Type*

*(mode of depiction : Type)*

*depicts event (is depicted by): Event*

*(mode of depiction : Type)*

*depicts object (is depicted by): Physical Entity*

*(mode of depiction : Type)*

physical status, short cut

*has dimension (is dimension of): Dimension*

*has condition (condition of): Condition State*

locations, short cut

*has former/current location (is former/current location of) : Place*

*has current permanent location (is current permanent location of): Place*

*has current location (currently holds) : Place*

structures

*bears feature (is found on): Physical Feature*

*has number of parts: Number*

*shows visual item (is shown by): Visual Item*

*is composed of (forms part of): Physical Object*  
*has section definition (defines section): Section Definition*  
*consists of (is incorporated in): Material*  
structures, short cut  
*has section (is located on or within): Place*  
other descriptions  
*was intended for (was intention of): Type*  
*had as general use (was use of): Type*  
*has note: String*  
*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Period: took place on or within (witnessed)*  
*Destruction: destroyed (was destroyed by)*  
*Activity: used object (was used for)*  
*(mode of use: String)*  
*Activity: was intended use of (was made for)*  
*(mode of use: String)*  
*Acquisition: transferred title of (changed ownership by)*  
*Move: moved (moved by)*  
*Transfer of Custody: transferred custody of (custody changed by)*  
*Modification: has produced (was produced by)*  
*Condition Assessment: concerns (assessed by)*  
*Identifier Assignment: registers (registered by)*  
*Measurement: measured (was measured)*  
*Type Assignment: classified (was classified by)*  
*Physical Object: is composed of (forms part of)*  
*Man-Made Entity: depicts object (is depicted by)*  
*(mode of depiction: Type)*  
*Document: refers to (is referred to by)*

## E24 Man-Made Entity

Belongs to: Physical\_Object\_Type  
Subclass of: Physical Entity  
Superclass of: Man-Made Object  
Man-Made Feature

Scope Note: Man-made entity is a general class that groups man made objects and features. The distinction between 'objects' and 'features' is useful since it avoids referring to things like holes and texture as objects. Features and objects share many common characteristics however, hence the need for a general class of man-made things.

### Properties:

classifications

*has type (is type of): Type*

intellectual contents

**depicts object (is depicted by): Physical Entity**  
(mode of depiction : Type)

**depicts event (is depicted by): Event**  
(mode of depiction : Type)

**depicts concept (is depicted by): Type**  
(mode of depiction : Type)

physical status, short cut

*has dimension (is dimension of): Dimension*

*has condition (condition of): Condition State*

structures

**shows visual item (is shown by): Visual Item**

*consists of (is incorporated in): Material*

other descriptions

*has note: String*

### The entity is referenced by:

Modification: has produced (was produced by)

### The entity inherits references :

*Type Assignment: classified (was classified by)*

*Man-Made Entity: depicts object (is depicted by)*  
(mode of depiction: Type)

## E25 Man-Made Feature

Belongs to: Physical\_Object\_Type  
Subclass of: Man-Made Entity  
Physical Feature

Scope Note: Man made features are those physical features which result from human intervention. Cf. E27 Physical Feature.

### Properties:

classifications

*has type (is type of): Type*

intellectual contents

*depicts concept (is depicted by): Type*  
*(mode of depiction : Type)*

*depicts event (is depicted by): Event*  
*(mode of depiction : Type)*

*depicts object (is depicted by): Physical Entity*  
*(mode of depiction : Type)*

physical status, short cut

*has dimension (is dimension of): Dimension*

*has condition (condition of): Condition State*

structures

*shows visual item (is shown by): Visual Item*

*consists of (is incorporated in): Material*

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Modification: has produced (was produced by)*

*Type Assignment: classified (was classified by)*

*Physical Object: bears feature (is found on)*

*Man-Made Entity: depicts object (is depicted by)*  
*(mode of depiction: Type)*



## E26 Physical Feature

Belongs to: Physical\_Object\_Type

Subclass of: Physical Entity

Superclass of: Man-Made Feature,  
Site

Scope Note: This class was introduced in order to avoid the counter-intuitive sense of referring to holes and similar features of objects as physical objects. Features are logically or physically attached to a particular physical object, and they share many of the attributes of physical objects - they can be measured and dated, and we can sometimes say who was responsible for them. However, you can't pick up a hole and put it in your pocket - Yellow Submarine notwithstanding. Physical feature groups together all features of physical objects. Cf. Man-made features for the results of human intervention.

### Properties:

classifications

*has type (is type of): Type*

physical status, short cut

*has dimension (is dimension of): Dimension*

*has condition (condition of): Condition State*

structures

*consists of (is incorporated in): Material*

other descriptions

*has note: String*

### The entity is referenced by:

Physical Object: bears feature (is found on)

### The entity inherits references :

*Type Assignment: classified (was classified by)*

*Man-Made Entity: depicts object (is depicted by)*

*(mode of depiction: Type)*

## E27 Site

Belongs to: Physical\_Object\_Type  
Subclass of: Physical\_Feature  
Scope Note: A site is a recognisable place that can be represented by an Iconographic object, such as a photograph, painting or map. A site is composed of relatively immobile material items and features in a particular configuration at a particular location.

### Properties:

classifications

*has type (is type of): Type*

physical status, short cut

*has dimension (is dimension of): Dimension*

*has condition (condition of): Condition State*  
structures

*consists of (is incorporated in): Material*

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Type Assignment: classified (was classified by)*

*Physical Object: bears feature (is found on)*

*Man-Made Entity: depicts object (is depicted by)*  
*(mode of depiction: Type)*



## **The Conceptual Objects:**

All object types of double nature, physical and conceptual, are already listed under the physical object types.

## E28 Conceptual Object

Belongs to: Concept\_Type  
Subclass of: CIDOC Entity  
Superclass of: Design/Procedure  
Right  
Document  
Linguistic Object  
Visual Item  
Iconographic Object

Scope note: This entity is the attempt to group the non-material products of our minds, and specifically to allow for reasoning about their identity, circumstances of creation and historical implications. Characteristically, these things are created, invented or thought, and somehow documented or communicated between persons. Conceptual objects need not have a particular carrier, but may be found on several different carriers, such as paper, electronic signals, marks, audio media, paintings, photos, human memory, etc. They cannot be destroyed as long as they exist on at least one carrier or in memory. Examples include texts, maps, photos, music, sounds, fairy tales, signs, patterns, symbols, plans, rights, and rules. A greater distinction could be made between products having a clear identity, such as a specific text, or photographs, and the ideas and concepts shared and traded by groups of people.

### Properties:

classifications

*has type (is type of): Type*

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Type Assignment: classified (was classified by)*

## E29 Design or Procedure

Belongs to: Concept\_Type  
Subclass of: Conceptual Object

Scope note: An established plan for execution of a series or group of technological actions, which result in a physical change of state in certain pieces of material and/or any physical object.

Examples: All elements of the AAT "processes and techniques" facets., a plan for a building, conservation procedures, complex editing techniques, flint napping, etc..

