Definition of the CRMsoc
An Extension of CIDOC CRM to support social documentation

Proposal for approval by CIDOC CRM - SIG

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1.1 Introduction

1.1.1 Scope

This document presents CRMsoc, an extension of CIDOC CRM created to support and capture social documentation.

CRM Social is a domain ontology extending the ISO21127 ontology CIDOC CRM, that can be used to (re-)encode data that document social phenomena and constructs that are typically recorded by humanities and social science scholars based on their analysis and transcription of primary documentary evidence or their representation of observational data in analytic digital form. The kinds of social phenomena and constructs recorded by humanities and social science scholars extend beyond the original scope of the CIDOC CRM in that they relate to the recording of indirectly observable, social phenomena and facts. CRM Social is being developed as a compatible extension of CIDOC CRM in order to be able to draw on its event oriented modelling and its capacity to represent facts related to cultural heritage while extending this to be able to represent and relate social facts and life. The expanded breadth and scope of CRM Social is presently under development but aims to take under its aegis documentation related to the representation of social facts recognizable by social agents and interpreters through intuition and inference. At this moment the following areas of analysis have been identified to be of interest and to fall within this scope:

- Characteristics of human beings, as individuals or groups (Mental attitude)
- Social relations, including between people (such as family and professional relationships), between people and groups (such as nationality and gender), and between groups (companies, NGOs, political parties).
- Rights and duties (such as ownership by inheritance and legal requirements by birth)
- Economic activities, including relations between people and things, such as financial transactions leading to ownership.
- Plans, including expressing proposed activities (for example in conservation and collection care planning) and legislation.
- Evaluations, including assessing risks and estimating the value of things.

CRM Social is being developed in relation to a growing body of primary humanities and social science schemas offered for analysis and incorporation by an active community of researchers. At present the list of considered schemas includes : the SPECTRUM museum standard (e.g. Acquisition and Accessioning procedure and Documentation planning procedure), the Linked Art community, Data for History consortium and the domain of heritage conservation.

1.1.2 Status

Under development!

1.1.3 Naming Convention

CRM Social classes and properties are given both a name and an identifier following the conventions of the CIDOC CRM. Class identifiers start with the letters "socE" and are followed by a number. Property identifiers start with the letters "socP" and are also followed by a number. When using a property in the reverse direction (inverse property) the identifier is further followed by the letter "i" (see also section Applied Form → Naming Conventions of the CIDOC-CRM definition document).
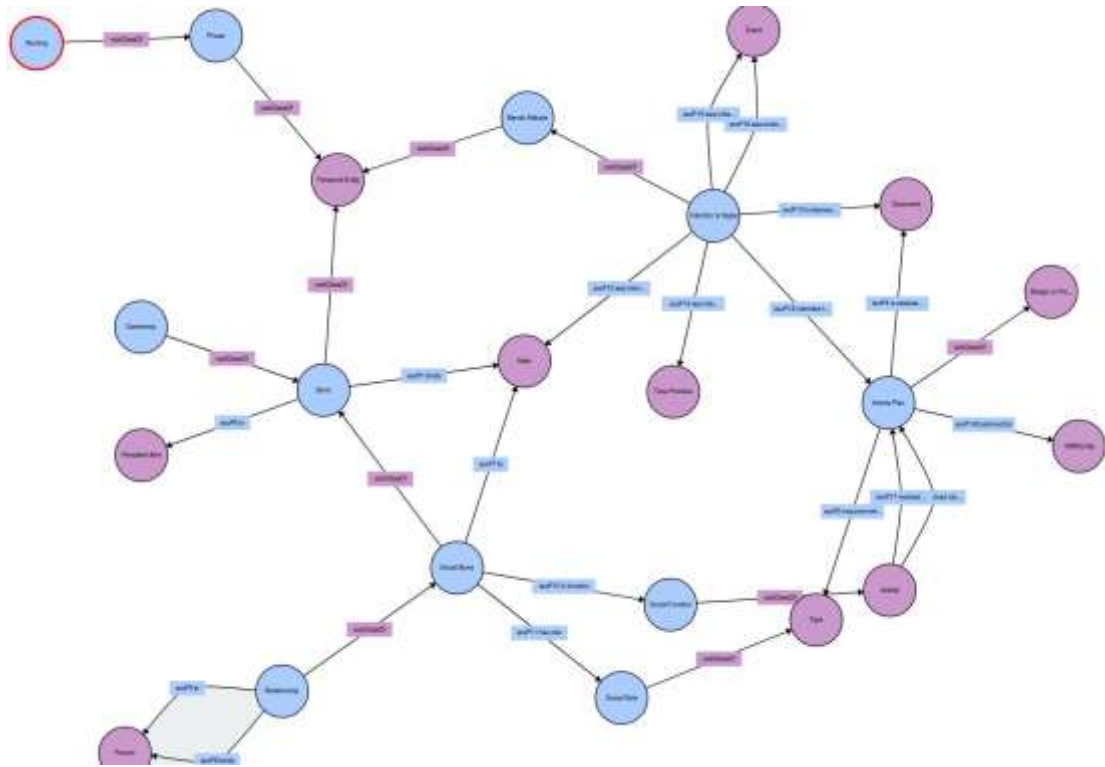
1.3 Graphical overview

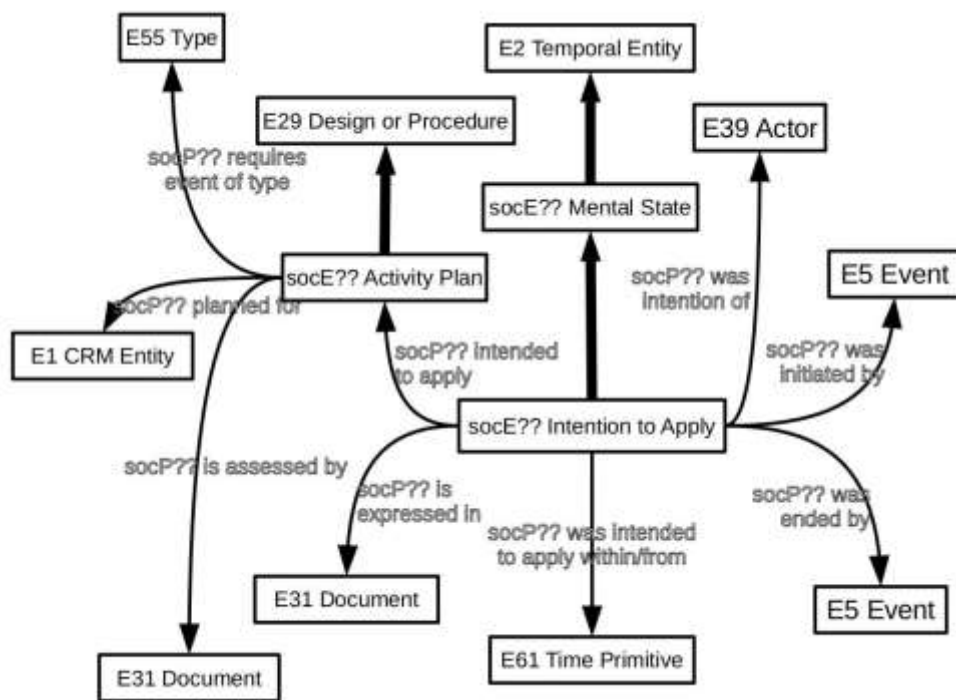**Fig. 1: CRMsoc classes and properties with relations to CRM classes**
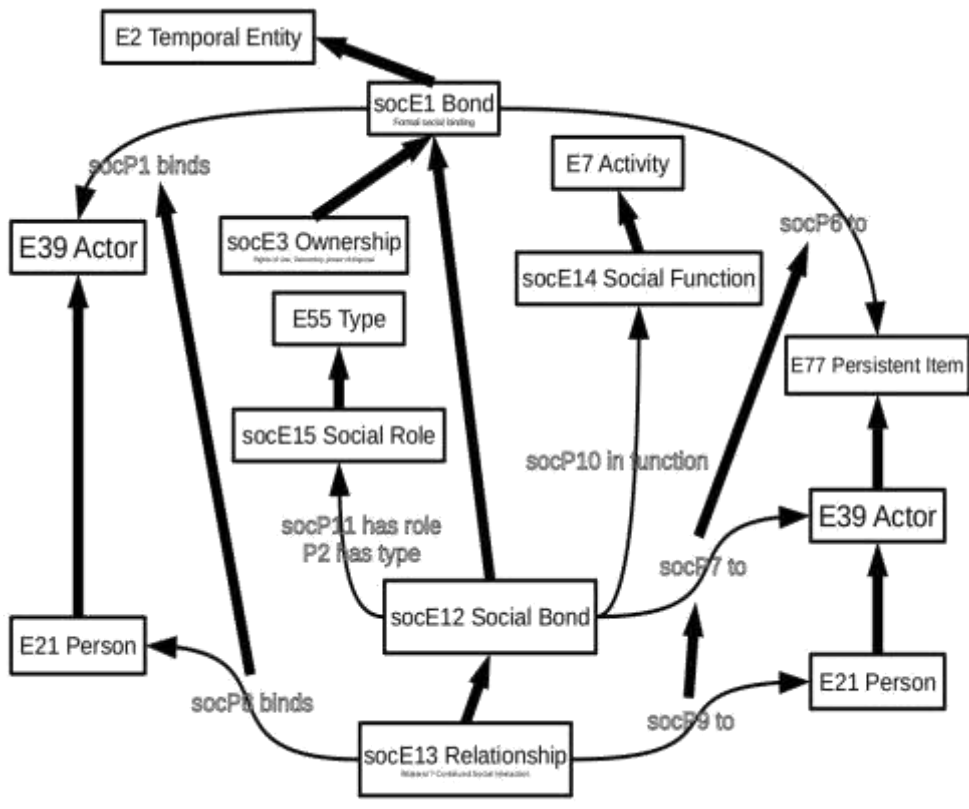