### Properties:

classifications

*has type (is type of): Type*

other descriptions

**usually employs (is usually employed by): Material**

**associated with: Design or Procedure**

*has note: String*

### The entity is referenced by:

Modification: used specific technique (was used by)

Design or Procedure: associated with

### The entity inherits references :

*Type Assignment: classified (was classified by)*

## E30 Right

Belongs to      Concept\_Type  
Subclass of     Conceptual Object  
Superclass of  
Scope Note:    Rights are used in the sense of legal privileges such as the right of property, reproduction rights, etc.

### Properties:

classifications  
    *has type (is type of): Type*  
other descriptions  
    *has note: String*

### The entity is referenced by:

Physical Object: is subject to (applies to)  
Actor: possesses (is possessed by)

### The entity inherits references :

*Type Assignment: classified (was classified by)*

## E31 Document

Belongs to: Concept\_Type  
Subclass of: Conceptual Object  
Superclass of: Authority Document

Scope note: This entity comprises items which make propositions about reality, whether intentionally or by chance. The means may be text, graphics, images, sound, video. Examples: Books on history, maps, photos.

### Properties:

classifications

*has type (is type of): Type*

intellectual contents

**refers to (is referred to by): Physical Object**

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Type Assignment: classified (was classified by)*



## E32 Authority Document

Belongs to: Concept\_Type  
Subclass of: Document

Scope note: This entity describes encyclopedia, thesauri, authority lists: all documents which define terminology or conceptual systems for consistent use.

e.g. Webster's, Getty Art and Architecture Thesaurus, MDA Archaeological Objects Thesaurus, This Document, etc.

### Properties:

classifications

*has type (is type of): Type*

intellectual contents

*refers to (is referred to by): Physical Object*

structures

**contains (is part of): Type**

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Type Assignment: classified (was classified by)*

## E33 Linguistic Object

Belongs to: Concept\_Type  
Subclass of: Conceptual Object  
Superclass of: Inscription  
Title

Scope note: This entity comprises texts of all kind, be they written or recorded speech, in any physical language.

### Properties:

classifications

*has type (is type of): Type*

**has language (is language of): Language**

intellectual contents

**has translation (is translation of): Linguistic Object**

other descriptions

*has note: String*

**The entity is only referenced by itself.**

**The entity inherits references :**

*Type Assignment: classified (was classified by)*

## E34 Inscription

Belongs to: Concept\_Type  
Subclass of: Linguistic Object  
Mark

Scope note: This entity comprises texts attached to a physical object. The attributes of the entity could be extended to include alphabet used, rather than documenting these features in the note. NB The entity does *not* describe idiosyncratic characteristics of individual physical embodiments of an inscription but the underlying prototype, e.g. Dürer's signature.

### Properties:

classifications

*has type (is type of): Type*

intellectual contents

*has translation (is translation of): Linguistic Object*

other descriptions

*has language (is language of): Language*

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Type Assignment: classified (was classified by)*

*Man-Made Entity: shows visual item (is shown by)*

*Linguistic Object: has translation (is translation of)*

## E35 Title

Belongs to: Concept\_Type  
Appellation\_Type

Subclass of: Linguistic Object  
Appellation

Scope note: This entity comprises the short pieces of texts that are used, by the creator or tradition, to characterize or identify a work, often alluding to its subject. The work may be linguistic, musical, iconographic or other.

Examples: Giaconda, La Joconde, Mona Lisa, Die Dreigroschenoper, La Pie, La Marseillaise.

### Properties:

classifications

*has type (is type of): Type*

*has language (is language of): Language*

intellectual contents

*has translation (is translation of): Linguistic Object*

other descriptions

*has note: String*

### The entity is referenced by:

Physical Object: has title (is title of)  
(has type : Type)

### The entity inherits references :

*Type Assignment: classified (was classified by)*

*Linguistic Object: has translation (is translation of)*

## E36 Visual Item

Belongs to: Concept\_Type  
Subclass of: Conceptual Object  
Superclass of: Mark  
Image

Scope Note: Visual Items refers to the intellectual or conceptual aspect of recognizable marks and images. When we identify a trade mark, say the ICOM logo, we are generally prepared to say that the same logo is used on any number of publications. The size, orientation and colour may change, but something uniquely identifiable remains. The same can be said of images which are reproduced many times. What these examples highlight is that visual items are independent of their physical support. The visual items class provides a means of identifying and linking together objects which carry the same visual symbols, marks, images or whatever.

### Properties:

classifications  
*has type (is type of): Type*  
other descriptions  
*has note: String*

### The entity is referenced by:

Man-Made Entity: shows visual item (is shown by)

### The entity inherits references :

*Type Assignment: classified (was classified by)*

## E37 Mark

Belongs to: Concept\_Type  
Subclass of: Visual Item  
Superclass of: Inscription

### Scope note:

Martin Doerr: Symbols, signs, signatures or short texts applied to physical objects by arbitrary techniques in order to indicate the creator, owner, dedications, purpose, etc.

Examples: Minoan double axe mark, ©, ☺, STOP! .

This entity specifically does not include marks such as scratches, which have no semantic significance. These can be documented as physical features.

### Properties:

classifications

*has type (is type of): Type*

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Type Assignment: classified (was classified by)*

*Man-Made Entity: shows visual item (is shown by)*

## E38 Image

Belongs to: Concept\_Type  
Subclass of: Visual Item

Scope note: This entity refers to distributions of form and colour which may be found on surfaces such as photos, paintings, prints, and sculptures etc. or directly on electronic media. The degree to which variations in the distribution of form and colour are tolerated depends on a given purpose.

The 'depiction' links between objects and depicted subjects may be regarded as short cuts of an intermediate image node capturing the optical features of the depiction. Cf E25

Examples: The front side of all 20 Frs notes.

### Properties:

classifications

*has type (is type of): Type*

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Type Assignment: classified (was classified by)*

*Man-Made Entity: shows visual item (is shown by)*

## **Actors Hierarchy**

All entities in this hierarchy are instances of the metaclass “Actor\_Type”.

Until now, only one subclass is defined, the physical person. As this has a physical nature as well, it is listed already under physical objects (In a passive sense, as patient, mummy etc.). Here in the future, all kinds of social organizations should be characterized.



## E39 Actor

Belongs to: Actor\_Type  
Subclass of: CIDOC Entity  
Superclass of: Legal Body  
Person

Scope note: People, either individuals or a groups of persons, or organisations, under the aspect of their role in activities. E.g. The ISO central committee, the Benaki Museum in Athens, Greece, the Bauhaus in Weimar, Germany, Monet, Me.

An informal group, such as a school of artists, may acquire an identity and perform actions without ever becoming an officially established legal entity. Such cases should be documented as instances of Actors, using an appropriate sub type.