Fig. 2: Plans in CRMsoc

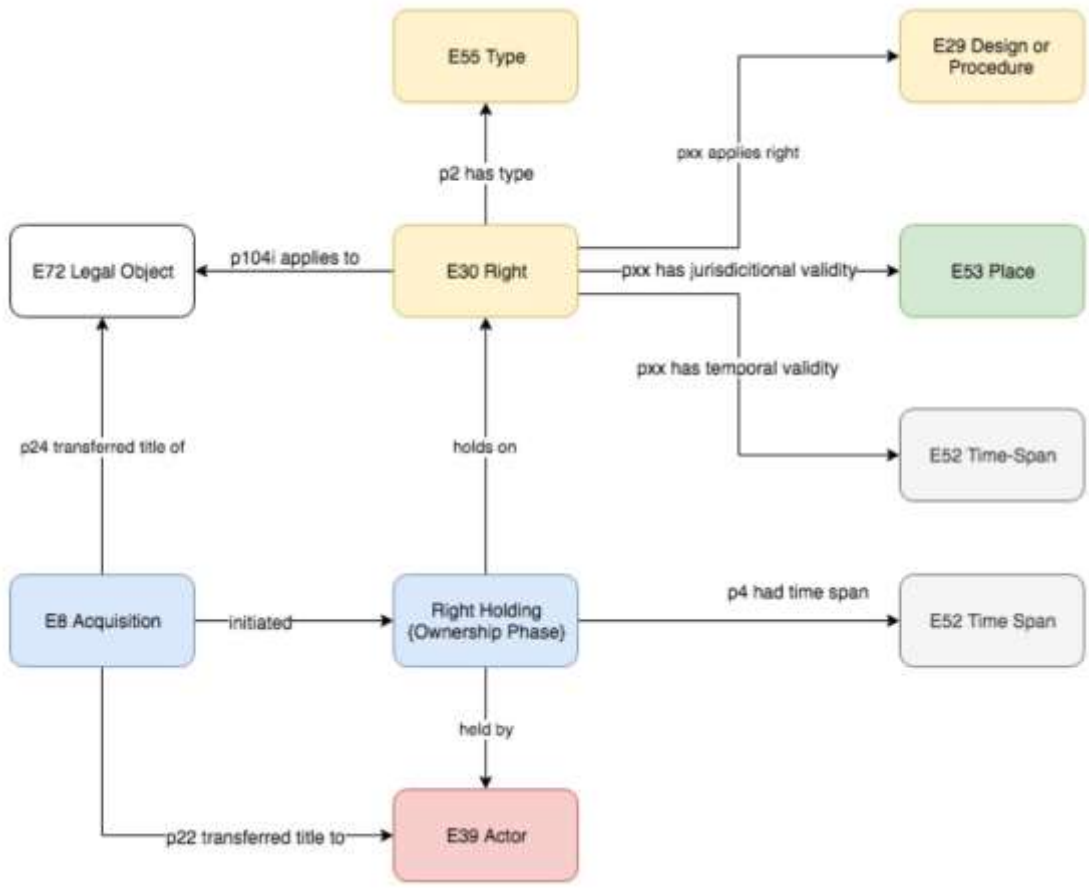**Fig. 3: Social bonds in CRMsoc**

Fig. 4: Proposal for Rights Model with Ownership Phase and Events

1.4 CRMsoc Class Declarations

The classes are comprehensively declared in this section using the following format:

> Class names are presented as headings in bold face, preceded by the class' unique identifier; The line "Subclass of:" declares the superclass of the class from which it inherits properties; The line "Superclass of:" is a cross-reference to the subclasses of this class;
> The line "Scope note:" contains the textual definition of the concept the class represents;
> The line "Examples:" contains a bulleted list of examples of instances of this class.

The line "Properties:" declares the list of the class's properties;

> Each property is represented by its unique identifier, its forward name and the range class that it links to, separated by colons;

Inherited properties are not represented;

> Properties of properties, if they exist, are provided indented and in parentheses beneath their respective domain property.

Mental Attitude

Subclass of: E2 Temporal Entity

Superclass of: socE Intention to Apply

Scope note: This class comprises the conscious maintaining of an intellectual attitude towards matters of knowing, believing or guiding actions and reactions to social and other environmental situations, such as, besides others, beliefs about laws governing nature or intentions to carry out actions. An instance of CRMsoc Mental Attitude is individual to a human being and specific to a particular, explicit matter.

<mark>According to Issue 359: mental state</mark>
<mark>From Martin's message: "mental state" is neither a relationship nor a "state" in the epistemological sense we have defined, regardless the label. I argue that it is actively maintained, can be witnessed, become weak, fuzzy and depends existentially on the carrier, possibly a group.</mark>

Examples:

Properties:

Activity Plan

Subclass of: E29 Design or Procedure

Scope Note: This class comprises plans foreseeing specific predefined activities or kinds of activities taking place. They consist of descriptions of specific constraints, patterns or types of activities that could be realized. They may also foresee that the planned activities are realized at times explicitly foreseen by the actor intending the application of the plan, for instance, to organize a conference, in which case we may talk about "active plans". Alternatively, times of realization may be foreseen in reaction to external events of a kind foreseen by the plan, for instance the rescue activity after an earthquake following a rescue plan, or a penal action in the case of criminal activity according to a penal code, in which case we may talk about "reactive plans". The existence of an instance of Activity Plan does not necessarily imply the intention of any Actor to apply it. It may be created together, before or without the will to apply it. For instance, laws are created before they are passed by parliament. Any Activity Plan may require specific conditions for it to be applicable. For example, a plan to excavate a river bank may require that the river is flooded, or my plan to lime plaster my stone wall requires that it is winter (i.e. wet and cold).

Examples: The disaster plan of Tate Archives in case of the Thames flooding.
The proposal for conservation work for MS Greek 418 at the Saint Catherine library.
Provisions of Law 3730/2008 of the Greek Government against smoking in work.

Properties: socP planned for: E1 CRM Entity
socP requires event of type (is required by): E55 Type
socP is assessed by (assesses): E31 Document

extra property may be required especially for conservation use cases. The property should like the Activity Plan to the thing it is meant to apply. E.g. Tate's flood plan to the Tate Archive, Nicholas's proposal for conservation of MS Greek 418 to MS Greek 418.
new property child of P67
Performance plan (LRMoo) is an activity plan

Intention to Apply

Subclass of: socE Mental Attitude

Scope note: This class comprises the mental states of individual instances of E39 Actor that intend to or want to apply a particular instance of Activity Plan. This can be understood as the period of time when an individual or group holds a particular will. It binds the activity plan to the actor. The 'intention to apply' may be abandoned before the realization of the plan. When the plan is actually realized, the 'intention to apply' must necessarily still exist. Characteristically, the passing of a law initiates the intention of a parliament to apply the law. In many cases, the creation of the plan initiates the intention to apply it, and in the case of "active plans" the completed realization of the plan ends the intention. Often, the existence of the 'intention to apply' cannot be determined other than by the realization of the plan.

Examples: The intention of Nicholas Pickwoad to undertake conservation work on MS Greek 418 at the Saint Catherine's Library.
The intention to apply §175 StGB of the German federal law (declaring homosexuality as a crime) was ended by the deletion of §175 StGB in 1994 by the German Bundestag (E7).