### Properties:

classifications

*has type (is type of): Type*

other descriptions

**possesses (is possessed by): Right**

**has contact points (provides access to): Contact Point**

*has note: String*

### The entity is referenced by:

Activity: carried out by (performed)

(in the role of : Type)

Acquisition: transferred title to (acquired title of)

Acquisition: transferred title from (surrendered title of)

Transfer of Custody: custody surrendered by (surrendered custody)

Transfer of Custody: custody received by (received custody)

Physical Object: right held by (owns rights to)

(has type : Type)

(has note : String)

Physical Object: has former/current keeper (is former/current keeper of)

Physical Object: has current keeper (is former/current keeper of)

Physical Object: has former/current owner (is former/current owner of)

Physical Object: has current owner (is current owner of)

### The entity inherits references :

*Type Assignment: classified (was classified by)*

## E40 Legal Body

Belongs to: Actor\_Type  
Subclass of: Actor  
Scope Note:: A legal body is any institution or group of people which can act collectively as an agent i.e. it can perform actions, own property, create or destroy and be held responsible for its actions. The term 'personne morale' is often used in French.

Examples: MDA (Europe) Ltd., GreenPeace.

### Properties:

classifications

*has type (is type of): Type*

structures

**consists of (belongs to): Legal Body**

other descriptions

*possesses (is possessed by): Right*

*has contact points (provides access to): Contact Point*

*has note: String*

### The entity is referenced by:

Person: is member of (has members)  
and itself.

### The entity inherits references :

*Activity: carried out by (performed)*

*(in the role of : Type)*

*Acquisition: transferred title to (acquired title of)*

*Acquisition: transferred title from (surrendered title of)*

*Transfer of Custody: custody surrendered by (surrendered custody)*

*Transfer of Custody: custody received by (received custody)*

*Type Assignment: classified (was classified by)*

*Physical Object: right held by (owns rights to)*

*(has type : Type)*

*(has note : String)*

*Physical Object: has former/current keeper (is former/current keeper of)*

*Physical Object: has current keeper (is former/current keeper of)*

*Physical Object: has former/current owner (is former/current owner of)*

*Physical Object: has current owner (is current owner of)*

### Person (repetition from under Biological Object)

Belongs to: Actor\_Type  
Physical\_Object\_Type  
Subclass of: Actor  
Biological Object

### *Properties (See under Biological Object)*

## **Appellations Hierarchy**

All entities in this hierarchy are instances of the metaclass “Appellation\_Type. This hierarchy is thought to capture all kinds of social or technical identifiers, names, numbers, codes etc. To which degree there is an overlap with conceptual objects should be discussed.

## E41 Appellation

Belongs to: Appellation\_Type

Subclass of: CIDOC Entity

Superclass of: Object Identifier

Period Appellation

Place Appellation

Time Appellation

Title

Scope note: This entity comprises all names in the proper sense. Codes or words, meaningless or meaningful, in the script of some group or encoding of an electronic system, used solely to identify a specific instance of some category within a certain context. These words do not identify the object by their meaning but by convention, tradition or agreement.

### Properties:

classifications

*has type (is type of): Type*

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Type Assignment: classified (was classified by)*

## E42 Object Identifier

Belongs to: Appellation\_Type  
Subclass of: Appellation

Scope note: Unique codes assigned to objects in order to identify them uniquely within the context of one or more organizations. Typically alphanumeric sequences.

examples: MM.GE.195, 13.45.1976, etc.

### Properties:

classifications

*has type (is type of): Type*

other descriptions

*has note: String*

### The entity is referenced by:

Identifier Assignment: assigns (is assigned by)

Identifier Assignment: deassigns (is deassigned by)

Physical Object: is identified by (identifies)

Physical Object: preferred identifier is (is preferred identifier of)

### The entity inherits references :

*Type Assignment: classified (was classified by)*

## E43 Period Appellation

Belongs to: Appellation\_Type  
Subclass of: Appellation

Scope note: Name of a period. E.g. "Ming Dynasty", MM1A, Middle Minoan I A. Middle Ages, Medieval period.

### Properties:

classifications

*has type (is type of): Type*

other descriptions

*has note: String*

### The entity is referenced by:

Period: is called (identifies)

### The entity inherits references :

*Type Assignment: classified (was classified by)*

## E44 Place Appellation

Belongs to: Appellation\_Type  
Subclass of: Appellation  
Superclass of: Address  
Section Definition  
Spatial Coordinates  
Place Name

Scope Note: A place appellation is any sort of identifier used to refer to a place. Place appellations may vary over time, and the same appellation may be used to refer to several places, either because of cultural shifts, or because things move around. These unstable aspects of place appellations are dealt with in the more general Appellation class. Place appellations can be extremely varied in form, postal addresses and spatial coordinates and parts of buildings can all be considered as place appellations.

Examples: Vienna, Wien, Aquae Sulis Minerva, Bath, Cambridge, “The Other Place”. “The City”.

### Properties:

classifications

*has type (is type of): Type*

other descriptions

*has note: String*

### The entity is referenced by:

Place: is identified by (identifies)

### The entity inherits references :

*Type Assignment: classified (was classified by)*

## E45 Address

Belongs to: Appellation\_Type

Subclass of: Place Appellation  
Contact Point

Scope Note: An address is generally a postal address used for mailing. An address can be considered both as the name of a place and as a contact point for an actor. This dual aspect is reflected in the multiple inheritance.

Example : 1-29-3 Otsuka, Bunkyo-ku,  
Tokyo, 121, Japan

### Properties:

classifications

*has type (is type of): Type*

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Type Assignment: classified (was classified by)*

*Actor: has contact points (provides access to)*

*Place: is identified by (identifies)*



## E46 Section Definition

Belongs to: Appellation\_Type

Subclass of: Place Appellation

Superclass of

Scope Note: section definition groups together names used to refer to parts of objects. The 'prow' of a boat, the 'frame' of the picture, the 'basement' of the building are all section definitions. The entity highlights the fact that parts of objects can be treated as locations. (cf. E53 Place) In answer to the question 'where is the signature?' one might reply 'on the lower left corner'.

Example: The entrance lobby to MDA House, Matthew's bedroom, the poop deck of H.M.S. Victory, the Venus de Milo's left buttock, "left inner side of the box".

### Properties:

classifications

*has type (is type of): Type*

other descriptions

*has note: String*

### The entity is referenced by:

Physical Object: has section definition (defines section)

### The entity inherits references :

*Type Assignment: classified (was classified by)*

*Place: is identified by (identifies)*

## E47 Spatial Coordinates

Belongs to: Appellation\_Type  
Subclass of: Place Appellation  
Scope Note: Coordinates are a specific form of place appellation, that is, a means of referring to a particular place. (cf E53 place) Coordinates are not restricted to longitude, latitude and altitude. Any regular system of reference that maps onto a physical object can be considered as coordinates.

Examples: 6°5'29"N 45°12'13"W,  
Black queen's bishop 4.

### Properties:

classifications

*has type (is type of): Type*

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Type Assignment: classified (was classified by)*

*Place: is identified by (identifies)*

## E48 Place Name

Belongs to: Appellation\_Type  
Subclass of: Place Appellation  
Scope Note: A place name is a particular and common form of place appellation. 'Greece', 'Athens', 'Geneva', are all place names. Place names may shift their meaning over time. Cf Place appellations.