Properties: socP was intention of (had intention): E39 Actor
socP is expressed in (expresses): E31 Document
socP was intended to apply within/from: E61 Time Primitive
socP was initiated by (initiated): E5 Event
socP was ended by (ended): E5 Event
socP intended to apply (was intended by): Activity Plan

Bond

Subclass of: E2 Temporal Entity

Superclass of: socE Ownership
socE Social Bond

Scope note: This class comprises phenomena of formally defined and socially respected bindings between different instances of E39 Actors or between multiple actors and instances of E70 Thing. Instances of SOxxx Formal Social Binding come into being and end with an explicit act of declaration or indirectly through other publicly acknowledged events, such as via heritage at birth or death. Depending on their type, they are associated with characteristic rights and obligations, which are subject to the formal legal system of the respecting society, regardless whether this is based on written laws or oral tradition.

Formal Social Bindings are not observable as such, even though the behavior of involved actors may suggest their existence, such as being married. They are exclusively a consequence of the establishing event, which should be kept as social memory in a persistent documented form or as oral tradition, and the continued respect of this kind of binding by a target community. For instance, a community may declare a certain kind of marriage as invalid from some date on, and later redeclare it as valid. Their existence does not depend on the existence of social memory. Documents may be lost or involved actors may not have been aware of the respective establishing events, but later evidence of the establishing events may be found. In these cases, the society may not act according to the respective rights and obligations as long as the fact remains unknown, but is obliged to when the necessary evidence has been provided. Involved actors may have difficulties proving the existence of the binding to authorities when respective documents are lost, but that does not affect their actual existence. However, certain legal systems may require in certain kinds of cases the provision of evidence itself as part of the establishing event.

In some contexts, Formal Social Bindings are also called social institutions. Examples include memberships, employments, ownerships, rights of use, marriage, parenthood and others. In documentation practice, instances of Formal Social Bindings may by shortcut by simple binary relations, such as "is married to".

Examples:	John owns his house.
Properties:	socP binds: E39 Actor
	socP to: E31 Document

Social Bond

Subclass of:	E2 Temporal Entity
Superclass of:	socE Ownership
	socE Social Bond
Scope note:	A specialisation of scoE1 Bond which applies to E40 Actors only.
Examples:	
Properties:	socP in function: socE Social Function
	socP has role: socE Social Role
	socP to: E39 Actor

Social Function

Subclass of:	E7 Activity
Scope note:	An extended activity providing a social service for a Group of a type foreseen by the statutes of a Group. It comes into existence and ends existence each by a unique event, normally a social decision, or events regarded by explicit social convention to initiate such a binding or to terminate it. It requires explicit acceptance of the provider of the service to execute it. Having accepted but not becoming active would still be considered activity for the sake of recall.
Examples:	

Social Role

Subclass of: E55 Type

Scope note: The nominal role of the E39 Actor bound by a Social Binding, i.e. the indicating the types of activities that could be undertaken but have not been undertaken (e.g. because the E39 Actor was not interested or able to undertake them).

Examples:

Relationship

Subclass of: socE Social Bond

Scope note: This typically models the long-term relationship of two instances of E21 Person. This would indicate interaction that would impact the attitudes or beliefs of the participants.

Examples:

Properties: socP binds: E21 Person
socP to: E21 Person

Ownership

Subclass of: socE Social Bond

Scope note: Initiated and terminated by an E8 Acquisition, expresses the temporal validity of has_current_owner.

Examples: The Getty has owned Irises since 1990, and still does, and did not lose ownership between then and now.

Custody

Subclass of:

Scope note: As per Ownership, relative to Transfer of Custody..

Examples: The Getty had custody of Irises from 1990 until June 1999, at which point it transferred custody via a Move to the National Gallery of Canada, for the purpose of an Exhibition..

Phase

Subclass of: E2 Temporal Entity

Superclass of: socE Naming

Scope note: This class comprises phases during the existence and evolution of an instance of E18 Physical Thing characterized by a substantial appearance, constitution or a behavior distinct from that in other times of its existence, or distinct in the evolution of things of comparable kind, such as the nestling, fledgling, juvenile and adult forms of birds, but some kinds of phases may also be consequence of incidental changes such as accidents.