### Properties:

classifications

*has type (is type of): Type*

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Type Assignment: classified (was classified by)*

*Place: is identified by (identifies)*

## E49 Time Appellation

Belongs to: Appellation\_Type  
Subclass of: Appellation  
Superclass of: Date

Scope Note: Time appellation groups all forms of names or codes, such as historical periods, and dates, which are used to refer to specific time frames. Time appellations may vary in their degree of precision, and they may be relative to other time frames, 'prehistoric' for example. These aspects of time appellations are dealt with in the more general 'appellations' class.

In contrast to cultural periods, proper names are seldom given to particular Time-spans, hence it was decided to exclude a specific entity 'Time-spans name'. Time-spans are often referred to in association with cultural periods, and events e.g. 'the duration of Ming Dynasty'. cf. E52 Time span.

Examples: Meiji, 1<sup>st</sup> half of the XX century, Quaternary, 1215 Hegira. Last century.

### Properties:

classifications

*has type (is type of): Type*

other descriptions

*has note: String*

### The entity is referenced by:

Time-Span: is identified by (identifies)

### The entity inherits references :

*Type Assignment: classified (was classified by)*

## E50 Date

Belongs to: Appellation\_Type  
Subclass of: Time Appellation  
Superclass of:

Scope Note: Dates are a specific form of time appellation. Dates may vary in their degree of precision. E.g. 1900, 4-4-1959, 19640604.

### Properties:

classifications

*has type (is type of): Type*

other descriptions

*has note: String*

**The entity is not referenced.**

**The entity inherits references :**

*Type Assignment: classified (was classified by)*

*Time-Span: is identified by (identifies)*

**Title** (Repetition from under Linguistic Object)

Belongs to: Concept\_Type  
Appellation\_Type  
Subclass of: Appellation  
Linguistic Object

***Properties: ( see under Linguistic Object)***

## **Appellation associated entities:**

## E51 Contact Point

(new)

Belongs to: Meta\_Entity  
Subclass of: CIDOC Entity  
Superclass of: Address  
Scope Note: This entity comprises identifiers used to communicate with Actors. Examples: E-mail addresses, telephone numbers, post office boxes, Fax numbers, etc. NB postal addresses can be considered both as place appellations and Contact Points.

### Properties:

classifications

*has type (is type of): Type*

other descriptions

*has note: String*

### The entity is referenced by:

Actor: has contact points (provides access to)

### The entity inherits references :

*Type Assignment: classified (was classified by)*

### Address (Repetition from under Place Appellation)

Belongs to: Appellation\_Type  
Subclass of: Contact Point  
Place Appellation

***Properties: ( see under Place Appellation)***

## Measures Hierarchy

All entities in this hierarchy are instances of the metaclass “Measure\_Type”. Three submetaclasses are defined, the “Time\_Type” for the hierarchy of determinators of a date range in any possible system (e.g. rules of Egyptian kings, Julian dates, C14 etc.), the “Location\_Type” for the determinators of areas in space, relative to the surface of the earth or other relevant methods, and the “Dimension\_Types” for all relative measures, as money, lengths, durations, degrees etc.



## E52 Time-Span

(former E36)

Belongs to: Time\_Type  
Subclass of: CIDOC Entity

Scope note: A determination of a range of dates or duration without any further connotations, to be used to confine periods, events, and any other phenomena valid for a certain time. A time appellation is a verbal form which refers to a time-span. The time-span itself is a temporal extent in the sense of Galilean physics. Different time-appellations may express the same time-span.

Examples : from 12-17-1993 to 12-8-1996, 14h30 – 16h22 4<sup>th</sup> July 1945, 9.30 am 1.1.1999 to 2.00 pm 1.1.1999, Duration of the Ming Dynasty.

### Properties:

identifications

**is identified by (identifies): Time-Appellation**

classifications

*has type (is type of): Type*

numerical values

**begins at: Time Primitive**

**begins at qualify: String**

**ends at: Time Primitive**

**ends at qualify: String**

structures

**consists of (forms part of): Time-Span**

**falls within (contains): Time-Span**

other descriptions

*has note: String*

### The entity is referenced by:

Temporal Entity: has time-span (is time-span of)  
and by itself

### The entity inherits references :

*Type Assignment: classified (was classified by)*

## E53 Place

Belongs to: Location\_Type  
Subclass of: CIDOC Entity

Scope note: This entity describes extents in space, in particular on the surface of the earth, in the pure sense of physics: independent from temporal phenomena and matter. Places are usually determined by reference to the position of “immobile” objects such as buildings, cities, mountains, and rivers. On a large time-scale however, these things are either not persistent or may actually move, with respect to each other. This motivates the search for a global or absolute system of reference.

However, relative references are more relevant in the context of cultural documentation and records of relative places tend to be more precise. In particular, we are often interested in position in relation to large objects, such as ships, which move. Any object can serve as a reference for place determination; therefore the model foresees the notion of a "section" of a physical object as a place determination of equal validity.

Matching between multiple reference systems is in principle possible for a given moment in time, but depends on the precision and completeness of the information available. However, the resolution of places to “absolute” coordinates is not, in general, necessary in cultural documentation systems, and absolute referencing may be dependent on the present state of global knowledge.

Example: the place at which Nelson died is known with reference to a large mobile object – H.M.S Victory. A resolution of this place in terms of absolute coordinates requires knowledge about the position of the vessel and the precise time of his death, either of which may be revised. Hence, documenting only an absolute reference effectively removes the possibility of recalculating. It is more relevant to preserve the *reasoning* behind an assumption than the result.

Hence a *place* can be determined by combining, one or more times, a frame of reference and a location with respect to this frame. These combinations are modelled by Place Appellation. (Instance of place are themselves nameless.)

Example: The place referred to by the “Fish collected at three miles north of the confluence of the Arve and the Rhone, or N W. (GPS)”, Here -> <-

### Properties:

identifications

**is identified by (identifies): Place Appellation**

classifications

*has type (is type of): Type*

structures

**consists of (forms part of): Place**

**falls within (contains): Place**

other descriptions

*has note: String*

### The entity is referenced by:

Period: took place at (witnessed)

Move: moved to (occupied)

Move: moved from (vacated)

Physical Object: has section (is located on or within)

Physical Object: has former/current location (is former/current location of)

Physical Object: has current permanent location (is current permanent location of)  
Physical Object: has current location (currently holds)  
and by itself

**The entity inherits references :**

*Type Assignment: classified (was classified by)*

## E54 Dimension

Belongs to: Measure\_Type  
Subclass of: CIDOC Entity

Scope note: This entity is an abstract class for properties that are measured by some calibrated means and result in numerical values,

Examples: currency: £26.00, length: 4 cm, diameter 26 mm, weight 150 lbs, density : 0.85 gm/cc, luminescence : 56 ISO lumens, tin content: 0.46 %, taille au garot : 5 hands, C14 date : 2460 years, etc.