Begin and ending of an instance of socE Phase is regarded to be observable, regardless how fuzzy they are, by the contrast of the prevailing conditions that characterize the phase to the times before and after. It is the kind of phase that determines which kinds of conditions identify it. Different kinds of phases may overlap on the same instance of E18 Physical Thing. Non-substantial properties, such as being owner of something, do not justify a phase.

Examples:

Naming

Subclass of: socE Phase

Scope note: Similarly temporal validity of P1, for an Appellation rather than an Identifier.

Examples: The painting had the name "The Rape of Europa" until sometime in the 70s, but was then renamed to the more politically correct "The Abduction of Europa" (and the original name was translated from the published name, "El rapto de Europa". Knoedler calls the painting "Lucretia Stabbing Herself", whereas the NGA call it just "Lucretia".

Gender

Subclass of:

Scope note: Replaces 'p2_has_type of a Person' because as a phase it can virtually change over time, in biological or sociological point of view.
Subclass of socE Phase class ?

Examples: Bruce Jenner was a male, and then a female (and took the name Caitlyn Jenner).

Nationality

Subclass of:

Scope note: p2_has_type of a Person

Examples: Angelina Jolie is American (by birth), but gained Cambodian nationality by decree of King Norodom Sihamoni, in 2005.

Profession

Subclass of:

Scope note: p2_has_type of a Person

Examples: Lewis Carroll was a photographer for a time, an author for a time, and a mathematician for a time.

Usage

Subclass of:

Scope note: That a thing was used in a particular way – either via p2_has_type or other.

Examples: A building can be used as a church, and then as a restaurant.

Valuation

Subclass of:

Scope note: Assignment of value for an object (monetary amount).

Examples: In 1913, Lucretia was valued at $130,000 and then later in the year at 39,000 GBP.

1.4 CRMsoc Property Declarations

The properties are comprehensively declared in this section using the following format:

> Property names are presented as headings in bold face, preceded by unique property identifiers;

The line "Domain:" declares the class for which the property is defined;

> The line "Range:" declares the class to which the property points, or that provides the values for th the property;
>
> The line "Superproperty of:" is a cross-reference to any subproperties the property may have; The line "Scope note:" contains the textual definition of the concept the property represents; The line "Examples:" contains a bulleted list of examples of instances of this property.

planned for

Domain: socE Activity Plan
Range: E1 CRM Entity

Subproperty of: E89 Propositional Object: P67 refers to: E1 CRM Entity

Scope note: This property links an instance of socE?? Activity Plan with an instance of E1 Entity for which the activity plan was produced.

Examples: The Tate Disaster Plan (socE?? Activity Plan) was planned for (socP?? planned for) the Tate Archives.

requires event of type

Domain: socE Activity Plan
Range: E55 Type

Scope note: This property associates an instance of socE?? Activity Plan with an instance E55 Type of an event which would cause the execution of the plan to be triggered.

Examples: An event of type "floods (natural events)" [http://vocab.getty.edu/aat/300054731] (E55) would trigger the execution of the disaster plan of Tate Archives (socE??).

is assessed by

Domain: socE Activity Plan
Range: E31 Document

Scope note: This property associates an instance of socE?? Activity Plan with an instance of E31 Document which holds the assessment of the activity plan after it has been executed. This property allows reasoning on the quality or effectiveness of the activity plan. It is a shortcut which can be expanded as: socE?? Activity Plan → P140i was attributed by → E13 Attribute Assignment → P141 assigned → E31 Document.

Examples:

Decided not to use it as a shortcut, but as a simple sub-property of P70.
Try to model assessments in general.

realised (was realised by)

Domain: E7 Activity
Range: socE Activity Plan

Scope note: This property associates an instance of E7 Activity with the instance of E100 Activity Plan of which it is regarded as being a valid execution by the actors holding the 'intention to apply'. To be valid the E61 Time Primitive associated with the instance of E7 Activity must fall within the E61 Time Primitive foreseen in the E101 Intention to Apply.

Examples: The delivery of a fine to a citizen in the initial enforcement period of Law 3730/2008 against smoking in public/work places (E7) realized provisions of Law 3730/2008 of the Greek Government against smoking in work places (E100).
The conservation of MS Greek 418 (E7 Activity) realised the proposals for its conservation (Activity Plan).