### Properties:

classifications

*has type (is type of): Type*

numerical values

**value: Number**

**unit: Measurement Unit**

other descriptions

*has note: String*

### The entity is referenced by:

Measurement: observed dimension (was observed)

Physical Entity: has dimension (is dimension of)

### The entity inherits references:

*Type Assignment: classified (was classified by)*

## Types Hierarchy

All entities in this hierarchy are instances of the metaclass “Type\_Type”. This hierarchy does not belong to the CIDOC Entities in the proper sense, as its instances are names for aggregations, sets, or undefined masses of physical items or intellectual constructs. They are thought as elements of authority files on one side, on the other they are used to refer to entities of the Model or any refinement of it as data elements at appropriate points from within the Model in a consistent way. This implies, that the respective authorities must be compatible in structure with the Model. As a rule, every entity of the model gives rise to a “Type\_Type”, which are not listed here, as they are defined by rule. Only those types of types not generated by the rule are given explicitly:

## E55 Type

Belongs to: Type\_Type  
Superclass of: Language  
Material  
Measurement Unit  
Measurable (Observable)

Scope note: This entity captures the names of all entities in the model and any refinements of these entities which do not require further analysis of their formal properties, but which represent typological distinctions important to a given user group. The semantic interpretation of these subtypes is based on the agreement of specific groups. Instances of the Type entity have to be formally organized in thesauri, with scope notes, illustrations, etc. to clarify their meaning. In general, it is expected that different domains and cultural groups develop different thesauri in parallel. Consistent reasoning on the expansion of sub terms used in a thesaurus is possible insofar as it conforms to both the entities and the hierarchies of this Model.

Examples: Weight, length, depth are types of measurement. Portrait, sketch, animation could be types of depiction. Oral, written could be types of language. Excellent, good, poor could be types of condition state.

### The entity is referenced by:

CIDOC Entity: has type (is type of)  
Event: depicts event (is depicted by): mode of depiction  
Activity: had as general purpose (was purpose of)  
Modification: used general technique (was technique of)  
Type Assignment: assigned (was assigned by)  
Physical Entity: depicts object (is depicted by): mode of depiction  
Physical Object: had as general use (was use of)  
Man-Made Object: was intended for (was intention of)  
Man-Made Entity: depicts concept (is depicted by)  
Authority Document: contains (is part of)  
Actor: carried out by (performed): in the role of  
Actor: right held by (owns rights to):has type  
Title: has title (is title of): has type  
Type: depicts concept (is depicted by): mode of depiction

## E56 Language

Belongs to: Type\_Type  
Subclass of: Type

Scope note: This entity comprises the names identifying natural languages. Internationally used codes are recommended (ISO...). This type does not correspond to another explicit entity in the Model.  
Example: ISO language codes.

### The entity is referenced by:

Linguistic Object: has language (is language of)

### The entity inherits references :

*CIDOC Entity: has type (is type of)*  
*Event: depicts event (is depicted by): mode of depiction*  
*Activity: had as general purpose (was purpose of)*  
*Modification: used general technique (was technique of)*  
*Type Assignment: assigned (was assigned by)*  
*Physical Entity: depicts object (is depicted by): mode of depiction*  
*Physical Object: had as general use (was use of)*  
*Man-Made Object: was intended for (was intention of)*  
*Man-Made Entity: depicts concept (is depicted by)*  
*Authority Document: contains (is part of)*  
*Actor: carried out by (performed): in the role of*  
*Actor: right held by (owns rights to): has type*  
*Title: has title (is title of): has type*  
*Type: depicts concept (is depicted by): mode of depiction*

## E57 Material

Belongs to: Type\_Type  
Subclass of: Type

Scope note: This entity comprises the names used to identify materials. Internationally used codes and terminology are recommended. This type does not correspond to any other explicit entity in the Model, because materials do not have well-defined instances, especially after they are used. Discrete pieces of raw-materials kept in museums, such as bricks, sheets of fabric, pieces of metal, should be modelled separately just as other objects. Discrete used or processed pieces, such as the stones from Nefer Titi's temple, should be modelled as parts.

### The entity is referenced by:

Physical Entity: consists of (is incorporated in)  
Design or Procedure: usually employs (is usually employed by)

### The entity inherits references :

*CIDOC Entity: has type (is type of)*  
*Event: depicts event (is depicted by): mode of depiction*  
*Activity: had as general purpose (was purpose of)*  
*Modification: used general technique (was technique of)*  
*Type Assignment: assigned (was assigned by)*  
*Physical Entity: depicts object (is depicted by): mode of depiction*  
*Physical Object: had as general use (was use of)*  
*Man-Made Object: was intended for (was intention of)*  
*Man-Made Entity: depicts concept (is depicted by)*  
*Authority Document: contains (is part of)*  
*Actor: carried out by (performed): in the role of*  
*Actor: right held by (owns rights to): has type*  
*Title: has title (is title of): has type*  
*Type: depicts concept (is depicted by): mode of depiction*



## E58 Measurement Unit

Belongs to: Type\_Type  
Subclass of: Type  
Scope Note: This entity provides the authority list for all types of measurement units: feet, inches, centimeters, litres, lumens, etc.

### Properties:

classifications

*has type (is type of): Type*

other descriptions

*has note: String*

### The entity is referenced by:

Dimension: unit

### The entity inherits references :

*CIDOC Entity: has type (is type of)*

*Event: depicts event (is depicted by): mode of depiction*

*Activity: had as general purpose (was purpose of)*

*Modification: used general technique (was technique of)*

*Type Assignment: assigned (was assigned by)*

*Physical Entity: depicts object (is depicted by): mode of depiction*

*Physical Object: had as general use (was use of)*

*Man-Made Object: was intended for (was intention of)*

*Man-Made Entity: depicts concept (is depicted by)*

*Authority Document: contains (is part of)*

*Actor: carried out by (performed): in the role of*

*Actor: right held by (owns rights to): has type*

*Title: has title (is title of): has type*

*Type: depicts concept (is depicted by): mode of depiction*

**Other entities:**

## **E59 Primitive value**

Belongs to: Value\_Type

Scope Note: This entity is a container for primitive values used as documentation elements which are not further analysed. As such they are not considered as elements within our universe of discourse. No specific implementation recommendations are made.

**The entity is not referenced.**

## **E60 Number**

Belongs to: Value\_Type  
Subclass of: Primitive Value  
Superclass of:  
Scope Note: Integers, real or complex numbers.

### **The entity is referenced by:**

Physical Object: has number of parts  
Dimension: value

## **E61 Time Primitive**

Belongs to: Value  
Subclass of: Primitive Value  
Scope Note: This entity is a primitive value that should implement appropriate validation and interval logic for date ranges and precision relevant to cultural documentation. It is not further analysed in this model

### **The entity is referenced by:**

Time-Span: begins at  
Time-Span: ends at

## E62 String

Belongs to: Value  
Subclass of: Primitive Value  
Scope Note: This entity is a primitive value to be used for any kind of documentation which lacks formal structure defined within the model e.g. free text, bitmaps, vector graphics, etc.

### **The entity is referenced by:**

CIDOC Entity: has note  
Physical Object: right held by (owns rights to): has note  
Time-Span: begins at qualify  
Time-Span: ends at qualify

# APPENDIX

## Index of the links of the CIDOC CRM sorted alphabetic :

No	ID	Entity – Domain	Link Name	Entity - Range	ID
1	E17	Type Assignment	assigned (was assigned by)	Type	E55
2	E15	Identifier Assignment	assigns (is assigned by)	Object Identifier	E42
3	E29	Design or Procedure	associated with	Design or Procedure	E29
4	E19	Physical Object	bears feature (is found on)	Physical Feature	E26
5	E52	Time-Span	begins at	Time Primitive	E61
6	E52	Time-Span	begins at qualify	String	E62
7	E7	Activity	carried out by (performed) (in the role of : Type)	Actor	E39
8	E17	Type Assignment	classified (was classified by)	CIDOC Entity	E1
9	E14	Condition Assessment	concerns (assessed by)	Physical Object	E19
10	E40	Legal Body	consists of (belongs to)	Legal Body	E40
11	E52	Time-Span	consists of (forms part of)	Time-Span	E52
12	E53	Place	consists of (forms part of)	Place	E53
13	E3	Condition State	consists of (forms part of)	Condition State	E3
14	E4	Period	consists of (forms part of)	Period	E4
15	E18	Physical Entity	consists of (is incorporated in)	Material	E57
16	E32	Authority Document	contains (is part of)	Type	E55
17	E10	Transfer of Custody	<i>custody received by (received custody)</i>	<i>Actor</i>	E39
18	E10	Transfer of Custody	<i>custody surrendered by (surrendered custody)</i>	<i>Actor</i>	E39
19	E15	Identifier Assignment	deassigns (is deassigned by)	Object Identifier	E42
20	E24	Man-Made Entity	depicts concept (is depicted by) (mode of depiction : Type)	Type	E55
21	E24	Man-Made Entity	depicts event (is depicted by) (mode of depiction : Type)	Event	E5
<b>No</b>	<b>ID</b>	<b>Entity – Domain</b>	<b>Link Name</b>	<b>Entity - Range</b>	<b>ID</b>
22	E24	Man-Made Entity	depicts object (is depicted by) (mode of depiction : Type)	Physical Entity	E18
23	E6	Destruction	destroyed (was destroyed by)	Physical Object	E19
24	E52	Time-Span	ends at	Time Primitive	E61
25	E52	Time-Span	ends at qualify	String	E62

26	E52	Time-Span	falls within (contains)	Time-Span	E52
27	E53	Place	falls within (contains)	Place	E53
28	E3	Condition State	falls within (contains)	Condition State	E3
29	E4	Period	falls within (contains)	Period	E4
30	E7	Activity	had as general purpose (was purpose of)	Type	E55
31	E19	Physical Object	had as general use (was use of)	Type	E55
32	E7	Activity	had specific purpose (was purpose of)	Activity	E7
33	E18	Physical Entity	has condition (condition of)	Condition State	E3
34	E39	Actor	has contact points (provides access to)	Contact Point	E51
35	E19	Physical Object	has current keeper (is former/current keeper of)	Actor	E39
36	E19	Physical Object	has current location (currently holds)	Place	E53
37	E19	Physical Object	has current owner (is current owner of)	Actor	E39
38	E19	Physical Object	has current permanent location (is current permanent location of)	Place	E53
39	E18	Physical Entity	has dimension (is dimension of)	Dimension	E54
40	E19	Physical Object	has former /current keeper : (is former/current keeper of)	Actor	E39
41	E19	Physical Object	has former/current location (is former/current location of)	Place	E53
42	E19	Physical Object	has former/current owner (is former/current owner of)	Actor	E39
43	E14	Condition Assessment	has identified (identified by)	Condition State	E3
44	E33	Linguistic Object	has language (is language of)	Language	E56
45	E1	CIDOC Entity	has note	String	E62
46	E19	Physical Object	has number of parts	Number	E60
47	E11	Modification	has produced (was produced by)	Man-Made Entity	E24
48	E19	Physical Object	has section definition (defines section)	Section Definition	E46
49	E19	Physical Object	has section (is located on or within)	Place	E53
50	E2	Temporal Entity	has time-span (is time-span of)	Time-Span	E52
<b>No</b>	<b>ID</b>	<b>Entity – Domain</b>	<b>Link Name</b>	<b>Entity - Range</b>	<b>ID</b>
51	E19	Physical Object	has title (is title of) (has type : Type)	Title	E35
52	E33	Linguistic Object	has translation (is translation of)	Linguistic Object	E33
53	E1	CIDOC Entity	has type (is type of)	Type	E55
54	E4	Period	is called (identifies)	Period Appellation	E43
55	E19	Physical Object	is composed of (forms part of)	Physical Object	E19
56	E19	Physical Object	is identified by (identifies)	Object Identifier	E42
57	E53	Place	is identified by (identifies)	Place Appellation	E44
58	E52	Time-Span	is identified by (identifies)	Time-Appellation	E49
59	E21	Person	is member of (has members)	Legal Body	E40
60	E19	Physical Object	is subject to (applies to)	Right	E30



61	E16	Measurement	measured (was measured)	Physical Object	E19
62	E9	Move	<i>moved from (vacated)</i>	<i>Place</i>	E53
63	E9	Move	moved (moved by)	Physical Object	E19
64	E9	Move	<i>moved to (occupied)</i>	<i>Place</i>	E53
65	E16	Measurement	observed dimension (was observed)	Dimension	E54
66	E39	Actor	possesses (is possessed by)	Right	E30
67	E19	Physical Object	preferred identifier is (is preferred identifier of)	Object Identifier	E42
68	E31	Document	refers to (is referred to by)	Physical Object	E19
69	E15	Identifier Assignment	registers (registered by)	Physical Object	E19
70	E19	Physical Object	right held by (owns rights to) (has type: Type) (has note: String)	Actor	E39
71	E24	Man-Made Entity	shows visual item (is shown by)	Visual Item	E36
72	E4	Period	took place at (witnessed)	Place	E53
73	E4	Period	took place on or within (witnessed)	Physical Object	E19
74	E10	Transfer of Custody	transferred custody of (custody changed by)	Physical Object	E19
75	E8	Acquisition	<i>transferred title from (surrendered title of)</i>	<i>Actor</i>	E39
76	E8	Acquisition	transferred title of (changed ownership by)	Physical Object	E19
77	E8	Acquisition	<i>transferred title to (acquired title of)</i>	<i>Actor</i>	E39
<b>No</b>	<b>ID</b>	<b>Entity – Domain</b>	<b>Link Name</b>	<b>Entity - Range</b>	<b>ID</b>
78	E54	Dimension	unit	Measurement Unit	E58
79	E11	Modification	used general technique (was technique of)	Type	E55
80	E7	Activity	used object (was used for) (mode of use: String)	Physical Object	E19
81	E11	Modification	used specific technique (was used by)	Design or Procedure	E29
82	E29	Design or Procedure	usually employs (is usually employed by)	Material	E57
83	E54	Dimension	value	Number	E60
84	E22	Man-Made Object	was intended for (was intention of)	Type	E55
85	E7	Activity	was intended use of (was made for) (mode of use: String)	Man-Made Object	E22

**Index of the links of the CIDOC CRM sorted by domain:**

<b>No</b>	<b>ID</b>	<b>Entity – Domain</b>	<b>Link Name</b>	<b>Entity - Range</b>	<b>ID</b>
1	E1	CIDOC Entity	has type (is type of)	Type	E55
2	E1	CIDOC Entity	has note	String	E62
3	E2	Temporal Entity	has time-span (is time-span of)	Time-Span	E52
4	E3	Condition State	consists of (forms part of)	Condition State	E3
5	E3	Condition State	falls within (contains)	Condition State	E3
6	E4	Period	is called (identifies)	Period Appellation	E43
7	E4	Period	took place at (witnessed)	Place	E53
8	E4	Period	took place on or within (witnessed)	Physical Object	E19
9	E4	Period	consists of (forms part of)	Period	E4
10	E4	Period	falls within (contains)	Period	E4
11	E6	Destruction	destroyed (was destroyed by)	Physical Object	E19
12	E7	Activity	carried out by (performed) (in the role of : Type)	Actor	E39
13	E7	Activity	used object (was used for) (mode of use: String)	Physical Object	E19
14	E7	Activity	was intended use of (was made for) (mode of use: String)	Man-Made Object	E22
15	E7	Activity	had specific purpose (was purpose of)	Activity	E7
16	E7	Activity	had as general purpose (was purpose of)	Type	E55
17	E8	Acquisition	<i>transferred title to (acquired title of)</i>	<i>Actor</i>	E39
18	E8	Acquisition	<i>transferred title from (surrendered title of)</i>	<i>Actor</i>	E39
19	E8	Acquisition	transferred title of (changed ownership by)	Physical Object	E19
20	E9	Move	moved (moved by)	Physical Object	E19
21	E9	Move	<i>moved to (occupied)</i>	<i>Place</i>	E53
22	E9	Move	<i>moved from (vacated)</i>	<i>Place</i>	E53
23	E10	Transfer of Custody	<i>custody surrendered by (surrendered custody)</i>	<i>Actor</i>	E39
<b>No</b>	<b>ID</b>	<b>Entity – Domain</b>	<b>Link Name</b>	<b>Entity - Range</b>	<b>ID</b>
24	E10	Transfer of Custody	<i>custody received by (received custody)</i>	<i>Actor</i>	E39
25	E10	Transfer of Custody	transferred custody of (custody changed by)	Physical Object	E19
26	E11	Modification	has produced (was produced by)	Man-Made Entity	E24
27	E11	Modification	used general technique (was technique of)	Type	E55
28	E11	Modification	used specific technique (was used by)	Design or Procedure	E29

29	E14	Condition Assessment	concerns (assessed by)	Physical Object	E19
30	E14	Condition Assessment	has identified (identified by)	Condition State	E3
31	E15	Identifier Assignment	registers (registered by)	Physical Object	E19
32	E15	Identifier Assignment	assigns (is assigned by)	Object Identifier	E42
33	E15	Identifier Assignment	deassigns (is deassigned by)	Object Identifier	E42
34	E16	Measurement	measured (was measured)	Physical Object	E19
35	E16	Measurement	observed dimension (was observed)	Dimension	E54
36	E17	Type Assignment	classified (was classified by)	CIDOC Entity	E1
37	E17	Type Assignment	assigned (was assigned by)	Type	E55
38	E18	Physical Entity	has dimension (is dimension of)	Dimension	E54
39	E18	Physical Entity	has condition (condition of)	Condition State	E3
40	E18	Physical Entity	consists of (is incorporated in)	Material	E57
41	E19	Physical Object	is identified by (identifies)	Object Identifier	E42
42	E19	Physical Object	has title (is title of) (has type : Type)	Title	E35
43	E19	Physical Object	preferred identifier is (is preferred identifier of)	Object Identifier	E42
44	E19	Physical Object	is subject to (applies to)	Right	E30
45	E19	Physical Object	right held by (owns rights to) (has type: Type) (has note: String)	Actor	E39
46	E19	Physical Object	has former /current keeper : (is former/current keeper of)	Actor	E39
47	E19	Physical Object	has current keeper (is former/current keeper of)	Actor	E39
48	E19	Physical Object	has former/current owner (is former/current owner of)	Actor	E39
49	E19	Physical Object	has current owner (is current owner of)	Actor	E39
50	E19	Physical Object	has former/current location (is former/current location of)	Place	E53
<b>No</b>	<b>ID</b>	<b>Entity – Domain</b>	<b>Link Name</b>	<b>Entity - Range</b>	<b>ID</b>
51	E19	Physical Object	has current permanent location (is current permanent location of)	Place	E53
52	E19	Physical Object	has current location (currently holds)	Place	E53
53	E19	Physical Object	bears feature (is found on)	Physical Feature	E26
54	E19	Physical Object	has number of parts	Number	E60
55	E19	Physical Object	is composed of (forms part of)	Physical Object	E19
56	E19	Physical Object	has section definition (defines section)	Section Definition	E46
57	E19	Physical Object	has section (is located on or within)	Place	E53
58	E19	Physical Object	had as general use (was use of)	Type	E55
59	E21	Person	is member of (has members)	Legal Body	E40
60	E22	Man-Made Object	was intended for (was intention of)	Type	E55
61	E24	Man-Made Entity	depicts object (is depicted by)	Physical Entity	E18

			(mode of depiction : Type)		
62	E24	Man-Made Entity	depicts event (is depicted by) (mode of depiction : Type)	Event	E5
63	E24	Man-Made Entity	depicts concept (is depicted by) (mode of depiction : Type)	Type	E55
64	E24	Man-Made Entity	shows visual item (is shown by)	Visual Item	E36
65	E29	Design or Procedure	usually employs (is usually employed by)	Material	E57
66	E29	Design or Procedure	associated with	Design or Procedure	E29
67	E31	Document	refers to (is referred to by)	Physical Object	E19
68	E32	Authority Document	contains (is part of)	Type	E55
69	E33	Linguistic Object	has language (is language of)	Language	E56
70	E33	Linguistic Object	has translation (is translation of)	Linguistic Object	E33
71	E39	Actor	possesses (is possessed by)	Right	E30
72	E39	Actor	has contact points (provides access to)	Contact Point	E51
73	E40	Legal Body	consists of (belongs to)	Legal Body	E40
74	E52	Time-Span	is identified by (identifies)	Time-Appellation	E49
75	E52	Time-Span	begins at	Time Primitive	E61
76	E52	Time-Span	begins at qualify	String	E62
77	E52	Time-Span	ends at	Time Primitive	E61
<b>No</b>	<b>ID</b>	<b>Entity – Domain</b>	<b>Link Name</b>	<b>Entity - Range</b>	<b>ID</b>
78	E52	Time-Span	ends at qualify	String	E62
79	E52	Time-Span	consists of (forms part of)	Time-Span	E52
80	E52	Time-Span	falls within (contains)	Time-Span	E52
81	E53	Place	Is identified by (identifies)	Place Appellation	E44
82	E53	Place	consists of (forms part of)	Place	E53
83	E53	Place	falls within (contains)	Place	E53
84	E54	Dimension	Value	Number	E60
85	E54	Dimension	Unit	Measurement Unit	E58

**Index of the links of the CIDOC CRM sorted by Range:**

<b>No</b>	<b>ID</b>	<b>Entity – Domain</b>	<b>Link Name</b>	<b>Entity - Range</b>	<b>ID</b>
1	E17	Type Assignment	classified (was classified by)	CIDOC Entity	E1
2	E3	Condition State	consists of (forms part of)	Condition State	E3
3	E3	Condition State	falls within (contains)	Condition State	E3
4	E14	Condition Assessment	has identified (identified by)	Condition State	E3
5	E18	Physical Entity	has condition (condition of)	Condition State	E3
6	E4	Period	consists of (forms part of)	Period	E4
7	E4	Period	falls within (contains)	Period	E4
8	E24	Man-Made Entity	depicts event (is depicted by) (mode of depiction : Type)	Event	E5
9	E7	Activity	had specific purpose (was purpose of)	Activity	E7
10	E24	Man-Made Entity	depicts object (is depicted by) (mode of depiction : Type)	Physical Entity	E18
11	E4	Period	took place on or within (witnessed)	Physical Object	E19
12	E6	Destruction	destroyed (was destroyed by)	Physical Object	E19
13	E7	Activity	used object (was used for) (mode of use: String)	Physical Object	E19
14	E8	Acquisition	transferred title of (changed ownership by)	Physical Object	E19
15	E9	Move	moved (moved by)	Physical Object	E19
16	E10	Transfer of Custody	transferred custody of (custody changed by)	Physical Object	E19
17	E14	Condition Assessment	concerns (assessed by)	Physical Object	E19
18	E15	Identifier Assignment	registers (registered by)	Physical Object	E19
19	E16	Measurement	measured (was measured)	Physical Object	E19
20	E19	Physical Object	is composed of (forms part of)	Physical Object	E19
21	E31	Document	refers to (is referred to by)	Physical Object	E19
22	E7	Activity	was intended use of (was made for) (mode of use: String)	Man-Made Object	E22
23	E11	Modification	has produced (was produced by)	Man-Made Entity	E24
<b>No</b>	<b>ID</b>	<b>Entity – Domain</b>	<b>Link Name</b>	<b>Entity - Range</b>	<b>ID</b>
24	E19	Physical Object	bears feature (is found on)	Physical Feature	E26
25	E11	Modification	used specific technique (was used by)	Design or Procedure	E29
26	E29	Design or Procedure	associated with	Design or Procedure	E29
27	E19	Physical Object	is subject to (applies to)	Right	E30
28	E39	Actor	possesses (is possessed by)	Right	E30

29	E33	Linguistic Object	has translation (is translation of)	Linguistic Object	E33
30	E19	Physical Object	has title (is title of) (has type : Type)	Title	E35
31	E24	Man-Made Entity	shows visual item (is shown by)	Visual Item	E36
32	E7	Activity	carried out by (performed) (in the role of : Type)	Actor	E39
33	E8	Acquisition	<i>transferred title to (acquired title of)</i>	<i>Actor</i>	E39
34	E8	Acquisition	<i>transferred title from (surrendered title of)</i>	<i>Actor</i>	E39
35	E10	Transfer of Custody	<i>custody surrendered by (surrendered custody)</i>	<i>Actor</i>	E39
36	E10	Transfer of Custody	<i>custody received by (received custody)</i>	<i>Actor</i>	E39
37	E19	Physical Object	right held by (owns rights to) (has type: Type) (has note: String)	Actor	E39
38	E19	Physical Object	has former /current keeper : (is former/current keeper of)	Actor	E39
39	E19	Physical Object	has current keeper (is former/current keeper of)	Actor	E39
40	E19	Physical Object	has former/current owner (is former/current owner of)	Actor	E39
41	E19	Physical Object	has current owner (is current owner of)	Actor	E39
42	E21	Person	is member of (has members)	Legal Body	E40
43	E40	Legal Body	consists of (belongs to)	Legal Body	E40
44	E15	Identifier Assignment	assigns (is assigned by)	Object Identifier	E42
45	E15	Identifier Assignment	deassigns (is deassigned by)	Object Identifier	E42
46	E19	Physical Object	is identified by (identifies)	Object Identifier	E42
47	E19	Physical Object	preferred identifier is (is preferred identifier of)	Object Identifier	E42
48	E4	Period	is called (identifies)	Period Appellation	E43
49	E53	Place	Is identified by (identifies)	Place Appellation	E44
<b>No</b>	<b>ID</b>	<b>Entity – Domain</b>	<b>Link Name</b>	<b>Entity - Range</b>	<b>ID</b>
50	E19	Physical Object	has section definition (defines section)	Section Definition	E46
51	E52	Time-Span	is identified by (identifies)	Time-Appellation	E49
52	E39	Actor	has contact points (provides access to)	Contact Point	E51
53	E2	Temporal Entity	has time-span (is time-span of)	Time-Span	E52
54	E52	Time-Span	consists of (forms part of)	Time-Span	E52
55	E52	Time-Span	falls within (contains)	Time-Span	E52
56	E4	Period	took place at (witnessed)	Place	E53
57	E9	Move	<i>moved to (occupied)</i>	<i>Place</i>	E53
58	E9	Move	<i>moved from (vacated)</i>	<i>Place</i>	E53
59	E19	Physical Object	has former/current location (is former/current location of)	Place	E53
60	E19	Physical Object	has current permanent location (is current permanent location of)	Place	E53

61	E19	Physical Object	has current location (currently holds)	Place	E53
62	E19	Physical Object	has section (is located on or within)	Place	E53
63	E53	Place	consists of (forms part of)	Place	E53
64	E53	Place	falls within (contains)	Place	E53
65	E16	Measurement	observed dimension (was observed)	Dimension	E54
66	E18	Physical Entity	has dimension (is dimension of)	Dimension	E54
67	E1	CIDOC Entity	has type (is type of)	Type	E55
68	E7	Activity	had as general purpose (was purpose of)	Type	E55
69	E11	Modification	used general technique (was technique of)	Type	E55
70	E17	Type Assignment	assigned (was assigned by)	Type	E55
71	E19	Physical Object	had as general use (was use of)	Type	E55
72	E22	Man-Made Object	was intended for (was intention of)	Type	E55
73	E24	Man-Made Entity	depicts concept (is depicted by) (mode of depiction : Type)	Type	E55
74	E32	Authority Document	contains (is part of)	Type	E55
75	E33	Linguistic Object	has language (is language of)	Language	E56
76	E18	Physical Entity	consists of (is incorporated in)	Material	E57
77	E29	Design or Procedure	usually employs (is usually employed by)	Material	E57
78	E54	Dimension	unit	Measurement Unit	E58
<b>No</b>	<b>ID</b>	<b>Entity – Domain</b>	<b>Link Name</b>	<b>Entity - Range</b>	<b>ID</b>
79	E19	Physical Object	has number of parts	Number	E60
80	E54	Dimension	value	Number	E60
81	E52	Time-Span	begins at	Time Primitive	E61
82	E52	Time-Span	ends at	Time Primitive	E61
83	E1	CIDOC Entity	has note	String	E62
84	E52	Time-Span	begins at qualify	String	E62
85	E52	Time-Span	ends at qualify	String	E62