Examples:

was intention of (had intention)

Domain: socE Intention to apply
Range: E39 Actor

Scope note: This property associates an instance of socE?? Intention to Apply with an instance or instances of the E39 Actors intending to apply a socE?? Activity Plan.

Examples: The intention to apply the Law 3730/2008 against smoking in work places (socE??) was the intention of the Greek government (E39).

is expressed in (expresses)

Domain: socE Intention to apply
Range: E31 Document

Scope note: This property associates an instance of socE?? Intention to Apply with an instance of E31 Document that formally represents and externalizes this intention in a symbolic form.

Examples: The Tate Archives disaster planning document (E31) expresses the intention of undertaking certain actions (socE?? Intention to Apply) to save the collection in the event of the Thames flooding.

was intended to apply within/from

Domain: socE Intention to apply
Range: E61 Time Primitive

Scope note: This property associates an instance of socE?? Intention to Apply with the declarative time constraint foreseen by the intending party for the actual application of the activity plan. The intending party may alter the time constraint over time. In case the newly set time constraint narrows a previously set time constraint, one may regard both constraints as being simultaneously true and consistent. In the case that the newly set time constraint does not just narrow the previous one (typically delaying the foreseen time of application), it should be regarded as a modification of the overall 'intention to apply'. The result of this modification should be regarded as an

'intention to apply' in its own right that is part of an overall instance of socE?? Intention to Apply, which continues to be held.

Examples: The enforcement of Law 3730/2008 against smoking in public/work places (socE??) was intended to apply within/from 1st of July, 2009 (E61).

was initiated by (initiated)

Domain: socE Intention to apply
Range: E5 Event

Scope note: This property associates the beginning of an instance of socE?? Intention to Apply with an explicit event initiating it. Often, the initiation of the 'intention to apply' is implicit in the creation of the activity plan.

Examples: The intention to apply of Law 3730/2008 against smoking in public/work places (E101) was initiated by the signature and publication of the law (E5) in the government paper as ΦEK 262/τ. A'/23-12-2008 on 23/12/2008.

was ended by (ended)

Domain: socE Intention to apply
Range: E5 Event

Scope note: This property associates an instance of scoE?? Intention to Apply with an explicit activity or event terminating it. Often, the termination of the 'intention to apply' is implicit in the realization of the activity plan. In some cases, it may be silently forgotten.

Examples: The intention to apply §175 StGB of the German federal law (declaring homosexuality as a crime) was ended by the deletion of §175 StGB in 1994 by the German Budestag (E7).
Storing MS Greek 418 into its new phase box (E7 Activity) ends the intention to conserve it

intended to apply (was intended by)

Domain: socE Intention to apply
Range: socE Activity plan

Scope note: This property associates an instance of socE?? Intention to Apply with the instance of socE?? Activity Plan that it intended to realize.

Examples: The decision in FEK (E101) intended to apply the provisions of the Law 3730/2008 of the Greek Government against smoking in work places (E100)

binds

Domain: socE Bond
Range: E39 Actor

Superproperty of: socE Relationship: socP binds: E21 Person

Scope note: This property associates the actor (person or group) being bound by the social tie.

Examples:

to

Domain: socE Bond
Range: E77 Persistent Item

Superproperty of:socE Social Bond: socP to: E39 Actor

Scope note: This allows to link to the E77 Persistent Item that the Esoc1 Bond refers to.

Examples:

to

Domain: socE Social Bond
Range: E39 Actor

Subproperty of: socE Bond: socP to: E77 Persistent Item

Superproperty of:socE Relationship: socP to: E21 Person

Scope note: Links socE Social Bond with E39 Actor.

Examples:

in function

Domain: socE Social Bond
Range: socE Social Function

Scope note: Links E12 Social Bond with the Activities/Social Functions undertaken while the
bond was active (e.g. the action for chairing a meeting by a committee chair).

Examples:

has role

Domain: socE Social Bond
Range: socE Social Role

Subproperty of: E1 CRM Entity: P2 has type: E55 Type

Scope note: Links the Social Bond with the corresponding nominal Social Role.

Examples:

binds

Domain: socE Relationship
Range: E21 Person

Superproperty of:socE Bond: socP binds: E39 Actor

Scope note: Person bound by the relationship.

Examples:

to

Domain: socE Relationship
Range: E21 Person

Superproperty of:socE Social Bond: socP to: E39 Actor

Scope note: Person the relationship is bound to.

Examples: