INTERNATIONAL COUNCIL ON ARCHIVES
CONSEIL INTERNATIONAL DES ARCHIVES
EXPERT GROUP ON ARCHIVAL DESCRIPTION

RECORDS IN CONTEXTS
CONCEPTUAL MODEL

Consultation Draft v0.2
July 2021

Comments are welcome at
egad@ica.org
or
https://github.com/ICA-EGAD/RiC-CM/issues

Table of Contents

1 Introduction

1.1 Overview of Records in Contexts (RiC)

Records in Contexts (RiC) addresses the activity of describing records in four complementary parts:

1. Records in Contexts-Introduction to Archival Description (RiC-IAD). RiC-IAD is a brief introduction to the principles and purpose of archival description.

2. Records in Contexts-Conceptual Model (RiC-CM) (this document).

3. Records in Contexts-Ontology (RiC-O). RiC-O is a specific implementation of RiC-CM formally expressed in the World Wide Web Consortium standard Web Ontology Language (OWL).[1] RiC-O provides the archival community with the ability to make archival description available using the techniques of Linked Open Data (LOD) employing a conceptual vocabulary and structure that is specific to archival description. As a specific implementation, it conforms to the high-level RiC-CM, though includes greater detail required by implementation as an ontology. RiC-O 0.2 was released in February 2021 and is compliant with RiC-CM 0.2.[2]

4. Records in Contexts-Application Guidelines (RiC-AG). RiC-AG, when completed, will provide practitioners and software developers with concrete guidance and examples to assist them in implementing RiC-CM and RiC-O in records management systems. Work on this third publication will begin after the release of stable versions of RiC-CM and RiC-O.

1.2 Purpose and Scope

RiC-CM is a high-level conceptual model that focuses on intellectually identifying and describing records, the people that created and use(d) them, and the activities pursued by the people that the records both facilitate and document. As a high-level model, RiC-CM is a broad conceptual framework. It does not address the full range of activities needed to manage records, nor does it address the full detail that may be required in any possible context in which it may be applied.

As a point of departure, RiC-CM covers all of the essential content of the four existing International Council on Archives (ICA) description standards: General International Standard Archival Description (ISAD(G))[3]; International Standard Archival Authority Records for Corporate

[1] For further information, see https://www.w3.org/OWL/ <accessed 20160620>.
[2] RiC-O 0.2 is available at https://www.ica.org/standards/RiC/ontology <accessed 20180621>.
[3] Available at http://www.ica.org/en/isadg-general-international-standard-archival-description-second-edition <accessed 20160620>.

Bodies, Persons, and Families (ISAAR(CPF))[4]; International Standard for Describing Functions (ISDF)[5]; and International Standard for Describing Institutions with Archival Holdings (ISDIAH).[6] RiC-CM replaces these four standards in one overarching standard. It incorporates from them the core descriptive entities, the properties or attributes of these entities, and the essential relations between the entities.

RiC-CM differs from the existing ICA standards in an important way. The existing ICA standards model description, that is, they model a finding aid, whereas RiC-CM models the entities as such, as a basis for describing but without anticipating any particular end product.

RiC-CM emphasizes the intellectual description of records and record contexts. Because analogue and digital records are represented in a wide variety of physical forms, RiC-CM also necessarily addresses description of physical instances of records, but it does not cover all of the attributes and relations that will be required for physically (as opposed to intellectually) managing record instances. To accommodate additional description related to physical management, RiC-CM is designed to be extensible, either through the formal ICA standards development and maintenance process, or through the use of existing standards that address the attributes and relations needed for physical management and preservation of records.

It follows that RiC-CM is not any of the following, though it may inform the development of each:

- A standard or set of rules for composing or forming descriptive content.
- An implementation specification for developing records management and public access systems.
- A model for physically managing records, though it does provide a framework for the intellectual component of such management.
- A data communication or exchange standard.

1.3 Audiences

The primary audience for RiC-CM is the archival community, so the model takes as its point of departure established archival description principles and practices. At the same time, the model takes into consideration ongoing scholarly and practical critiques of archival description principles and practices as well as emerging communication and network technologies that provide new opportunities to improve and build upon established descriptive practices. While

[4] Available at http://www.ica.org/en/isaar-cpf-international-standard-archival-authority-record-corporate-bodies-persons-and-families-2nd <accessed 20160620>.
[5] Available at http://www.ica.org/en/isdf-international-standard-describing-functions <accessed 20160620>.
[6] Available at http://www.ica.org/en/isdiah-international-standard-describing-institutions-archival-holdings <accessed 20160620>.

the current ICA description standards largely emerged in a world of non-digital records, RiC-CM is intended to address the description of traditional analogue records and digital records.

RiC-CM is also intended to be of interest to the records management community. The work of records managers and archivists overlaps: description and intellectual control are essential components of the management of records in the contexts in which they are created, accumulated, and used, and for archivists who assume responsibility for preserving and providing access to those records subsequently. In the world of analogue records, cooperation and collaboration between records managers and archivists was highly desired and perhaps essential for enabling archival repositories to cope with vast quantities of records transferred into their custody. The explosive growth of digital records makes such collaboration and cooperation not merely desirable but an absolute necessity. Archival repositories, quite simply stated, are and will continue to be unable to cope with the huge volumes of digital records if those records are not created, used, and managed in a way that ameliorates subsequent preservation and access challenges. Cooperation between records managers and archivists is an urgent necessity. Such cooperation necessarily includes the activity of description, but it needs to be extended to address many technological challenges. It is hoped that RiC-CM will play a significant role in discussions aimed at the alignment of descriptive practices between the two professional communities.

Furthermore, RiC-CM is intended to facilitate collaboration with allied cultural heritage communities. Integrated access to cultural heritage held by libraries, archives, museums, and curated cultural sites and monuments is increasingly the focus of professional communities, policymakers, funding agencies, and user communities. Different cultural heritage communities have fundamentally different understandings of the nature of the objects for which they have curatorial responsibility. These understandings and practices are well-established and adapted (and adapting) to the particular challenges of each community and the nature of the objects in their care. While many of the efforts to realize the objective of integrated access have focused on developing a shared standard for description, reducing the different descriptive practices to one is intellectually and politically challenging. The integrated access objective, though, does not require such a reduction, as the communities need only cooperate where there are identifiable shared (or largely shared) concepts and practices that can serve to provide common paths into and across cultural heritage resources, each described according to the principles and needs of each community. It is hoped that RiC-CM will serve as a foundation for cross-domain collaboration in providing integrated access.

It is essential that those developing systems to support the work of records managers and archivists are members of the RiC-CM audience. Though high-level, RiC-CM is nevertheless detailed and complex. The developers of systems, however, can ameliorate the intellectual, technological, and economic challenge of data creation and maintenance by designing and implementing systems with user interfaces that mask the complexity.

Finally, RiC-CM is intended to be of interest to those who use archives for research. Description based on RiC-CM will enhance users' experience and understandings of records by enabling a

fuller representation of the contexts within which the records were created and used over time. RiC-CM will also benefit researchers interested in using RiC-CM to describe archival records from their own disciplinary perspective. Though RiC-CM primarily focuses on description that is based on archival principles and responsibilities, it may be used to support scholarly descriptions of individual records or sets of records that are based on other perspectives and requirements.

1.4 Conceptual Model

A conceptual model is an abstract representation of selected phenomena created from a disciplinary perspective in order to serve the needs or interest of the discipline. Current methods of modelling emerged from the representation of surrogates of real-world phenomena in computer systems. There are a variety of methods for developing and conventions for representing models. Methods differ based on the kinds of phenomena to be represented, and the intended use or uses of the model. Despite the differences among the different modelling systems, all of the approaches involve a rigorous analysis of the needs and responsibilities of a person or group, identifying the phenomena of interest, the characteristics of each, and relations among the phenomena.

The phenomena represented in a model may be physical or conceptual. Further, the phenomena may be relatively stable things, processes that unfold in time, or relations among the things. A model may simply serve to further understanding, or it may serve as the foundation for developing systems for facilitating complex interrelated objectives such as production, management, and use of the things represented.

One formal modelling system is the Entity-relationship Model (ERM). The ERM has as a primary focus modelling things and relations among them for representation in information systems. In ERM, the things of interest are called "entities", the characteristics of each "attributes", and the relations among the entities "relations". RiC-CM is represented using ERM, specifically as a high-level conceptual model (see Figure 1 below)

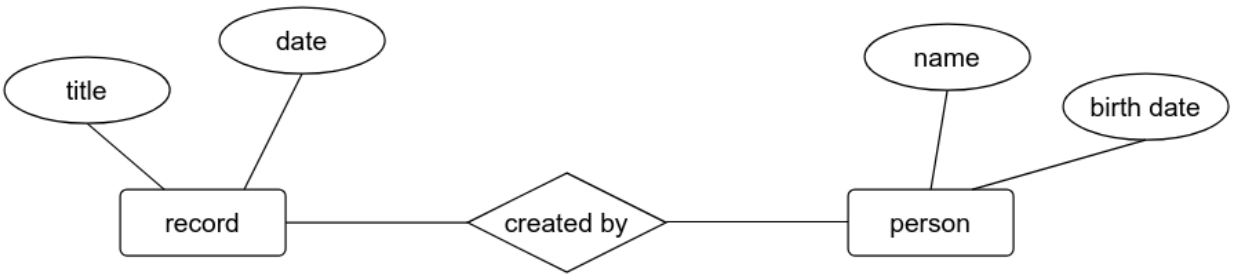

Figure 1: Basic ERM representation showing entity, attribute, and relation.

As a conceptual model, RiC-CM is intended to serve as a foundation for describing records to facilitate their near- and long-term preservation and use. It provides a conceptual framework

based on archival principles for designing and implementing standardized systems for the intellectual control and description of analogue and digital resources in records management and archival programs, including description of the contexts in which the resources originated and were used, as well as the contexts of ongoing subsequent management and use.

1.5 Record Description in Transition

1.5.1 Current Description

Current archival description is predominantly based on the traditional understanding of the Principle of Provenance. In the traditional understanding, the principle has two major facets: Respect des fonds and Respect for original order. Respect des fonds stipulates that the records created, accumulated, and used by a person or group in the course of life and work are to be kept together and not intermixed with records from other sources. Respect for original order stipulates that the interrelations among the records in a fonds established in the context of accumulation and use is to be preserved.[7]

Traditional description is a largely self-contained, inward-looking hierarchical description of a single fonds. Description begins with a description of the fonds, and proceeds to describe the components of the fonds, and the subcomponents of the components, and so on. The hierarchy may terminate in the description of an individual record, although in practice it commonly does not. It is this model of archival description that is embodied in ISAD(G), and description based on this model are currently created and maintained using a variety of communication technologies (for example, word processors, databases, or Encoded Archival Description (EAD[8]) XML-encoded documents). Most such description anticipates the production of the traditional print finding aid, or an online presentation that is more or less an analogue of it.

1.5.2 Description and Communication Technologies

Archival description (and resource description in general) is dependent on available communication technologies. As new methods for representing and communicating information become available, they offer the opportunity to re-envision archival description. This re-envisioning generally emphasizes separating and interrelating key components of description to accommodate the production of familiar and proven modes of access, and at the same time, open new paths into and present new perspectives on described resources. Two interdependent motivations for the separation are commonly cited: improving the economy and accuracy of description; and enhancing access to and understanding of the described resources.

Communication technologies that emerged in the last two decades of the twentieth century have gradually been transforming the methods used by archivists to describe and provide

[7] A fuller discussion of the Principle of Provenance will be found in Records in Contexts: Introduction to Archival Description (RiC-IAD).
[8] For further information, see https://www.loc.gov/ead/ <accessed 20160620>.

access to them. Both markup (XML and related standards) and relational database (SQL) technologies, in particular, have enabled many archives to successfully transition from paper-based finding aids to computer-based production.

As powerful as the two technologies have been, much and perhaps most real-world information is not represented well in either one or the other. Archival description, particularly in the single fonds-level description, is adequately but not optimally accommodated by database technologies in some parts and by markup technologies in other parts. That neither technology clearly dominates the archival implementation landscape reflects the betwixt and between nature of the traditional single fonds-level description. Many description systems use either one or the other or a carefully crafted combination of the two. Technological developments within and between the two technologies ameliorate if not eliminate the weakness of each and thus help sustain their dominance over the representation landscape. But, given that the real world within which we live and work may be understood as a vast, dynamically interrelated network of people and objects situated in space and time, graph technologies offer new and more expressive forms of representation.

Graph technologies have existed in various forms since the 1960s, though their use did not become widespread until the late 1990s when the W3C released Resource Description Framework (RDF[9]), a standard for the representation of graph data. Graph technologies introduce data representation as nodes (entities) interconnected by arcs (relations), enabling querying the relations and navigating from one node to another. One of the methods for storing these graphs is to use RDF triples, each triple being a subject-predicate-object statement. While XML supports a specific form of graphs, the hierarchy (or "tree"), graph technologies enable unbounded representation of networks of interconnected data objects as well as real world objects (represented by data).

RiC-CM provides a foundation for producing high quality knowledge graphs describing records and their contexts. RiC-O is a formal implementation of RiC-CM that defines the vocabulary and rules for representing archival description as RDF graphs.

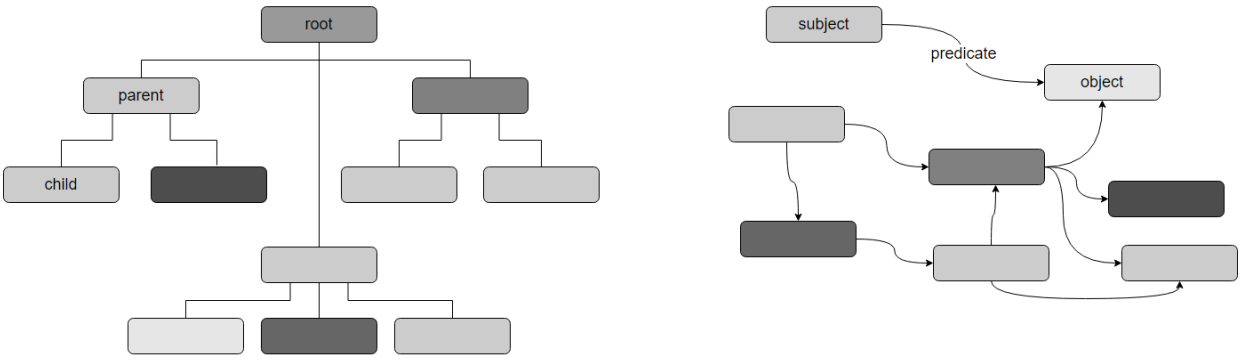

Figure 2. Left: Representation of data in a hierarchical structure like XML or other markup-language. Right: Representation of data in triples that results in a graph-structure.

[9] For further information, see https://www.w3.org/RDF/ <accessed 20160620>.

1.5.3 Expanding the Understanding of Provenance

In recent decades, theorists and practitioners have intellectually and ethically challenged the traditional understanding of the Principle of Provenance. While accepting the traditional understanding of Respect des fonds, the intellectual criticism argues that a fuller understanding must include recognizing that provenance is much more complex, that the origins and history of records include not only the person or group that accumulated a body of records, but also other persons and groups directly related to the records, and the activities that were and are being performed in relation to the records. Ethically, the traditional understanding has been criticized because it privileges the accumulator of a body of records and thereby obscures or elides other persons and groups related to them, either actively participating in their creation or use, or as the subject of them. RiC-CM affirms both the enduring methodological soundness of the traditional understanding of provenance, while embracing at the same time both the intellectual and ethical criticisms. RiC-CM recognizes that provenance is much more complex, that records originate and continue to exist within a complex network of dynamic relations with other records, activities, persons, and groups.

It is within the context of this expanded understanding of provenance and the established and emerging communication technologies that RiC-CM is being developed. RiC-CM is intended to accommodate existing description practices and at the same time to acknowledge new understandings, and to position archives to take advantage of opportunities presented by new and emerging communication technologies. RiC-CM aspires to reflect both facets of the Principle of Provenance, as these have traditionally been understood and practiced, and recognize a more expansive and dynamic understanding of provenance. It is this more expansive understanding that is embodied in the word "contexts". RiC-CM is intended to enable a fuller, if forever incomplete, description of the contexts in which records emerge and exist, in order to enable multiple perspectives and multiple avenues of access.[10]

1.6 Relationships between RiC-CM and Other Models and Standards for Describing Records

1.6.1 The Existing ICA Description Standards

ISAD(G) was first published in 1994, and of the four existing ICA description standards, it has been the most widely adopted. As stated above, it closely adheres to a traditional understanding of provenance, and it is based on the identification and description of a fonds. The prescribed fonds-down description contains a description of the fonds and dependent aggregations of records, as well as a description of the person, corporate body, or family that created, accumulated and used the records, and the holding repository. Description of the records and the context of the records is combined in a single, standalone description, with little or no relation to the world outside the immediate context.

[10] A fuller discussion of the more expansive understanding of provenance will be found in Records in Contexts: Introduction to Archival Description (RiC-IAD).

Over the course of the fourteen years following the development of ISAD(G), three other standards were developed: ISAAR-CPF, ISDF, and ISDIAH. They envisioned the separation of primary components of the archival description (creator-accumulator of a fonds; the functions (or activities) that the records document; and the repository that holds the fonds). These additional standards were intended to encourage the development of systems of description in which the components of descriptions were separately maintained and interrelated, and then used, on demand, to produce complete archival description as it has traditionally been understood. At the same time, they were meant to enable the production of new and potentially powerful perspectives that facilitate the use and understanding of records.

However, the four standards were developed independently of each other over an extended period of time and without an overarching and persistent vision for how such separation would work in practice, for how the different components addressed would be related to one another to form a whole description. As a result, the standards do not represent a coherent, consistent model of archival description.

Though ISAD(G) has significantly influenced international archival descriptive practice, ISAAR(CPF) has some use, and both ISDF and ISDIAH very little.

The fonds-down hierarchical description prescribed by ISAD(G) remains and is likely to remain, for a variety of reasons, the prevailing approach to archival description for the near future: it addresses the traditional understanding of the Principle of Provenance; it is well understood by the community; a variety of existing methods and systems exist to facilitate creation, maintenance, and publication; and finally, it is a relatively economic approach to an exceptionally complex, labour-intensive challenge.

1.6.2 From ISAD(G) to RiC-CM

Archivists familiar with ISAD(G) may initially find RiC-CM challenging to understand. Both the conceptual perspective represented in and the presentation of RiC-CM differ significantly from ISAD(G). Descriptions based on ISAD(G) are accommodated by RiC-CM, though the latter enables situating ISAD(G)-based description within a broader, open network of contextual relations. As described above, the development and publication of the two editions of ISAD(G) during the 1990s reflected archival practice and consensus that existed at that time. Two factors, in particular, shaped ISAD(G), but which RiC-CM seeks to explicitly transcend.

The first factor was the common assumption and practice that the inputs and outputs of the activity of archival description were the same, that how description was represented in archival systems and how it was presented to users were the same. This assumption was explicitly rejected in section I.6 of ISAD(G), but it nevertheless was implied by the linear ordering of the descriptive elements within the standard.[11] Implementations of ISAD(G) commonly reflected this assumption. Although finding aids were produced increasingly using automated means

[11] ISAD(G) Second Edition: https://www.ica.org/sites/default/files/CBPS_2000_Guidelines_ISAD%28G%29_Second-edition_EN.pdf <accessed 20210718>. See section I.6, page 7.

over the course of the 1990s, they were still overwhelmingly conceived of as being flat, linear documents (albeit with access points that could enable indexing) that were to be printed, or, when presented online, to have layout and presentation resembling linear printed documents.

Today, printed finding aids are an alternative to computer-based presentation, with the latter having become the predominant method of access. Many archival control and access systems are automated and based on relational database technology. In the world of relational databases, archival description is best carried out through the description of separate, but related entities and relations among them that form the inputs into the descriptive control system. Clever systems and user interface design can then enable the rendering of these descriptive inputs in a variety of outputs depending on the preferences of the archival program, the preferences of user communities, or the imperatives of data sharing arrangements across institutional boundaries.

Given this new world of automated archival description, RiC-CM is only intended to provide a framework for standardizing the inputs into the system and leave the rendering of outputs and user interfaces unconstrained by rules that might unwittingly hamper efforts aimed at innovation and experimentation. As such, unlike ISAD(G), RiC-CM does not resemble a traditional, linear, analogue finding aid. Rather, it presents a range of entities, attributes, and relations that can be used as the basis for creating inputs into an archival descriptive system that can then share and present the data to a variety of users, and in forms suited to the different needs of the users.

Related to the above change in approach is the second factor that shaped ISAD(G), but which is explicitly rejected by RiC-CM. ISAD(G) privileged description of records or aggregations of records and intermixed with this description brief description of all other entities associated with the records or aggregations, primarily treated as "access points". The "access points" serve as surrogates for entities such as persons, groups, activities, places, and subjects that are otherwise not described. In recognizing "access points" and independent maintenance of the description of the entities represented by them, ISAD(G) implicitly recognized that records could only be understood in the context of their creation and use and as part of a wider network of relations with other entities.

By and large, this situation resulted from the fact that ISAD(G) was developed as a codification of traditional practice rather than as a standard based upon a coherent and agreed-upon conceptual model that understood archival materials within their broader relational and contextual universe. Rather than continuing to attempt to revise ISAD(G) and its companion standards, one by one, to address this issue, ICA instructed EGAD to develop a comprehensive framework for archival description based on a conceptual model that recognizes the relational and contextual realities of archival materials and which regards the record entity as being just one of a range of entities and relations that must be described if archival control systems are to reflect the realities of the diverse ways in which records are made, kept, and used.

For these reasons RiC-CM looks very different from ISAD(G). It is acknowledged that this difference is likely to be unsettling for a generation of practitioners who are familiar with

ISAD(G). There is nothing inherently wrong with archival description that conforms with ISAD(G). But ISAD(G) is limited in terms of what is possible using current and emerging communication technologies that enable describing records and the complex relations records have with one another, and in terms of the expectations of archivists and archival users inspired by what is made possible by those technologies. While RiC-CM is much more complex than ISAD(G), the world in which records are created and used is complex, and it is a fundamental responsibility of archivists to reflect that complex world to the best of their abilities.

In recognition of the complexity of RiC-CM, EGAD is committed to producing implementation guidance for archival practitioners that it hopes will make their job of creating and maintaining archival descriptions as efficient and effective as possible. EGAD also hopes that the release of RiC-CM will stimulate the developers of archival control and description software to implement RiC-CM. When that happens, archival practitioners will benefit from the existence of RiC-CM by virtue of having access to software tools and systems that comply with its comprehensive conceptual framework.

1.6.2.1 From Unit of Description to Record and Record Set

A core concept in ISAD(G) is "unit of description". ISAD(G) (and a major portion of the professional literature on description) assumes that individual records and sets of records that archivists call "fonds", "series", "file" and so on, may be each described in the same way, and, implicitly, that they are the same kind of thing. Though individual records and sets of records are both kinds of record resources, each comes into existence from different activities for distinct if perhaps interrelated purposes, and each may have different creators and different times of creation. For example, a fonds may be accumulated by a person or group, but the individual records in the fonds are highly likely to be of mixed provenance. Further, describing a single record differs from sets of records, as they differ with respect to identifying their characteristics and relations with other entities.

Archivists have long recognized that the two are not the same, but there has been no clear guidance on how to describe each, and this has led to inconsistent and ambiguous practice. RiC-CM treats each as a distinct kind of thing; though there are many shared attributes, the manner in which one should be described is not the same as the manner in which the other should be described. Treating each as a distinct kind of thing, created at different times and for different purposes, enables description that is unambiguous and clear.

1.6.2.2 From Multilevel Description to Multidimensional Description

An additional core concept of ISAD(G) is "multilevel description". ISAD(G) is based on a "multilevel" model that assumes (though does not prescribe) that the focus of a single description is the set of all the records accumulated by a single person or group (a fonds), and that the description begins with a description of the record set, as a single and complete thing. The description may then proceed to describe parts of the whole, and parts of the parts, all linked together to form a single, self-contained hierarchy.

RiC-CM models what may be described as "multidimensional description". Rather than a hierarchy, the description may take the form of a graph or network. Modelling description as a graph accommodates the single, fonds-based, multilevel description modelled in ISAD(G), but also enables a more open description of the often-complex and mixed provenance of records found in a fonds. The model makes it possible to describe sets of records with complex origination, for example, a record series that documents one activity that is performed serially by a succession of different groups, and at the same time, situate the series within the fonds of the different groups that serially had the activity as a responsibility.

In a multidimensional approach to description, the records and record set(s), their interrelations with one another, their interrelations with persons, groups, and activities, and each of these with one another, are represented as a network within which an individual fonds may be situated. The immediate context of each fonds is established, though its boundaries are permeable, as it exists within a network of interrelated, records and record set(s), persons, groups, and activities.

While RiC-CM models describing records and the environments in which they are created, accumulated, used, and managed in a way that more fully captures and expresses the complex contextual realities than can be done using a single hierarchical description, it does not repudiate hierarchical description as such. In fact, the model assumes that sets of records, in addition to the possibility of having individual member records, may also have member sets of records, hierarchically arranged, such as a hierarchy that represents a series that contains subseries that in turn contains files.

In the modelling of sets of records, special care is taken to distinguish between the attributes and relations of the set of records as such, and individual records contained in the set. A record set, for example, has its own provenance. While the provenance of the record set may be related to the provenance of some if not all of the contained records, the provenance of the record set is distinct from the provenance of the contained records. In other words, while the creator (or accumulator) of a record set may be the same as the creator of all or some of the contained records, the act of creating the record is distinct from the act of creating the set of records.

Description of the records contained in a record set is further differentiated into two categories: summary description of the contained records (for example, a date range for the span of time within which the contained records were created); and the shared relations the records have that designate them as members of a record set (for example, all contained records document the same activity, or all share the same documentary form).

Distinguishing the kinds and scope of attributes and relations within a record set is intended to bring greater intellectual clarity to the description and to make it possible to make explicit and machine-actionable "the inheritance of description". Description of the record set as such, and summary description of the contained records is only intellectually inheritable as "context" for the contained records. The summary attributes are not attributes of the contained records as such, but an overview of them, reduced to an abstract. The shared attributes or relations

recorded at the level of the record set, however, are legitimately attributes or relations of each of the member records of a record set. For example, if all of the records in a record set reflect a particular activity, then the description of each individual record may also include a relation to the activity.

1.6.3 RiC-CM and ISO 23081

An important related suite of standards for describing and managing records is ISO 23081 (Information and documentation - Records management processes - Metadata for records).[12]

Both RiC-CM and ISO 23081 provide internationally agreed-upon metadata frameworks for describing and managing records. The focus of RiC-CM is the metadata used to describe, control, and enable access to records of enduring value that are identified for ongoing preservation by an archival program; the focus of ISO 23081 is the metadata that is needed to protect, understand, and enable the usability of records as evidence from the point of creation by records creators and for as long as the records need to be retained. Clearly, there is a substantial commonality of purpose across the two frameworks - especially as they are both focused on metadata for managing and enabling the use of records. In practice, it is expected that a lot of metadata created and/or captured by records creators will be reused by archival programs in their descriptive systems. As such, it is highly desirable for both metadata frameworks to be as conceptually consistent and interoperable as possible with each other, notwithstanding their somewhat different target audiences and contexts of deployment.

The multi-entity conceptual framework for documenting and understanding the contextual inter-relationships within which records are created and used that is presented in ISO 23081 has greatly influenced and is reflected in the entity model presented in RiC-CM. While there nevertheless remains some differences between the entity models in the two frameworks, it is hoped that ongoing dialogue and collaboration between the professional communities responsible for their ongoing evolution and development will lead to an increasing alignment, convergence, and interoperability between the two frameworks as future iterations of each are developed in the years to come. Ultimately, it is in everyone's interests for the key metadata frameworks used by practitioners who manage records to be as consistent as possible with each other. The EGAD is committed to pursuing this objective.

1.6.4 Transition to RiC-CM

Though RiC-CM accommodates the existing description practice that is codified in ISAD(G), it also goes well beyond the current ICA description standards, both conceptually and structurally. It has also been influenced by, and reflects, ISO 23081. RiC-CM then is intended to provide the semantic and structural foundation for developing record description systems or description

[12] Available at https://committee.iso.org/sites/tc46sc11/home/projects/published/iso-23081-metadata-for-records.html <accessed 20190412>.

modules within records management systems. It attempts to identify and accommodate a wide variety of description and access needs and is intended to be sufficiently detailed and precise in the modelling to support graph and semantic technologies.

RiC-CM thus conceptually differs from and is much more complex and detailed than the existing four ICA standards. It is anticipated that mastering the intellectual and technological complexity of RiC-CM by archivists, records managers, and the developers of systems that support their work will take time. Transitioning from the prevailing approach of records description (the single, stand-alone fonds-based hierarchical description) to a more flexible, open, graph- or network-based approach will be gradual.

Archives and libraries, museums, and other cultural heritage institutions with archival holdings vary greatly in size and resources, and they exist in many different social and political contexts. In developing RiC-CM, EGAD recognizes that many institutions will simply not have the resources to immediately embrace RiC-CM. At the same time, there are institutions that have the need and means to begin implementing description based on the RiC-CM model, and these institutions will be able to contribute feedback to benefit the ongoing development of RiC, and also "to pave the way" for others, demonstrating both the value of the RiC-CM model, and the methods required to successfully implement it.

Developers of records management and description access systems will also be essential in the promulgation and ongoing development of RiC. Developers with a good understanding of archival principles and practices, as well as competency in the development of relational and graph technologies will need to design systems that ameliorate the intellectual, technological, and economic challenge of data creation and maintenance.

1.7 Background and Process of Development

In 2012, the ICA Programme Commission (PCOM) formed EGAD as the partial successor to the Committee on Best Practices and Standards. ICA charged EGAD with developing a standard for the description of records based on archival principles that reconciles, integrates, and builds on the four existing standards: ISAD(G); ISAAR(CPF); ISDF; and ISDIAH.

From 2012 through 2016, EGAD conducted the development of RiC primarily through a series of teleconferences. EGAD had four in-person discussions:

- November 2013: Brussels, Belgium
- October 2014: Girona, Spain
- May 2015: Moeciu, Romania
- April 2016: Paris, France

In September 2016, EGAD released the first draft of RiC-CM for public comment. Sixty-two individuals, groups, and institutions representing nineteen countries and two international organizations submitted comments on many aspects of the draft. When compiled, the comments represented hundreds of pages of comments. In order to address the large volume,

the comments were first analysed into various categories and compiled into six tables representing over 260 pages: broad comments by subject; introduction; entities; properties; relations; and appendices. A summary of comments was then compiled into a fifty-five page document that served as the basis for discussions for working on the second draft.

In reviewing the comments, it was clear to the members of EGAD that the organization and presentation of the model in the first draft made it difficult for readers, in particular those familiar with ISAD(G), to understand how all of the various elements of description were to be interrelated and used together. The second draft is thus reorganized to emphasize the entities that are the primary responsibility of record managers and archivists. This reorganization has endeavoured to eliminate redundancy in the presentation of the attributes (called "properties" in the first draft) and relations. It was also clear that the first draft did not adequately distinguish describing the intellectual content of a record from the physical representation of the content. Clearly making this distinction is essential for the economic management of preservation of records.

From 2017 to the present, EGAD had four in-person discussions:

- October 2017: Rome, Italy
- May 2018: Paris, France
- December 2018: Seitenstetten, Austria
- October 2019: Windsor, United Kingdom

Developing international consensus on a standard for archival description is a daunting challenge. Cultural differences coupled with differing theories and practices are at the core of this challenge. The members of EGAD represent many (though certainly not all) of these differences. At the same time, they share a common commitment to developing a shared standard that respects and accommodates the past practices, and that respects and accommodates differences while remaining intellectually coherent and workable. EGAD also recognizes that developing a consensus will necessarily be an ongoing process, a field of negotiation.

Over the course of development, EGAD has included thirty-one members from fifteen countries. While the members are broadly representative of the global archival community, many areas with long and distinguished histories of administration and governance, and concomitant traditions of record creation, use, and management are not represented, such as much of Asia and eastern Europe. And while Africa and South America have been represented, the representation should be broader and more inclusive. Given this, the members of EGAD welcome broader international participation in the ongoing development of an international archival description standard, to strengthen the intellectual foundation of the standard, and to ensure that the standard represents as broad a consensus as possible and addresses the needs of the global archival community.

1.8 Brief Overview of Changes in RiC-CM 0.2

The second release of the draft of RiC-CM brings some significant changes. The changes are based on extensive feedback from the professional community as well as new reflections on the part of the EGAD.

The introduction has been substantially revised, giving more emphasis to RiC-CM's changing approach to archival description, due both to new technologies and to the broader view of context with its implications for the understanding of records.

The Entities section has been completely revised. In the new version, entities are grouped hierarchically, starting from the root entity, *thing*, followed by the core entities of concern when describing archives (*record resource*, *instantiation*, and *agent*) and the supporting entities (*event*, *rule*, *date*, and *place*), which are then followed by the third- and fourth-level entities including the *activity* and *mandate* entities.

Due to their shared nature, the *record set*, *record* and *record part* (formerly Record Component) entities have been grouped under the new *record resource* entity. A new entity, *instantiation*, has been introduced, to distinguish clearly between the intellectual content of a *record* and its representation on one or more carriers. The former Function, Function (Abstract) and Activity entities have been replaced by a single entity, *activity*, which is defined as a kind of a newly-introduced *event* entity. A new *agent* entity, *mechanism*, has been introduced in order to allow for the description of human technological proxies. The *position* entity has been redefined as a kind of *agent*, while *family* and *corporate body* have each been identified as a kind of *group agent*.

What were called properties in the first release have been reconfigured as *attributes*; they are now listed together with definitions in a consistent format and by the entity with which they may be used.

The Relations section has been completely rewritten. The number of relations has been significantly reduced, resulting in seventy-eight relations, most of them having an inverse relation. The relations are now organized in a poly-hierarchical system. Also, each of them is defined in a consistent format. The definitions, when appropriate, cover both past relations as well as those that are ongoing. Many examples have also been provided to facilitate understanding and use.

1.9 Acknowledgements

The ICA PCOM has generously provided funding for EGAD meetings in Belgium (2013), Spain (2014), Romania (2015), France (2016), Italy (2017), France (2018), Austria (2018), and United Kingdom (2019). In addition to support from the PCOM, the ICA Secretary General and other staff have provided both moral and logistical support to EGAD. Local support for meetings was provided by Archives générales du Royaume/Algemeen Rijksarchief (Belgium); Arxiu Municipal

de Girona (Spain); Arhivele Naţionale ale României; Archives nationales de France; Service interministériel des Archives de France; Archivio Centrale di Stato; Verband Oestereichischer Archivarinnen und Archivare; and the Royal Archives, Windsor Castle. EGAD members' home institutions have also provided members with additional support for both travel and work.

2 Entities

2.1 Introduction

The entities identified and defined in the RiC-CM are the main objects of interest for professionals that manage records in the context of origin and use (records managers) or that manage records retained for long-term preservation and access (archivists). From the perspective of both records managers and archivists, the identified entities are those required to provide the intellectual context that serves physical management, preservation, discovery, use, and understanding of the records over the course of their history.

The entities represent a conceptual and extensible hierarchy, as shown in the table below. At the root of the hierarchy is the *thing* entity, as all other entities are kinds of *thing*. In the hierarchy are the *things* that records managers and archivists necessarily focus on to fulfil their responsibility of preserving and providing access to records.

RiC Entities Hierarchy			
First Level	**Second Level**	**Third Level**	**Fourth Level**
RiC-E01 Thing	**RiC-E02 Record Resource**	RiC-E03 Record Set	
		RiC-E04 Record	
		RiC-E05 Record Part	
	RiC-E06 Instantiation		
	RiC-E07 Agent	RiC-E08 Person	
		RiC-E09 Group	RiC-E10 Family
			RiC-E11 Corporate Body
		RiC-E12 Position	
		RiC-E13 Mechanism	
	RiC-E14 Event	**RiC-E15 Activity**	
	RiC-E16 Rule	RiC-E17 Mandate	
	RiC-E18 Date	RiC-E19 Single Date	
		RiC-E20 Date Range	
		RiC-E21 Date Set	
	RiC-E22 Place		

Among the entities are four core entities: ***record resource*** and the closely related ***instantiation*** entity, as well as the ***agent*** and ***activity*** entities. The core archival entities are those that are considered essential in describing records and the contexts within which the records emerge and are used over time. Together, these entities represent *agents* acting in the world while employing recorded information to facilitate the objectives of their activities. The recorded information is evidence of the performance of an *activity*. Identifying and describing the *agents*, the *activities* which they perform, and the *records* generated in the course of that performance is a fundamental responsibility of records managers and archivists. Description of these entities captures the origins of records and their ongoing history, as well as intellectually preserving the original and ongoing contexts of the records.

The core entities are similar to those expressed in existing professional descriptive standards for the records management and archival communities. They align relatively closely with the existing ICA description standards: ISAD(G), ISAAR(CPF), and ISDF as well as the records management standard ISO 23081.[13]

The four core entities with the exception of *activity* are in the second level of the hierarchy. The other second level entities, *event*, *rule*, *date* and *place*, in relation to the core entities, are important for fully describing the core entities (see also Figure 3 below).

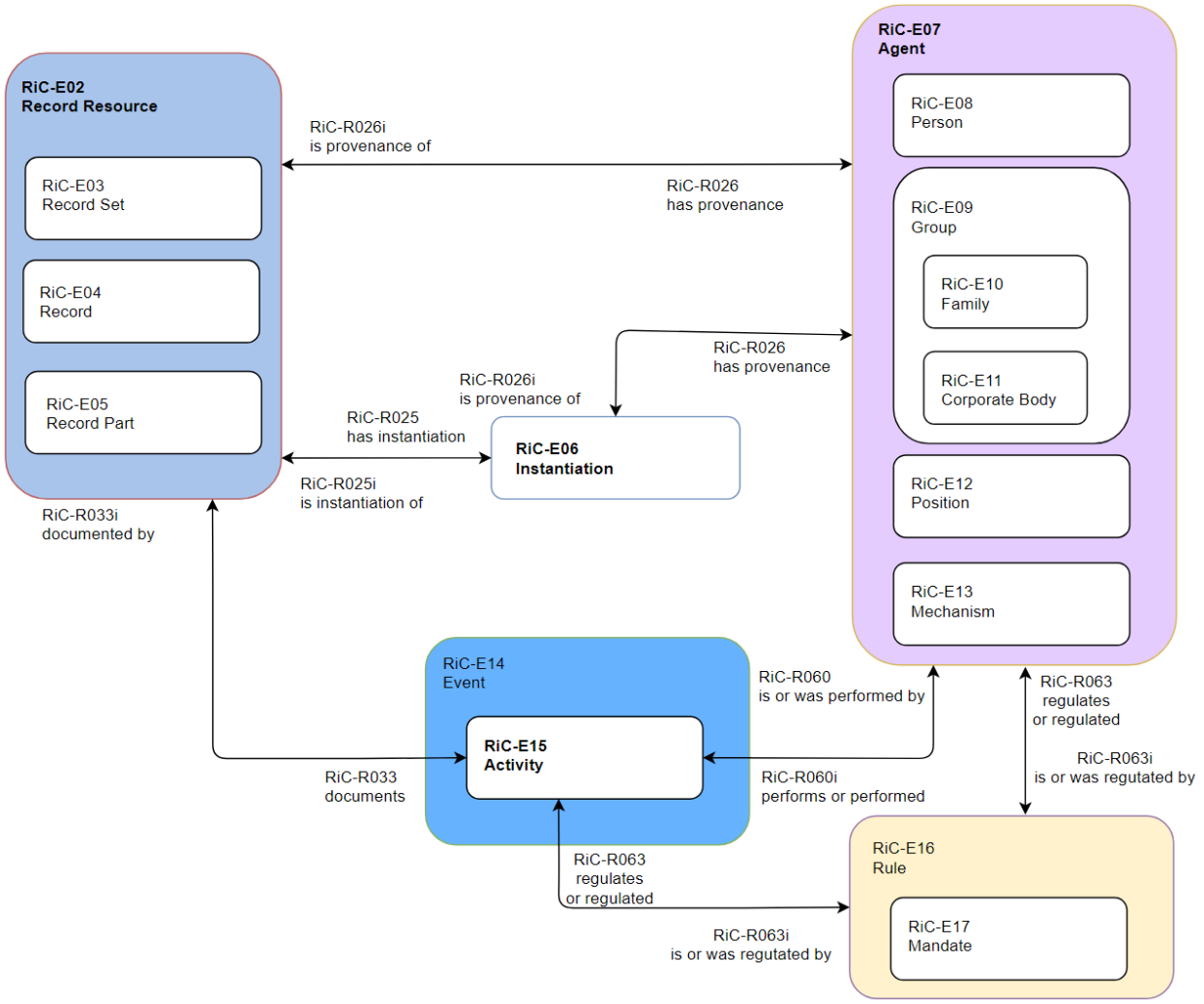

Figure 3: Core-Entities of the RiC Conceptual Model.

[13] Available at https://committee.iso.org/sites/tc46sc11/home/projects/published/iso-23081-metadata-for-records.html <accessed 20190412>.

2.1.1 Presentation of the Entities

The entities are presented as follows. The *thing* entity, as the all-encompassing entity, is set out first. It is followed by *record resource* and *instantiation*, presented together as they are conceptually closely related. Following are the remaining entities immediately below *thing*. Sub-entities of *record resource*, *agent*, *event*, *rule* and *date* are presented following the immediately superior entity. The only entity in the third level of the hierarchy that has sub-entities is *group*.

Description of each entity is based on the following template:

ID	Identifier for the entity
Name	Name of the entity
Definition	Brief definition of the entity
Scope Notes	Detailed conceptual scope of the entity
Examples	Examples of the entity
Comments	Comments comparing the entity to similar concepts in other conceptual models and ontologies

2.2 Description of Entities

2.2.1 Thing

RiC-E01 Thing

The *thing* entity includes all possible concepts, material things, or events within the realm of shared human experience and discourse. *Thing* is the root or base entity in RiC and as such includes all of the entities that are of primary interest to records managers and archivists, as well as other entities used in the description of the primary entities. Further, *thing* encompasses all other possible entities that are not explicitly identified in RiC-CM as entities. Any possible *thing* may be the subject of a *record resource* or associated with an *activity*. Describing or referencing (for example, through a name) such entities may be necessary for the description of context. Entities that are not explicitly identified and described in RiC-CM are commonly the responsibility of allied cultural heritage communities, academic and research communities, or specialized or expert communities.

ID	**RiC-E01**
Name	**Thing**
Definition	Any idea, material thing, or event within the realm of human experience.
Scope Notes	Includes all RiC-CM entities as well as any concept, material thing, or event that may be the subject of a *record resource* or associated with an *activity*. Examples of entities not explicitly addressed in RiC-CM include but are not limited to the following: abstract concepts; cultural movements, named periods and events; named things, objects, and works; legendary, mythical or fictitious figures, characters or beings.

Examples	Airplane Impressionism Puck Renaissance Slavery Before Christian Era (BCE) French Revolution A copy of an edition of William Shakespeare's Hamlet Leonardo da Vinci's Mona Lisa in the Musée du Louvre, Paris The vertebrate zoology specimen collection at the American Museum of Natural History The Flatiron Building located at 175 Fifth Avenue, New York City Quilombo dos Palmares, símbolo da resistência do negro à escravidão no Brasil
Comments	Compare further with: LRM-Res (Latin for Thing); and OWL-Thing (the root class of all ontologies expressed in OWL).

2.2.2 Record Resource and Instantiation

RiC-E02 Record Resource
- RiC-E03 Record Set
- RiC-E04 Record
- RiC-E05 Record Part

RiC-E06 Instantiation

RiC-CM introduces several conceptual distinctions for identifying and describing records. These distinctions are intended both to improve the clarity and precision of the description of record resources, and to address common record-keeping phenomena that arise prominently though by no means exclusively with both original and derived digital records.

ISAD(G) used the concept "unit of description" for record resources of all types: "A document or set of documents in any physical form, treated as an entity, and as such, forming the basis of a single description".[14] Further, ISAD(G) provides one set of "descriptive elements" or attributes for describing a "unit of description" whether the *thing* being described is an individual *record*, or a *record set*.

The RiC-CM *record resource* entity is conceptually comparable to "unit of description". RiC-CM, though, identifies three kinds of *record resources*: *record set*, *record*, and *record part*. *Record set* and *record* differ from one another in fundamental ways, and the ways in which they differ lead to differences in the way each is described. The origins of *record sets* and individual *records* within the set differ, in particular the *agents* related to the creation of each; and the

[14] ISAD(G) Second Edition: https://www.ica.org/sites/default/files/CBPS_2000_Guidelines_ISAD%28G%29_Second-edition_EN.pdf <accessed 20210717>. See page 11.

activities and purposes associated with each *agent*.[15] Further, the *activities* associated with each may be and commonly are separated from one another in time. The most prominent difference in the description is that the identity of the *record* is directly derived from the *record* itself, and the identity of the *record set* is dependent on and derived from the members of the set. Though some of the description of the set will describe the set as such, much of the description provides an overview or summary of the *records* contained in it.

RiC-CM introduces another important distinction. The information content or message that is communicated in a *record* or *record part* is distinguished from the inscription or representation of that content in a physical form (digital or analogue), an *instantiation*. A *record* or *record part* does not exist until it is represented in at least one *instantiation*, that is, its information content is inscribed on a carrier in a persistent, recoverable form.[16] This distinction is introduced for practical reasons and not as an absolute epistemic assertion.[17] As a practical distinction it recognizes that informally or formally humans will treat different representations of information as representations of the same information even though there may be and frequently are identifiable differences in the information conveyed. Despite the differences, within the context of use or anticipated uses, the differences may not be considered significant: the essential information content conveyed is considered the same or functionally equivalent. This determination is common in digital preservation, though there are analogue examples as well. While differences may not be deemed significant in particular use contexts, the differences are nevertheless evident. In some use contexts, however, the differences may be deemed significant. In such cases the information conveyed in an *instantiation* can be regarded as the representation of a new and not the same *record* or *record part*.

The relation between a *record* and an *instantiation* thus presents a dilemma; it enables presenting two or more equally conclusive alternatives. Which of the alternatives is viewed as correct depends on perspective and the context of use. When one perspective is that the physical characteristics of a specific *instantiation* contribute inalienable meaning to the intellectual content of the *record*, then it follows that any derived *instantiation* that does not maintain those physical characteristics results in a new *record*. Otherwise, the derived *instantiation* may be considered an *instantiation* of the same *record*.

The relation of *instantiation* to *record set*, *record* and *record part* differs in important ways. *Record* and *record part* have a *necessary* relation with *instantiation*. Each must be represented in at least one *instantiation* to exist. A *record set*, though, is an intellectual and not a physical aggregation. A *record set* represents *records* grouped together based on one or more shared attributes or relations, and thus it is indirectly dependent on the existence of instantiated

[15] Even if the same agent is responsible for both a Record Set and records that are members of the set, it is the performance of two different activities with distinct purposes that brings each into existence.
[16] The distinction between the *record* and *instantiation* is comparable to the "Intellectual Entity" and "Representation" distinction in PREMIS: *PREMIS Data Dictionary for Preservation Metadata* (Version 3): https://www.loc.gov/standards/premis/v3/premis-3-0-final.pdf <accessed 20201216>.
[17] For an in-depth analysis of the interplay of humans and technology in communicating using "new media," see Kirschenbaum, Matthew G. *Mechanisms: New Media and the Forensic Imagination*. Cambridge, MA: The MIT Press, 2012. Print.

records. A *record set*, however, may be instantiated if the group of records represented in it, subsequent to their creation, are instantiated by being bound together, either as a physical object, such as by a bound volume, or a computer file containing two or more identifiable *records*, for example, a sequence of page-images of analogue correspondence, or a sequence of photographs. Nevertheless, the *instantiation* of the *record set* is not a necessary condition of its existence.

RiC-CM thus introduces distinctions that are intended to improve the clarity and precision of the description of *record resources*, and to address phenomena that are common in record-keeping. While these distinctions introduce additional complexity into the processing and description of *record resources*, for perhaps the most common phenomenon, a *record* existing with one and only one *instantiation*, the description will remain much the same as in current practice.

2.2.2.1 Record Resource

ID	**RiC-E02**
Name	**Record Resource**
Definition	A *record*, *record set*, or *record part* produced or acquired and retained by an *agent* in the course of *activity*.
Scope Notes	*Record resource* is a kind of **Thing (RiC-E01)**. Producing a *record resource* may imply either its initial creation or a reuse of previous existing information by combination, rearrangement, selecting, reformatting, etc. *Records, record sets*, and *record parts* are all evidence of the *activities* of an *agent*. More than one *agent* may be involved in the creation of a *record resource*. The role of the *agent* in creating the *record resource* may take different forms, for example, authoring of an individual *record*, accumulating a *record set*, or arranging a *record set*. Though a *record*, *record set*, and *record part*, under most circumstances, may be easily distinguished from one another, identifying the boundary of each may frequently present particular challenges. Documentary forms provide the rules governing the structure of many types of records, providing criteria for identifying a *record's* boundary, and identifying its essential parts. Many *records*, though, do not have well-established documentary forms, particularly in the case of digital *records*, where it may be difficult to determine whether individual elements represented in separate bitstreams are *record parts*, *records*, or *record sets*. For example, is a photograph represented independently in a bitstream embedded in a text document a *record* or a *record part*? Or is the same photograph attached to an email that maintains its independent representation, a *record* or a *record part*? Information grouped for some purpose, for example, ZIP or TAR "file compression" for saving storage space, presents a further challenge. One file comprises multiple bitstreams subjected to techniques that remove bits that can be losslessly recovered when decompressed. Under what circumstances is such a compressed bitstream a *record* or a *record set*?

	Determining when an information object is a *record*, *record set*, or *record part* is based on perspective and judgement exercised in a particular context. In one context, the agent describing an information object may designate it a *record*, while another agent in a different context may designate it a *record part*. Both designations are supported by RiC-CM, and the significance of the difference for users of the records is ameliorated by the fact that all of the attributes and relations employed in describing *record* and *record part* are shared, as are many of the attributes and relations employed in describing a *record set*.
Examples	Cotton Manuscripts Collection Sketch Map of the Qatar Peninsula 3rd Great Seal of King Charles I Livro de registro de entrada de imigrantesna Hospedaria de Imigrantes da Ilha das Flores
Comments	

ID	**RiC-E03**
Name	**Record Set**
Definition	One or more *records* that are grouped together by an agent based on the *records* sharing one or more attributes or relations.
Scope Notes	*Record set* is a kind of **Record Resource (RiC-E02)**. The member *record*s in a *record set* may physically reside together, though physical proximity is not essential. In a particular context, an *agent* (for example, administrator, records manager, archivist, end-user, etc.) may select the member *records* of a *record set* based on any shared attribute or attributes, or any shared relation or relations. The grouping of the records serves a purpose or purposes specific to the context of the *agent*. For example, all member *records* of a *record set* have been accumulated by the same *agent*; have the same *documentary form type*; or are related to and document the same *activity*. A *record set* may represent the act of classifying the *record*s in accordance with a formal classification scheme that may be based on *activity*, subject, organizational structure, or other criteria; an act of archival arrangement (for example, based on common provenance); or some other selection and grouping that fulfils a particular purpose or purposes (for example, a classification that reflects or supports the purposes of a researcher). By exception, some *record*s are brought together based on their not belonging in the context of selection to other designated groups: a 'Miscellaneous' series, for example. A *record set* accumulated by an *agent* in the course of life or work activity should be described in a manner that preserves context and evidential value. *Record sets* may also contain other *records sets*. A *record set* or *record* may simultaneously be a member of more than one *record set*, and over the course of its

	existence, a *record set* or *record* may be a member of an indeterminate number of *record sets* in an indeterminate number of contexts. *Record sets* and *records* contained within a *record set* may be ordered into a sequence based on a common property or relation, or common properties or relations (for example, alphabetical by *agent* or related *plac*e); chronological order by creation *date*; or some other criterion (for example, an imposed order by relevance).
Examples	Cotton Manuscripts Collection Miscellaneous papers and fragments Papers of the Earls of Liverpool Official correspondence of the 1st Earl of Liverpool Registros de Hospedaria deImigrantes da Ilha das Flores Livro de registro de entrada de imigrantesna Hospedaria de Imigrantes da Ilha das Flores
Comments	

ID	**RiC-E04**
Name	**Record**
Definition	Information inscribed at least once by any method on any carrier in any persistent, recoverable form by an *agent* in the course of life or work *activity*.
Scope Notes	*Record* is a kind of **Record Resource (RiC-E02)**. A *record* must have or have had at least one *instantiation*. A *record* may have more than one *instantiation*. An *instantiation* derived from another *instantiation* of a *record* may be considered the *instantiation* of the same *record* or an *instantiation* of a new *record*, depending on the context . A *record* may serve a variety of purposes, though it always documents or is evidence of *activity*.
Examples	Deed appointing John Bambridge, Sheriff of Leicestershire, with 3rd Great Seal of Charles I appended Sketch Map of the Qatar Peninsula Email message concerning an agreement to participate in the ICA Seoul Congress (2016) containing two attachments and digitally signed Registro de entrada de Jacob Schwarz, trabalhador alemão, procedente de Antuérpia pelo navio Graf Bismark, na Hospedaria de Imigrantes da Ilha das Flores, e de sua saída para Porto Alegre
Comments	

ID	**RiC-E05**
Name	**Record Part**
Definition	Part of a *record* with discrete information content that contributes to the *record's* physical or intellectual completeness.
Scope Notes	*Record part* is a kind of **Record Resource (RiC-E02)**.

	A *record part* may itself have *record parts*.
Examples	3rd Great Seal of King Charles I Attachment to email message concerning an agreement to participate in the ICA Seoul Congress (2016)
Comments	

2.2.2.2 Instantiation

ID	**RiC-E06**
Name	**Instantiation**
Definition	The inscription of information made by an *agent* on a carrier in any persistent, recoverable form as a means of communicating information through time and space.
Scope Notes	*Instantiation* is a kind of **Thing (RiC-E01)**. A *record* or *record part* must have been instantiated at least once, though this *instantiation* may no longer exist at the time of description, when, for example, evidence of its existence is present in an extant *record*. An *instantiation* might also exist at the time of description but be destroyed at a later time when, for example, a derived *instantiation* might become the only remaining *instantiation*. A *record set* may have an *instantiation*, which is to say that it is not a necessary condition. An *instantiation* may be derived from another *instantiation*. A *record resource* may have multiple *instantiations* simultaneously or over time. For example, a *record* printed and saved at the same time as both DOCX and PDF/A would have three concurrent *instantiations*, or a *record* may be copied following its initial *instantiation*. Depending on the context, a new *instantiation* may represent a new *record resource* or the same *record resource*. Relative to the technique employed in deriving an *instantiation* from an existing *instantiation*, characteristics of the source *instantiation* may be lost or altered. Whether the derived *instantiation* is an *instantiation* of the same *record resource* or, because of loss or changes in characteristics, is an *instantiation* of a new *record resource* must be determined within the context by the *agent* that produces or uses that *instantiation*. For instance, a postcard representing a town map from 1874 (*instantiation* 1) is digitized and kept as a JPEG file (*instantiation* 2). The digital copy may be considered as instantiating the same *record* by an *agent* considering the information transmitted by the *record* (for example, the urban landscape displayed), but as a new *record* by an antiquarian more focused on the materiality of the carrier. Successive *instantiations* may change the perceivable boundaries of a *record resource*. For instance, a case file comprising many *records* may be digitized and saved as one single PDF file, which, from a management perspective, may be treated as one *record*. Similarly, a large *record set* (for example, a fonds or a series) may be maintained as one database. On the other hand, one *record* (main document and its annexes) may be digitized in separate files and each one may be managed as a discrete "physical" item. *Instantiations* may require mediation to communicate the information in the *record resource*. While a traditional *record* on paper can simply be read by an *agent* in order to understand the information, a vinyl recording, a video cassette or a digital file needs a device (mediator) to codify or decodify the information conveyed. This

	mediator may imply simple physical components (a turntable, for example), or a complex constellation of software and hardware elements. *Instantiations* are more than the mere informational content of *record resource* and may be the focus of preservation and physical management of records. The use of particular document types for *records*, such as a medieval charter, may have implications for the authenticity of the *records*. Hence, the way a *record resource* is instantiated contributes to the contextualizing of the content. Distinguishing the message conveyed (*record resource*) and its representations (*instantiations*) allows for the efficient management of their descriptions, and preservation of information about a *record resource* even when no *instantiation* of it exists or is known to exist. The relations between distinct *instantiations* can then be expressed wherever they coexist, and they can be related to the *record resource* they instantiate.
Examples	Cópia digital de livro de registro de entrada de imigrantes na Hospedaria da Ilha das Flores em formato pdf *Record*: 1521, June 29 — The merchant Neacsu writes to Johannes Benkner, mayor of Brasov, about the movement of Ottoman army in South Danube *Instantiation 1*: 1950 — b/w photocopy of the letter *Instantiation 2*: 2016 — color digital copy of the letter Wax seal carrying an impression of the 3rd Great Seal of King Charles I
Comments	

2.2.3 Agent

RiC-E07 Agent
- RiC-E08 Person
- RiC-E09 Group
  - RiC-E10 Family
  - RiC-E11 Corporate Body
- RiC-E12 Position
- RiC-E13 Mechanism

Agents are entities that act or perform *activities* in the world and in the course of performing the *activities* generate *records* that are the products or by-products of the *activity* performance.

The kinds of *agents* presented in RiC-CM include the entities represented in ISAAR(CPF): *corporate bodies*, *persons*, and *families*. In RiC-CM, *corporate bodies* and *families* are kinds of *groups* or collective agents. While *corporate bodies* and *families* are traditionally recognized kinds of *groups* it may be useful, within some contexts, to define additional kinds of *groups*. For example, within many political contexts, individual voters collectively elect individuals to hold *positions* in a government or an organization, and the election constitutes a *mandate* authorizing the *person* elected to hold and perform the duties assigned to the *position*. In yet other contexts, identifiable collective movements emerge that are not formally *corporate bodies*, but that do perform *activities* governed by shared values or commitments.

RiC-CM also introduces two additional kinds of agents: *position* and *mechanism*.

While traditional description has treated some high-level or government executive *positions* as *corporate bodies*, RiC-CM recognizes that a *position* or role that individual *persons* play in a *group* is a specific kind of *agent*. *Position* represents the intersection of *person* and *group*, and that the *records* generated by the performance of *activities* assigned to the *position* are both evidence of the *activities* of the *group*, but also evidence of the *activities* of the *person* that holds or held the *position*.

Mechanism as a kind of *agent* recognizes that software or machines based on mechanical and software components perform *activities* based on *rules* determined by the *agent* or *agents* that designed, created, and employ them. Such *mechanisms* may create or modify *records*.

ID	**RiC-E07**
Name	**Agent**
Definition	A *person*, or *group*, or an entity created by a *person* or *group* (*mechanism*), or a *position,* that acts in the world.
Scope Notes	*Agent* is a kind of **Thing (RiC-E01)**. An *agent* may have one or more identities; an identity is a constellation of properties or relations that together "identify" the *agent*. A *person* or *group* commonly has one identity, though each also may have one or more alternative identities. Such alternative identities may be shared by more than one *person* or *group*. Alternative identities include but are not limited to pseudonyms, heteronyms, DBA (Doing Business As), and trade identities. *Agent* also includes entities created by a *person* or *group* that act on behalf of the creating *agent* in an autonomous or semi-autonomous manner. Examples of a *mechanism* include software agents, robots, and space and underwater probes that generate data (*records*) in the course of *activity* assigned to and in conformance with the instructions (*rules*) given to them by the creating *person* or *group*.
Examples	Nelson Mandela Jean Harlow Família Schwarz Señores de los Cameros Hospedaria de Imigrantes da Ilha das Flores The Who (musical group) Perseverance (Mars rover)
Comments	

ID	**RiC-E08**
Name	**Person**
Definition	A human being with a social identity or persona.
Scope Notes	*Person* is a kind of **Agent (RiC-E07)**. Most commonly, a human being (biological person) has a single coeval socially constructed identity or persona. In everyday discourse, this is the "real person".

	Less common though not rare, over the course of a lifetime, one or more personae in addition to the coeval (or "original") persona may be associated with the human being. Such "alternative personae" are most often created by the original *person* for specific purposes. Under some circumstances, an alternative persona might eclipse or replace the original *person* (Mark Twain eclipsing Samuel Clemens; John Wayne eclipsing Marion Mitchell Morrison), that is, the social (shared) alternative identity becomes the predominant identity. Less common is when two or more *persons* collaborate to create a shared persona. A persona shared by two or more persons constitutes a kind of *group*. Within the archival context, the original *person* generally will be the focus of the description, with alternative personae noted. Exceptionally, an alternative persona may displace the coeval persona.
Examples	Nelson Mandela Jean Harlow
Comments	

ID	**RiC-E09**
Name	**Group**
Definition	Two or more *agents* that act together as an *agent*.
Scope Notes	Group is a kind of **Agent (RiC-E07)**. A *group* has a socially recognized identity. Each member of the *group* plays a particular role or roles (that is, has a particular *position*) in the coordinated *activity* of the *group*. *Corporate bodies* and *families* are kinds of groups, though other kinds of *groups* are possible. For example, the "electorate" — all of the voters in a given election. Complex, large *groups* may be subdivided into other *groups*.
Examples	Manchester United F.C. San Francisco Opera Parliament of the United Kingdom Corning Inc. Green Party of Canada Diné/Navajo Nation
Comments	

ID	**RiC-E10**
Name	**Family**
Definition	Two or more *persons* related by birth, or through marriage, adoption, civil union, or other social conventions that bind them together as a socially recognized familial *group*.
Scope Notes	Family is a kind of **Group (RiC-E09)**. "Family" is used here as a general term that encompasses a wide variety of familial groups. Other types of familial groups include dynasty, clan, house, tribe and others.

	Though *family* may be a recognized legal group in specific contexts, the term may also be used for *groups* that are socially recognized as *families*. A *family* may be a *group* of *persons* related either by consanguinity or affinity or cohabitation or other social conventions. In some context, a *family* may also be legally recognized as a *corporate body*. For example, certain North American peoples (Tribes) retain self-government rights and have jurisdiction over defined Tribal lands.
Examples	Noel Family Casa de Borbón Fugger Family Señores de los Cameros House of York Dukes of Northumberland Família Schwarz
Comments	

ID	**RiC-E11**
Name	**Corporate Body**
Definition	An organized *group* of *persons* that act together as an *agent*, and that has a recognized legal or social status.
Scope Notes	Corporate body is a kind of **Group (RiC-E09**). By exception, within some legal contexts, a sole trader or sole proprietor may be recognized as a corporate body, even when the economic enterprise does not have additional members. Corporate bodies often have a mandate giving them the authority to act within their area(s) of competence. They will also usually act within a particular jurisdiction being governed by legal and other rule-based frameworks. A corporate body though may be constituted in a more informal manner and exist as an entity by virtue of its recognition as such by its members.
Examples	Australian Hearing Services Gilbert and George Library and Archives Canada The Who (Musical group) Faculty of Science, University of Strathclyde Ministère de la Culture et de la Communication: Direction générale des patrimoines Parroquia de San Antonio Abad de Bilbao Ministerio de Ciencia y Tecnología Organización de Estados Americanos XV Brigada Internacional del Ejército Popular de la República Altos Hornos de Vizcaya, S.A. Concilio de Trento (1545-1563) Hospedaria de Imigrantes da Ilha das Flores
Comments	See CIDOC-CRM E40 (Legal Body).

	See PROV-O Organization class ("An organization is a social or legal institution such as a company, society, etc.")[18] See the Organization Ontology, Organization class ("Represents a collection of people organized together into a community or other social, commercial, or political structure. The group has some common purpose or reason for existence which goes beyond the set of people belonging to it and can act as an Agent. Organizations are often decomposable into hierarchical structures.")[19]

ID	**RiC-E12**
Name	**Position**
Definition	The functional role of a *person* within a *group*.
Scope Notes	*Position* is a kind of **Agent (RiC-07)**. *Position* is the intersection of a *person* and a *group*. *Position* exists independently of the *person* or *persons* that holds the position within a *group*. More than one *person* may hold a *position*. *Position* is commonly defined in a *mandate*, often called a position description or job description. The *mandate* may specify the work to be performed (*activity*) as well as the competencies for performing the *activity*. A *position* is often given a name. A *position* may be tied to a project or to a set of tasks and thus have a defined duration. A *position* may change over time, as the *group* that establishes it changes over time. Within the *records* created by a *corporate body*, a *position* may be used to identify the *record sets* resulting from *activities* performed by one or more *persons* holding the *position* over time, without necessarily identifying or describing the *person* or *persons*, or identifying which *records* were created by each *person*.
Examples	Pope, Roman Catholic Church President of France Prime Minister of Great Britain Chancellor of the University of California President of Toyota Motor Corporation State Archivist and Executive Director of the Louisiana State Archives Maestre Racional de la Casa y Corte del Rey de Aragón Presidente del Gobierno de España Pai de familia
Comments	

[18] Available at https://www.w3.org/TR/prov-o/#Organization <accessed 20190912>.

[19] Available at https://www.w3.org/TR/vocab-org/#class-organization <accessed 20190912>.

ID	RiC-E13
Name	**Mechanism**
Definition	A process or system created by a *person* or *group* that performs an *activity*.
Scope Notes	*Mechanism* is a kind of **Agent (RiC-E07)**. A *mechanism* may have both mechanical and software components or may be exclusively software. A *mechanism* acts in the world producing physical or social effects and may generate or modify records. A *mechanism* performs *activities* based on *rules* determined by the *agent* that designed and created it. A *mechanism* has an essential, derivative relation with the designing and creating *agent*.
Examples	Cassini–Huygens (space probe) Googlebot (webcrawler) soccer.bot (chatbot) ImageMagick (digital image conversion software) Xena (Xml Electronic Normalising for Archives) Dawn (space probe) Argo (ocean probe) Perseverance (Mars rover)
Comments	

2.2.4 Event

RiC-E14 Event
RiC-E15 Activity

An *event* is something that happens in time and space. A particular *event* may occur at a specific moment in time, or it may occur over a long period of time. *Events* may be natural, such as earthquakes, storms, floods, or pandemics; or have a human causation, such as elections, wars, protests, building a home, monitoring water quality, or managing records; or be a combination of natural and human when there is a human response to a natural *event*, such as rescuing *records* damaged by a flood, or developing a vaccine in response to a pandemic.

An *activity* is a kind of *event*. It is a human designed and performed *event* that has an intended purpose or purposes. The scope of *activity* within the context of a *corporate body* is the same as the traditional understanding of function. The name *activity* is used for this entity because, while it is appropriate to describe *corporate bodies*, *positions,* and *mechanisms* functionally, this is not the case for all of the *activities* of *persons* and *families*.

ID	RiC-E14
Name	**Event**
Definition	Something that happens in time and space.
Scope Notes	*Event* is a kind of **Thing (RiC-E01)**.

	An *event* may be natural, human, or a combination of natural and human. *Events* have temporal and spatial boundaries. An *event* may actively involve some *agent(s)* and affect any entity. An *event* may be discrete, happening at a specific moment in time, or may occur over an extended period of time. *Events* may have *events* as parts, and *events* may precede or follow one another. Multiple *agents* may participate in the same *event*, and in different roles.
Examples	Eruption of Mount Vesuvius (79 CE) San Francisco Earthquake (1906) Women's March (2017) Indian Ocean Earthquake and Tsunami (2004) Second World War (1939-1945) Registering births (Albemarle County, Virginia) Arno River Flood (1966) Restoration of records damaged in the Arno River Flood (1966-) T.S. Eliot and Groucho Marx corresponding (1961-1964)
Comments	Compare to: LODE Event class (2010) with some important details in the definition[20]: "An event consists of some temporal and spatial boundaries subjectively imposed on the flux of reality or imagination, that we wish to treat as an entity for the purposes of making statements about it. In particular, we may wish to make statements that relate people, places, or things to an event. Note that, unlike some definitions of "event," this definition does not specify that an event involves a change of state, nor does it attempt to distinguish events from processes or states". Event in the Event ontology (2007).[21]

ID	**RiC-E15**
Name	**Activity**
Definition	The doing of something for some human purpose.
Scope Notes	*Activity* is a kind of **Event (RiC-E14)**. *Activity* is specifically used to designate purposeful human activity. *Activity* may be understood from two perspectives. First it can be understood as leading to an end. The end is the purpose of the *activity*, or why the *activity* is performed. Second, it can be understood in terms of the processes that lead to achieving the end, how the end is realized through coordinated actions. Purpose and process are complementary understandings of *activity*. Together the two perspectives address why the *activity* is performed, the expected ends or outcomes; and how the *activity* fulfils the purpose. While *activity* has an intended end, it may also have unintended consequences and results, or side-effects (for example, a scientific experiment that has unexpected

[20] Available at http://linkedevents.org/ontology/#term-Event <accessed 20190912>.

[21] Available at http://motools.sf.net/event/event.html <accessed 20190912>.

	results). While, such unintended consequences may not be the focus of the description, they are context. In a corporate or government context an *activity* may also be called a "function". An *activity* exists in a specific social and cultural context, and within that context is subject to change over time. An *activity* may be composed of other *activities*.
Examples	Marketing Research and development Writing poetry Describing archives
Comments	

2.2.5 Rule

RiC-E16 Rule
RiC-E17 Mandate

Rules that govern human *activity* are ubiquitous. The very existence of some *agents*, *corporate bodies*, and *positions* in particular, are governed by *rules*. The *activities* of all *agents* are governed, in one manner or another, by *rules*. The *things* created through human *activity* are often affected by *rule*s governing the *activities* that produce the *things*, and in some instances, *rules* specify the essential characteristics of *things* produced. Managing the *things* produced over time, as an *activity*, will be governed by *rules*.

An essential governing condition is that an *agent* has the authority to perform a specific *activity*. Such authority may be explicit or implicit. In some contexts, for example within governments, armed forces, corporations, and other organizations, authority devolves from the top down. In such contexts, an explicit *mandate* conferring the authority is often required. In other contexts, the delegation of authority may be implicit, for example, it may be derived from prevailing socio-cultural norms or community expectations, or it may be implied when a *person* in a superior *position* requests a *person* in a subordinate *position* to perform a task. The RiC-CM *mandate* entity is a kind of *rule* wherein one *agent* explicitly gives another *agent* the authority to perform a specific *activity*.

In addition to explicitly or implicitly authorizing an *agent* to perform an *activity*, *rules* (and thus including explicit *mandates*) may also provide specifications for how the *activity* is to be performed or determine the nature of the *thing* or *things* produced by the *activity*.

The conditions that govern or influence the performance of an *activity* may derive from multiple sources. In representative democracies, for example, constitutions define the various components of the government, the authority of each, and elections populate the various *groups* and *positions*. Such *rules* and conditions may also be derived from applicable international and national standards, industry and professional codes of practice, by-laws, approved procedures manuals, etc. The authority of an *agent* may be and commonly is derived

from more than one source. For example, within the context of an archival institution, a *person* occupying the *position* of processing archivist will have a particular work assignment. Authority for performing the work will be set down in a formally approved description of the responsibilities of the *position*. The *person* will also have been formally trained as an archivist making them qualified for the *position*; that is, they will have professional training and skills. Professional principles and standards will also provide conditions for the performance of the *activities* assigned to the *position*.

Rules and *mandates* play important roles in all aspects of record-keeping. Records managers and archivists have authority and responsibility for managing, preserving, and providing access to *records*. Each of these activities and the detailed sub-activities are governed by *rules*. Access to *records*, for example, may be controlled based on security or privacy *rules*, and use of *records* may be controlled by intellectual property *rules*. The description of *record resources* and related contextual entities will be based on *rules*, such as RiC-CM. *Records* that have an identifiable *documentary form type*, for example, a deed of sale or a birth certificate, are created based on *rules* that specify the characteristics of the type. Thus *rule*, in addition to *activity*, may also be directly related to *record resources*.

ID	**RiC-E16**
Name	**Rule**
Definition	Conditions that govern the existence or authority of an *agent* or the performance of an *activity*, or that contribute to the distinct characteristics of *things* created or managed by an *agent*.
Scope Notes	*Rule* is a kind of **Thing (RiC-E01)**. *Rule* can be related directly to *agent*, *activity*, or anything created or managed by *agents*, such as a *record resource* or *instantiation*. A *rule* may be unwritten or written or otherwise documented. Unwritten *rules* may include though are not limited to the following: social mores, customs, or community expectations. Written rules may include though are not limited to the following: constitutions, legislation, acts (legal), statutes, legal codes, ordinances, charters, mission statements, regulations, policies, procedures, instructions, codes of conduct or ethics, professional standards, work assignments, or work plans. The source or sources of some *rules* governing the existence or *activity* of an *agent* may be external (for example, expressed in elections, social mores, customs, community expectations, laws, regulations, standards, and best practice codes), while others may be expressed within the immediate context of an *agent* (for example, policies, or written or verbal instructions). The evidence for identifying *rules* may be found in their entirety in one documentary source (for example, a law or regulation) or may be found in two or more sources. *Rule* should not be confused with the one or more documentary sources that serve as evidence of its identity. A documentary source is a *record*.
Examples	Records in Contexts-Conceptual Model Constitución Española del 27 de diciembre de 1978 Fuero de Guadalajara de 1219 Manual de Procedimientos de Administrativos de la Universidad Pública de Navarra

	Decreto n. 8816/1882 sobre as declarações exigidas aosestrangeiros no ato de visita da Polícia
Comments	

ID	**RiC-E17**
Name	**Mandate**
Definition	Delegation of authority by an *agent* to another *agent* to perform an *activity*.
Scope Notes	*Mandate* is a kind of **Rule (RiC-E16)**. A *Mandate* confers the authority or competencies of an *agent* to perform a specified *activity*. In addition to assigning an *activity* and delegating authority to perform the *activity* to an *agent*, a *mandate* commonly limits the *place* (jurisdiction) and *date* (time period) within which an *agent* may perform the *activity* (where and when). *Mandates* exist in a specific social and cultural context, and within that context are subject to change over time. While a *mandate* may be tacit, in whole or part, it may be explicitly expressed in a variety of documentary sources (for example, constitutions, legislation, (legal) acts, statutes, legal codes, ordinances, charges, charters, or mission statements). The evidence for identifying a *mandate* may be found in its entirety in one documentary source (for example, a law or regulation), or may be found in two or more sources. A *mandate* should not be confused with the one or more documentary sources that serve as evidence of its identity. A documentary source is a *record*.
Examples	Authority granted by electors to a person to represent them in Parliament Authority of a Mayor of New York City to grant building authorisations The mandate of the Australian Hearing Services, as set out by the Australian Hearing Services Act 1991 (s 7), is to provide hearing services, carry out research and development in relation to hearing services and acoustic development, and conduct education about hearing services. O decreto n. 603/1890 dá como competências da Inspetoria Geral de Terras e Colonização a extremação das terras de domínio público e particular, a demarcação, divisão e registro das terras devolutas, a legitimação de posses, concessões e sesmarias, além da fiscalização e direção de todos os serviços atinentes à imigração e colonização e promoção da imigração espontânea
Comments	

2.2.6 Date

RiC-E18 Date
- RiC-E19 Single Date
- RiC-E20 Date Range
- RiC-E21 Date Set

All *things* exist in time with the exception of time itself. Situating entities in time is critical in establishing context for understanding.

The RiC-CM entity for describing the chronological dimension of entities is provided by the *date* entity and its sub-entities *single date*, *date range*, and *date set*. For all entities, *dates* are important in conveying when the entity began and ended, and important *events* in the course of its existence that contribute to or effect changes in its identity.

A significant *date* or *dates* related to each entity will vary according to the nature of the entity being described. With respect to a *record resource*, *dates* associated with creation, or cessation, and *events* that affect its quality are all important contextual information. In addition to beginning and ending dates for an *agent*, its authority to perform an *activity* may be limited to a specific period of time. The *date* of an *event* in relation to another entity, for example, to a *record resource*, *instantiation*, or *agent*, can be used to describe the history of the entity.

Date and its sub-entities are treated as entities rather than attributes because chronological description is inherently complex. *Dates* may be expressed in natural language or in a standard-based machine-readable form. If the latter, the standard on which the date is based needs to be explicit. Evidence for relating a *date* to an entity may be ambiguous or unclear, and thus more or less certain. A *date* may be expressed in varying degrees of precision, and the degree of precision needs to be provided to inform interpretation.

ID	**RiC-E18**
Name	**Date**
Definition	Chronological information associated with an entity that contributes to its identification and contextualization.
Scope Notes	*Date* is a kind of **Thing (RiC-E01)**. *Date* has as sub-entities *single date*, *date range*, or *date set* (a set of non-contiguous *single dates* or *date ranges*). A *date* may be represented in natural language, based on a digital standard, or both. Digital standard *dates* will typically be based on ISO 8601, or Extended Date-Time Format (EDTF).
Examples	4 March 1842 3 Henry VIII 1925-1957 20th Century
Comments	

ID	**RiC-E19**
Name	**Single Date**
Definition	*Single Date* is a kind of **Date (RiC-E18)**. Chronological information associated with an entity that contributes to its identification and contextualization related to a single point in time.
Scope Notes	
Examples	March 1842 3 Henry VIII

	9 Thermidor An II 18420304 5 de março de 1883

ID	**RiC-E20**
Name	**Date Range**
Definition	*Date Range* is a kind of **Date (RiC-E18)**. Chronological information associated with an entity that contributes to its identification and contextualization that implies or explicitly states a start *date* and end *date*.
Scope Notes	
Examples	1925-1957 20th Century c. 1860s 4/3/1883-15/12/1883
Comments	

ID	**RiC-E21**
Name	**Date Set**
Definition	Non-contiguous *single dates* or *date ranges*.
Scope Notes	*Date Set* is a kind of **Date (RiC-E18)**. Primarily used in the description of *record sets* to describe the *dates* of creation of member records.
Examples	1926-1928, 1930, 1935-1945 1846, 1849, 1876
Comments	

2.2.7 Place

RiC-E22 Place

There are a variety of ways in which relating entities to *place* is essential in establishing the contexts of the entities. *Record resources* are created in a particular *place*, and after they are created, they continue to exist in a particular *place* or *places*. *Agents* come into existence in a particular *place*, and subsequently, in the course of life or work activities may be associated with a one or more *places*. Further, the authority of an *agent* to perform an *activity* may be constrained by *place*, a mandated jurisdiction. *Events* occur in a particular *place* or *places*. Finally, a *rule* comes into existence in a particular *place*, and may also constrain an *activity* by defining the *place* where the *activity* may be performed.

ID	**RiC-E22**
Name	**Place**
Definition	Bounded, named geographic area or region.

Scope Notes	*Place* is a kind of **Thing (RiC-E01)**. A *place* may be a jurisdiction, a man-made structure, or a natural feature. A man-made structure or natural feature may also be a jurisdiction. A *place* may be systematically referenced to a location on the earth (geographic coordinates). Both *jurisdictions*, *man-made structures*, and *natural features* are historical entities. A *place* thus may have a begin *date* and end *date* and changing boundaries that result from human or natural *events*. A jurisdiction is the bounded geographic area within which an *agent* has the authority to perform specified *activities* constrained by *rules.*
Examples	Amazon River Nova Scotia Paris North Lanarkshire District Manchester Diocese Rugby Urban Sanitary District Reino de Granada Vía de la Plata El Bierzo Cabo de Corrubedo Condado de Barcelona Río Guadalquivir Avenida de Mayo (Buenos Aires, Argentina) Ilha das Flores (São Gonçalo, RJ, Brasil) The Flatiron Building (New York City)
Comments	

3 Attributes

3.1 Introduction

Attributes are the characteristics of the entities. The attributes of an entity, together with the relations that the entity has with other entities, constitute its identity, what it is. Describing an entity necessarily involves observation and analysis of evidence in order to identify the salient characteristics. While many of the attributes are based on characteristics inherent to the entity, for example, the *language* used by a *person*, or the *language* used in a *record*, others are specified by the *person* describing the entity, such as associating a specific *identifier* with the entity to uniquely identify it within the context of its description.

3.2 Attribute Definition Template

The attributes are listed in alphabetical order.

Each attribute is described based on the following template:

ID	Identifier of the attribute
Name	Natural language label of the attribute
Definition	Brief definition of the attribute
Domain	Entity or entities which may have the attribute: see section 4 below for lists of attributes for each entity
Specifications	Possible specifications, precisions, annotations, or qualifiers of the meaning of the value of an attribute in a description
Extensibility	Whether the attribute may have extensions or specializations by the addition of sub-attributes
Repeatability	Whether the attribute can be repeated or not in the description of a particular entity or relation
Value Schema	Rules for selecting or formulating the value of the attribute: see section 3.5 below
Scope	Additional information to aid the understanding and use of the attribute
Examples	Examples of values of each attribute

3.3 Entities versus Attributes

In conceptual modelling, it is often difficult to decide whether a particular phenomenon should be treated as an entity or an attribute. This is particularly true for attributes with Value Schema type "Controlled value" (see section 3.5 below). In many implementation scenarios such concepts are defined as entities (or classes). Controlled value lists or thesauri typically have the scope of a particular conceptual category or categories (for example, subjects, occupations, or *activity* types), and each conceptual entity may have preferred as well as alternative terms, broader and related terms, and more.

EGAD chose to treat these types of conceptual phenomena as attributes in order to keep the entities presented focused on the phenomena deemed central to the purpose of records

managers and archivists. However, in any implementation of RiC-CM, these attributes might be treated as entities for a number of reasons. For example, it would enable creating shared vocabularies that are important for the management of *records*, such as *record set type*, *activity type,* or *occupation type*. It would also enable the use of existing shared vocabularies, such as subject or topic concepts, available for the description of *records* as well as artifacts curated by allied cultural heritage communities. Finally, it would enable, in a Linked Open Data environment, interrelating dispersed description and access services. For these reasons, RiC-O treats such as entities (classes).

3.4 Record Resource, Record Set, Record, and Record Part Attributes

As noted in section 1.6.2.1 above, RiC-CM introduces a distinction between a *record set* and an individual *record*. ISAD(G) uses the concept "unit of description" that treats both a *record set* and a *record* as essentially the same kind of *thing*, that is, the same attributes may be used for describing a *record set* or an individual *record*.

The RiC-CM distinction between *record set* and *record* is based on the broad observation that treating *record sets* and individual *records* as essentially the same leads to ambiguity and imprecision in the description. For example, an attribute, such as *language* or *documentary form type*, when associated with a *record set*, is not an attribute of the *record set*, as such, but rather a description of all or some of the individual *records* that are members of the set. A *record set*, as such, does not have a *language* or a *documentary form type*.

Understanding this distinction can be a challenge because in everyday discourse we commonly ascribe a shared characteristic of members of a set to the set as such. For example, if all members of a *record set* are "access restricted", then we commonly say "the record set is access restricted" rather than the more precise "all records in the set are access restricted". The ambiguity is often compounded further in that attributes such as *language* and *documentary form type* are often associated with a *record set* when they only characterize some but not all members of the *record set*.

Distinguishing between *record set* and *record* presents challenges in identifying and specifying the attributes of each. The central technical issue presented is that the relation between an entity and an attribute may be formulated as follows: "entity has attribute". But, as stated above, for many of the attributes of *record* when associated with *record set*, such a statement is false. In order to make this statement true, the precise way to associate the attributes of *record* with *record set* would involve differentiating the nature of the relation:

> *record set* **has all members** with attribute
> *record set* **has some members** with attribute

But this violates the implied semantics of an Entity-relationship Model.
The only formal option possible would be to specify two additional attributes:

record set **has** language of all members
record set **has** language of some members

And so on for each attribute at issue. EGAD, in order to keep RiC-CM as concise as possible, has chosen not to differentiate these attributes. Instead, attributes for which this distinction is relevant are identified in the "Scope" statements in section 3.6 below and with an '*' in the list of attributes for the *record set* entity in section 4.2.1 below.

3.5 Value Schema

The association of an attribute to an entity is implicitly an assertion: entity *has* attribute *with value*. For example: *record* "A" has *language* "B", where "B" is the value of the *language*.

All attributes will have at least one specified "Value Schema". Some attributes that may be differentiated into sub-attributes upon implementation have more than one Value Schema specified. The Value Schema should be seen as indicative and neither prescriptive nor proscriptive.

There are four possible Value Schema:

Free text: Words and sentences based on alpha-numeric code that are not bound or constrained by *rules* or models other than those of natural language expression. Free text is useful for situations where prose is necessary to make clear some aspect or aspects of the entity that may or may not be shared with other entities.

Model-based text: Words and sentences based on alpha-numeric code that are bound or constrained by a linguistic or content model. The aim of the model is to create consistency of expression and content across instances of the attribute. For example: a model may specify a certain set or form of words be used to either frame specific content or consistently capture a particular value. One aim of the Model-based text is to enable the retrieval of all instances containing the text specified in the model.

Controlled value: Words and phrases (terms) based on alpha-numeric code that are selected from a controlled list of authorized (or authoritative) terms. Such lists may also allow for the emergence of new terms based on day-to-day operations and changing circumstances. Conceptual Controlled value lists are commonly maintained as thesauri that accommodate, in addition to authorized terms, synonyms and related, broader, or narrower terms. Controlled value lists commonly establish the identity of real-world entities, such as *agents* or *places* (jurisdictions, manmade structures, or natural features), relate authorized *names* (and alternative *names*) to the real-world entity, and may additionally interrelate the entities with one another. Note that Controlled value attributes are commonly treated as entities in implementations as noted in section 3.3 above.

Rule-based value: Data objects based on alpha-numeric code that are designed to be computationally processable (machine readable and processable) and based on a set of prescriptive or proscriptive *rules* governing form, scope, and purpose. Typically, these *rules* are embodied in standards that enable interoperability of data across systems and operational environments. For example, there are international standards for the expression of *dates* and the expression of geographic *coordinates*.

3.6 Description of Attributes

ID	**RiC-A01**
Name	**Accrual**
Definition	Information on the anticipated accession(s) to the *record set*.
Domain	Record Set
Specifications	Such accessions may be *record sets*, *records*, or *record parts*. Note the *accrual status* of a *record set* as a text statement or single words such as "Closed" to indicate that no additional *record sets* or *records* will (or are anticipated to) be added to the *record set*; "Open" to indicate that additional *records* or *record sets* will (or are expected to) be added to the *record set*; or "Unknown" to indicate that this information is not available.
Extensibility	May be extended with any number of specific attributes.
Repeatability	Not repeatable
Value schema	Model-based text; free text
Scope	
Examples	Open - there is an agreement with the creator that additional snapshots of their email directory will be accessioned at yearly intervals Closed Unknown

ID	**RiC-A02**
Name	**Activity Type**
Definition	Categorization of an *activity*.
Domain	Activity
Specifications	
Extensibility	May be extended with any number of specific attributes, for example "function/action" and "activity domain". Making the attribute extensible allows for a faceted approach that enables *activity type* to be divided into more distinct components, both general and specific. For example, "monitoring" can be used in combination with "election polls" or "water resources".
Repeatability	Not repeatable
Value schema	Controlled value
Scope	
Examples	business process action task transaction

ID	RiC-A03
Name	**Authenticity Note**
Definition	Description of the evidence that the *record*, *record part*, or *instantiation* is what it purports to be, was created or sent by the said *agent* at the said time, and has not been tampered with, corrupted, or forged.
Domain	Record Set; Record; Record Part; Instantiation
Specifications	
Extensibility	May be extended with any number of specific attributes.
Repeatability	Not repeatable
Value schema	Model-based text; free text
Scope	May be used in a *record set* description when the attribute value is shared by some or all members of the *record set*. For digital *records*, it may include results from automated means of checking the validity of signatures and timestamp. In particular cases it may be contextually related to the s*tate* attribute, for example, a document can be an original or a copy, either of which can be authentic or a forgery.
Examples	The letter is unsigned The charter is missing the seal of the King The deed is digitally signed by the Notary. The electronic signature validity cannot be assessed, but the content was not modified from the moment of signing The timestamp exists but cannot be verified The record bears signatures and it was preserved The whole collection consists of copies of the charters issued by Vlad the Impaler

ID	RiC-A04
Name	**Carrier Extent**
Definition	Number of physical units and/or physical dimensions of the carrier of an *instantiation*.
Domain	Instantiation
Specifications	In order to manage an *instantiation* of a *record resource* it is necessary to note the extent of the carrier as well as that of the *instantiation* itself. Whether it is necessary to note dimensions, the number of relevant units or both depends on the nature of the carrier and particular business needs.
Extensibility	May be extended with any number of specific attributes in order to enable use of controlled values or rule-based values.
Repeatability	Not repeatable
Value schema	Model-based text; free text
Scope	For digital resources, it indicates the size of storage capacity (disk, tape, film, etc.). *Carrier extent* should not be confused with *instantiation extent* or *record resource extent*. For a given *record resource*, the *instantiation extent* may vary, based on format, density of information on the carrier, etc. For example, a CD with a storage capacity of 700 MB (*carrier extent*) might hold a *record* of 1500 words (r*ecord resource extent*) represented in two versions, one a Word document with an *instantiation extent* of 3 KB and the other a PDF file with an *instantiation extent* of 5 KB.
Examples	1 page

	32.5 x 49 cm [piece of parchment] 17 x 34.5 cm 3 GB [1 USB key]

ID	**RiC-A05**
Name	**Carrier Type**
Definition	Categorization of physical material in or on which information is represented.
Domain	Instantiation
Specifications	In order to manage an *instantiation* of a *record resource*, it is necessary to note the type of carrier on which the *record resource* is instantiated as its nature will determine the environmental conditions of storage and the prerequisites and possible ways to access and use the *record resource*.
Extensibility	May be extended with any number of specific attributes.
Repeatability	Repeatable
Value schema	Controlled value
Scope	*Carrier type* should not be confused with *representation type* of the *instantiation* or the *content type* of a *record resource* as the form of communication can be independent of the representation or the carrier, for example a map (*content type* "cartographic image") may be represented as a sketch (*representation type* "visual") recorded as a physical document (*carrier type* "paper").
Examples	clay tablets papyrus magnetic disk optical disk paper parchment film vinyl disk magnetic tape

ID	**RiC-A06**
Name	**Certainty**
Definition	Qualifies the level of certitude about the accuracy of a *date* or an *event.*
Domain	Event; Date
Specifications	
Extensibility	Not extensible
Repeatability	Not repeatable
Value schema	Controlled value
Scope	
Examples	certain uncertain

ID	RiC-A07
Name	**Classification**
Definition	A term, number or alphanumeric string that is usually taken from an external classification vocabulary or scheme that qualifies the *record* or *record part*.
Domain	Record Set; Record; Record Part
Specifications	
Extensibility	May be extended with any number of specific attributes.
Repeatability	Repeatable
Value schema	Controlled value; Model-based text
Scope	May be used in a *record set* description when the attribute value is shared by some or all members of the *record set*. The attribute is not to be confused with *identifier* attribute although, in some cases, the information may be the same.
Examples	BUD-01-F002 [example of a classification number from a corporate file plan] human resource management student registration financial affairs digitized items

ID	RiC-A08
Name	**Conditions of Access**
Definition	Terms and circumstances affecting the availability of a *record set*, *record,* or *record part* for consultation.
Domain	Record Set; Record; Record Part; Instantiation
Specifications	Such conditions may originate in laws, regulations and policies, including those pertaining to privacy and security concerns or restrictions; they may concern a specific *instantiation* of a *record resource*, for example, conditions that require preservation treatment; or they may specify the software or hardware necessary to access the *instantiation*.
Extensibility	May be extended with any number of specific attributes in order to enable use of controlled values.
Repeatability	Not repeatable
Value schema	Model-based text; free text
Scope	May be used in a *record set* description when the attribute value is shared by some or all members of the *record set*. The attribute provides information about the accessibility of a *record*, as well as the physical, technical or legal limitations that exist for providing access to it.
Example	Open Closed under data protection legislation Closed as awaiting conservation treatment Acceso libre a través de los terminales de consulta The Archives cannot provide VHS reader to access the content of the tape Recognita software, min. version 3.0, is needed in order to open the file Closed for 30 years

ID	RiC-A09
Name	**Conditions of Use**
Definition	Terms and circumstances affecting the use of a *record* or *record part* after access has been provided.
Domain	Record Set; Record; Record Part; Instantiation
Specifications	Includes conditions governing reproduction of the *record* or *record part* under applicable copyright (intellectual property) and/or property legislation or due to conservation status.
Extensibility	May be extended with any number of specific attributes in order to enable use of controlled values.
Repeatability	Not repeatable
Value schema	Model-based text; free text
Scope	May be used in a *record set* description when the attribute value is shared by some or all members of the *record set*.
Example	Permission of the copyright owner must be obtained before use Cannot be copied using warm light copying machines or photographed using flashlight

ID	RiC-A10
Name	**Content Type**
Definition	The fundamental form of communication in which a *record* or *record part* is expressed and the human sense through which it is intended to be perceived.
Domain	Record Set; Record; Record Part
Specifications	
Extensibility	May be extended with any number of specific attributes.
Repeatability	Repeatable
Value schema	Controlled value
Scope	May be used in a *record set* description when the attribute value is shared by some or all members of the *record set*. The attribute should not be confused with *representation type* or *carrier type attributes* of a related *instantiation* since the form of communication can be independent of the representation or carrier, for example a map (*content type* "cartographic image") may be represented as a sketch (*representation type* "visual") recorded as a physical document (*carrier type* "paper").
Examples	cartographic image notated music recorded spoken word still image text

ID	RiC-A11
Name	**Coordinates**
Definition	Longitudinal and latitudinal information about a *place*.
Domain	Place
Specifications	

Extensibility	May be extended with any number of specific attributes. For example, it needs to accommodate both longitudinal and latitudinal information according to a reference system.
Repeatability	Repeatable. It needs to accommodate information deriving from different systems.
Value schema	Rule-based value
Scope	May be based on ISO 6709 Standard representation of geographic point location by coordinates.
Examples	Latitude 50°40’46,461”N, Longitude 95°48’26,533”W, Height 123,45m Latitude 35.89421911, Longitude 139.94637467

ID	**RiC-A12**
Name	**Corporate Body Type**
Definition	Categorization of a *corporate body*.
Domain	Corporate Body
Specifications	Note the type or types of *corporate body* where useful in a particular context.
Extensibility	May be extended with any number of specific attributes.
Repeatability	Repeatable
Value schema	Controlled value
Scope	
Examples	private public non-governmental organization political party musical group

ID	**RiC-A13**
Name	**Date Qualifier**
Definition	Indicates the precision of *date*. It specifies if, and to what extent, the value is an estimation.
Domain	Date
Specifications	
Extensibility	May be extended with any number of specific attributes. It needs to be extensible in order to differentiate among different types of qualifiers.
Repeatability	Not repeatable
Value schema	Controlled value
Scope	
Examples	circa exact during

ID	**RiC-A14**
Name	**Date Standard**
Definition	Identifier of the standard governing the form of the *normalized date.*
Domain	Date
Specifications	

Extensibility	May be extended with any number of specific attributes.
Repeatability	Not repeatable
Value schema	Free text
Scope	
Examples	Gregorian French Revolution calendar ISO 8601

ID	**RiC-A15**
Name	**Demographic Group**
Definition	Categorization of a *person* or *group* based on shared characteristics.
Domain	Person; Group
Specifications	
Extensibility	Needs to be differentiated into specific attributes in order to be useful. Among possible specific demographic attributes are gender, education, identity, *place*, ancestry, ethnic/cultural identification, and religion.
Repeatability	Relative to the specific kind of demographic category, it may or may not be repeatable
Value schema	Specific demographic attributes should use controlled values
Scope	Intended to recognize that demographic categorization of *persons* or *groups* may be useful in identifying *persons* or *groups* associated with records in specific contexts. Demographic categorization presents intellectual and ethical challenges. While it may benefit users of records by providing context and facilitating specific kinds of research, historically it has also been abused, for example, when one *demographic group* argues its superiority over another *demographic group* as justification for oppression, even genocide. A *person* or *group* may belong to several *demographic groups*. A kind of *demographic group* for a *person* is an *occupation type*.
Examples	females Brazilians Protestants

ID	**RiC-A16**
Name	**Descriptive Note**
Definition	Further information about an entity that is not otherwise addressed.
Domain	Thing
Specifications	
Extensibility	May be extended with any number of specific attributes.
Repeatability	Not repeatable
Value schema	Free text
Scope	
Examples	Previous reference codes on the cover of the folder are written in orange and blue pencil (*record*) This charter was written on an erased parchment (*record*)

	Su producción como literata se divide fundamentalmente en dos grandes apartados: Ensayo y novela. También escribió obras de teatro experimentales y de escaso éxito. (*person*) tasks involved in developing and establishing the university's research strategy include: identifying requirements for a new or revised strategy undertaking research developing strategy proposals consulting on strategy proposals reviewing and revising strategy proposals in light of comments received drafting strategy documents consulting on strategy documents reviewing draft strategy documents in light of comments received producing final strategy documents submitting final strategy documents for formal endorsement formally endorsing strategy documents disseminating strategy documents reviewing strategies [example for research strategy development, University of Strathclyde] (a*ctivity*)

ID	**RiC-A17**
Name	**Documentary Form Type**
Definition	Categorization of the document with respect to its extrinsic and intrinsic elements that together communicate its content, administrative and documentary context, and authority.
Domain	Record Set; Record; Record Part
Specifications	
Extensibility	May be extended with any number of specific attributes.
Repeatability	Not repeatable on *record* or *record part*, or on *record set* when describing all members of the *record set* Repeatable on *record set* when describing some members of the *record set*
Value schema	Controlled value
Scope	May be used in a *record set* description when the attribute value is shared by some or all members of the *record set*. *Documentary form type* plays an important role in determining the type of information a *record* may comprise, its status of perfection, and its authenticity and reliability. *Documentary form types* exist in a specific social and cultural context, and within that context, are subject to change over time.
Examples	deed of gift email letter papal bull charter letters patent

	birth certificate will carta acta de entrega expediente de licencia de obras mayores libro de actas

ID	**RiC-A18**
Name	**Event Type**
Definition	Categorization of an *event.*
Domain	Event
Specifications	
Extensibility	May be extended with any number of specific attributes.
Repeatability	Not repeatable
Value schema	Controlled value
Scope	*Events* of all kinds can be categorized.
Examples	accession acquisition arrangement birth description digitization earthquake hurricane marriage transfer

ID	**RiC-A19**
Name	**Expressed Date**
Definition	Natural language expression of a *date*.
Domain	Date
Specifications	
Extensibility	May be extended with any number of specific attributes.
Repeatability	Repeatable
Value schema	Model-based text; free text
Scope	
Examples	October 24, 1999 1925-1966

ID	**RiC-A20**
Name	**Family Type**
Definition	Categorization of *family*.
Domain	Family
Specifications	
Extensibility	Not extensible

Repeatability	Not repeatable
Value schema	Controlled value
Scope	Encompasses a wide variety of familial *groups* related by consanguinity, affinity, cohabitation, or other social conventions.
Examples	family dynasty clan tribe

ID	**RiC-A21**
Name	**History**
Definition	Summary of the development of an entity, since its origin until present time.
Domain	Record Resource; Instantiation; Agent; Event; Place; Activity; Rule
Specifications	For a *record resource,* an account of its *history*. To the extent known, this may cover the entire *history* from inception to the *date* of the most current description and include information about the *history* of origination, responsibility, property, custody, control, arrangement, description, and management of the *record resource*. For *instantiation,* an account of *history* of a specific *instantiation* of a *record resource* from its inception to *date* of latest description. For *agent,* concise *history* of the *agent*, relevant for understanding of the context of *records* creation, including its creation/definition/birth, its evolution over time, including changes concerning the education, competencies, *positions*, the *mandate* assigned, etc. For *event*, *history* of origin and development of the *event*. For *rule*, *history* of the authority or specifications relating to the performance of an *activity*. For *activity,* an account of the *history* of the *activity* relevant for understanding the context of *records* creation. This may include information about the evolution of the *activity* over time and the changes in responsibility for the *activity*. For *place,* an account of the history of the *place*. Can alternatively be represented in a more structured manner by use of the *event* entity. For example, the history of an *entity* may be represented as a series of *events* with relevant *event types* with relations expressed with *date* and *place* entities.
Extensibility	May be extended with any number of specific attributes.
Repeatability	Not repeatable
Value schema	Model-based text; free text
Scope	For *record set*, may additionally be used to summarize the *history* of members of the *record set*. Should not be confused with the *scope and content* attribute.
Examples	The manuscripts are part of the collections of Robert Harley (d 1724) and Edward Harley (d 1741), 1st and 2nd Earls of Oxford, that were brought by Parliament and transferred to the British Museum in 1753. Those materials were then separated into this collection and those for Harley Charters and Harley Rolls and became part of the collections of the British Library in 1972. (*record set*)

	Nacido en Barbastro en 1892, donde realizó sus primeros estudios con los escolapios. Licenciado en Derecho por la Universidad de Zaragoza, aprobó las oposiciones al cuerpo nacional de notarios…(*person*) El primer sorteo de lotería se celebró el 13 de mayo de 1771, siendo desarrollado por la Real Lotería General de Nueva España… (*activity*)

ID	**RiC-A22**
Name	**Identifier**
Definition	A word, number, letter, symbol, or any combination of these used to uniquely identify or reference an individual instance of an entity within a specific information domain.
Domain	Thing
Specifications	Can include Global Persistent Identifiers (globally unique and persistently resolvable identifier for the entity) and/or Local Identifiers. Both the domain within which the *identifier* is unique, and the rules used in forming the *identifier* value should be provided with the *identifier* value.
Extensibility	May be extended with any number of specific attributes.
Repeatability	Repeatable
Value schema	Rule-based value; model-based text; free text
Scope	Within a given domain (a closed system), *identifiers* are used to uniquely reference instances of an entity. *Identifiers* are instruments of control that facilitate management of the entities within the domain. The formulation of *identifiers* commonly is based on rules. In addition to an *identifier* needing to be unique within a domain, it is also highly desirable that it be persistent, that is, that the *identifier* uniquely identifies the entity over time. A variety of organizations provide rules for the formation of *identifiers*, and services designed to facilitate the persistence of *identifiers*. Such *identifiers* are commonly referred to as Persistent Identifiers (or PIDs). PIDs conform to RFC 3986, but impose additional rules. Common examples are Archival Resource Keys (ARKs)[22] and Digital Object Identifiers (DOIs).[23] Within the global environment of the Internet, there are special rules for the formation of *identifiers* to ensure that they are unique within the domain of the Internet. Such *identifiers* must conform to the Internet Engineering Task Force (IETF) Uniform Resource Identifier rules (RFC 3986).[24]
Examples	<u>Global Persistent Identifiers</u> http://n2t.net/ark:/99166/w6v1266v [example of an Archival Resource Key for a *record*] http://n2t.net/ark:/99166/w6tz44ht [example of an Archival Resource Key for a *person*] http://isni.org/0000000073572182 [example of a persistent International Standard Name Identifier for a *person*] <u>Local identifiers</u>

[22] Available at https://n2t.net/e/ark_ids.html <accessed 20190412>.
[23] Available at http://www.doi.org/index.html <accessed 20190412>.
[24] Available at https://www.ietf.org/rfc/rfc3986.txt <accessed 20190412>.

	BUD-01-F002 [example of a classification number from a corporate file plan] NAS1/A/1.1 [example of local *identifier* for a *record*] F 1204 [example of a local *identifier* for a *record set* assigned by a repository]

ID	**RiC-A23**
Name	**Instantiation Extent**
Definition	Countable characteristics of the *instantiation* expressed as a quantity.
Domain	Instantiation
Specifications	
Extensibility	The attribute may be extended with any number of specific attributes.
Repeatability	Repeatable
Value schema	Model-based text; free text
Scope	*Instantiation extent* should not be confused with *record resource extent* or *carrier extent*. For a given *record resource*, the *instantiation extent* may vary, based on format, density of information on the carrier, etc. For example, a CD with a storage capacity of 700 MB (*carrier extent*) might hold a *record* of 1500 words (*record resource extent*) represented in two versions, one a Word document with an *instantiation extent* of 3 KB and the other a PDF file with an *instantiation extent* of 5 KB.
Examples	The book register has 345 written folios Size of PDF file: 1.5 MB

ID	**RiC-A24**
Name	**Integrity**
Definition	Information about the completeness of the *record set*, *record*, *record part*, or *instantiation*.
Domain	Record Set; Record; Record Part; Instantiation
Specifications	
Extensibility	May be extended with any number of specific attributes.
Repeatability	Not repeatable on *record* or *record part*, or on *record set* when describing all members of the *record set* Repeatable on *record set* when describing some members of the *record set*
Value schema	Model-based text; free text
Scope	May be used in a *record set* description to provide an overview or summary of the integrity of some or all members of the *record set*. The information about integrity may be generated manually or automatically.
Examples	The charter is missing the seal The register's last pages are missing The letter is missing its lower left corner of text The database (DBF) file has the checksum SHA-1: 99f9d780e441785016dea545b72dad700305535a

ID	RiC-A25
Name	**Language**
Definition	A spoken or written human language represented in the *record* or *record part* or used by the *agent*.
Domain	Record Set; Record; Record Part; Agent
Specifications	Information includes the language, the script of the language, and the script transliteration scheme when appropriate. More than one *language* may be represented in a *record*. An *agent* may use one or more *languages*. Does not refer to language/script of the description itself.
Extensibility	May be extended with any number of specific attributes, in particular to accommodate separate though interrelated codes for *language* and script
Repeatability	Repeatable
Value schema	Controlled value
Scope	May be used in a *record set* description when the attribute value is shared by some or all members of the *record set*. Controlled Code or Term (ISO 639 Codes for the representation of names of languages; ISO 15924 Codes for the representation of names and scripts; ISO 233-2:1993 Information and documentation - Translation of Arabic characters into Latin characters - Part 2: Arabic language - Simplified transliteration; ISO 843: 1997 Information and documentation - Conversion of Greek characters into Latin characters).
Examples	Languages Arabic (ara) Chinese (chi) English (eng) French (fre) Spanish (spa) Scripts Arabic (Arab) Han (Hans) Latin (Latn)

ID	RiC-A26
Name	**Legal Status**
Definition	A status defined by law.
Domain	Record Set; Record; Record Part; Agent
Specifications	
Extensibility	Not extensible
Repeatability	Not repeatable on *record* or *record part*, *agent*, or on *record set* when describing all members of the *record set* Repeatable on *record set* when describing some members of the *record set*
Value schema	Controlled value
Scope	May be used in a *record set* description when the attribute value is shared by some or all members of the *record set*.

	For *record* and *record part*, the attribute provides information about legal context.
Examples	association [*corporate body*] non-profit organization [*corporate body*] public limited company [*corporate body*] public records [*record resource*] private papers [*record resource*]

ID	**RiC-A27**
Name	**Location**
Definition	A delimitation of the physical territory of a *place*.
Domain	Place
Specifications	Used to describe basic human-readable text such as an address, a cadastral reference, or less precise information found in a *record*. Use the *coordinates* attribute to capture the geographical *coordinates* of the *place*. Use RiC-CM spatial relations (particularly RiC-R075i '*has location*') to capture a relation between two *places*.
Extensibility	May be extended with any number of specific attributes.
Repeatability	Repeatable
Value schema	Free text
Scope	The level of precision may vary according to the context.
Examples	25 rue Saint-Denis à Paris Montreal

ID	**RiC-A28**
Name	**Name**
Definition	A label, title or term designating the entity in order to make it distinguishable from other similar entities.
Domain	Thing
Specifications	Provides brief information about the content or other individual characteristics of the entity being described, necessary to distinguish it from other perhaps similar entities.
Extensibility	May be extended with any number of specific attributes.
Repeatability	Repeatable
Value schema	Model-based Text; free text
Scope	
Examples	The Letter of Neacsu from Campulung to the Mayor of Brasov [*record*] Digital copy of the Pomarius archival inventory from 1575 [*instantiation*] D-Day [*date* or *event*] Halloween 2016 [*date*] Fundraising, University of Glasgow [*activity*] Providing hearing services [*activity*] Nelson Mandela [*person*] Papers of the Earls of Liverpool [*record set*]

	Paris [*place*] Prime Minister [*position*] Sketch Map of the Qatar Peninsula [record]

ID	**RiC-A29**
Name	**Normalized Date**
Definition	*Date* representation based on a standard, preferably machine-readable.
Domain	Date
Specifications	Used to represent the *expressed date* in a format that can be processed automatically.
Extensibility	May be extended with any number of specific attributes.
Repeatability	Repeatable
Value schema	Rule-based value
Scope	Digital standard *dates* will typically be based on ISO 8601, or Extended Date-Time Format (EDTF).
Examples	14/02/2012-08/03/2015 1948-03-08

ID	**RiC-A30**
Name	**Occupation Type**
Definition	Categorization of a profession, trade, or craft pursued by a *person* in fulfilment of an *activity*.
Domain	Person
Specifications	
Extensibility	May be extended with any number of specific attributes.
Repeatability	Repeatable. A *person* can have more than one occupation.
Value schema	Controlled value
Scope	The pursuit of an occupation involves the performance of an *activity*. Successful performance of the *activity* is based on the ability to perform related competencies successfully. Such competencies may be acquired through education or experience, or a combination of both. The authority of the *person* to pursue the occupation may be derived tacitly or explicitly from an external *agent*, based on a demonstrated mastery of the competency. An occupation may be pursued independently by a *person* or a *group*, thereby contributing to the fulfilment of the function (a*ctivity*) of the *group*. Should not be confused with *position* where, for example, an *agent* with the occupation type "lawyer" holds the *position* of "legal counsel" in an agency. Related to but should not be confused with the domain or field of *activity*, such as an archivist who works in the domain of archival science. Is a kind of *demographic group*.
Examples	health professional legal professional service and sales worker

ID	RiC-A31
Name	**Physical Characteristics**
Definition	Information about the physical features of the *instantiation*.
Domain	Instantiation
Specifications	Includes information about the physical nature and condition such as conservation status.
Extensibility	May be extended with any number of specific attributes.
Repeatability	Not repeatable
Value schema	Free text
Scope	
Examples	carrier heavily foxed emulsion flaking watermarked British Library binding

ID	RiC-A32
Name	**Place Type**
Definition	Categorization of a *place*.
Domain	Place
Specifications	An indication of the category of *place*, especially to distinguish natural and human constructs.
Extensibility	May be extended with any number of specific attributes.
Repeatability	Not repeatable
Value schema	Controlled value
Scope	
Examples	settlement administrative division country mountain river

ID	RiC-A33
Name	**Production Technique**
Definition	The method used in the representation of information on the *instantiation*.
Domain	Instantiation
Specifications	
Extensibility	May be extended with any number of specific attributes.
Repeatability	Not repeatable
Value schema	Free text
Scope	
Examples	handwriting engraving magnetic recording optical recording

ID	RiC-A34
Name	**Quality of Representation**
Definition	Conditions of an *instantiation* that impact the legibility or completeness of a *record resource*, and thus the viability of its use.
Domain	Instantiation
Specifications	Conditions may be associated with deficiencies in the processes of *record* (re)creation or capture, or the deterioration of the *instantiation* (for example its carrier) causing loss of information of the *record* over time.
Extensibility	May be extended with any number of specific attributes.
Repeatability	Not repeatable
Value schema	Free text
Scope	
Examples	some loss of information due to poor quality of image capture some loss of text due to rodent damage black and white digitization may have led to loss of some information

ID	RiC-A35
Name	**Record Resource Extent**
Definition	The quantity of information content as human experienced represented in the *record resource*.
Domain	Record Resource
Specifications	The method and precision of expressing the quantity of information represented in a *record resource* will vary according to the kind of *record resource* being described as well as by processing economy constraints. For *record sets*, quantity may be expressed as number of *records*, or, for analogue *records* in particular, by the physical storage dimensions of the members of the *record set*. For individual *records* or *record parts*, quantity may be expressed in more precise terms.
Extensibility	May be extended with any number of specific attributes in order to enable use of controlled values or rule-based values.
Repeatability	Repeatable
Value schema	Model-based text; free text
Scope	*Record resource extent* should not be confused with *instantiation extent* or *carrier extent*. The number, size or duration of the information content unit(s) remains the same even if the information is instantiated in various carriers. For example, a CD with a storage capacity of 700 MB (*carrier extent*) might hold a *record* of 1500 words (*record resource extent*) represented in two versions, one a Word document with an *instantiation extent* of 3 KB and the other a PDF file with an *instantiation extent* of 5 KB.
Examples	3 minutes and 24 seconds 6 maps 6 photographs 2 films 1,500 words 2.065.735 characters

	234 linear metres

ID	**RiC-A36**
Name	**Record Set Type**
Definition	A broad categorization of the type of *record set*.
Domain	Record Set
Specifications	For legacy purposes, this attribute is the equivalent of the Level of Description element in ISAD(G) (3.1.4) except for the value "item", which equates to the *record* or *record part* entity in RiC-CM. May be extended to categorize types of *record set* that have not traditionally been considered archival.
Extensibility	May be extended with any number of specific attributes.
Repeatability	Not repeatable
Value schema	Controlled value
Scope	
Examples	fonds series file piece collection accrual accession

ID	**RiC-A37**
Name	**Representation Type**
Definition	Method of recording the content type.
Domain	Instantiation
Specifications	Can be unmediated (which allows humans to receive the message communicated without an intermediation of a device) and mediated (which needs a device to decode the message). A lot of contemporary mediated types are digital. Each representation type may present specific features: bit rate for audio, resolution for digital images, encoding format for video etc. Depending on the type, specific attributes may be added to describe their characteristics.
Extensibility	May be extended with any number of specific attributes.
Repeatability	Not repeatable
Value schema	Controlled value
Scope	Should not be confused with the *carrier type* of the *instantiation* or the *content type* of a *record resource* as the form of the communication can be independent of the representation of the carrier, for example a map (*content type* "cartographic image") may be represented as a sketch (*representation type* "visual") recorded as a physical document (*carrier type* "paper").
Examples	analogue/digital textual analogue/digital visual analogue/digital video

	analogue/digital audio

ID	**RiC-A38**
Name	**Scope and content**
Definition	Summary of the scope (such as time periods, geography) and content (such as subject matter, administrative processes) of the *record resource*.
Domain	Record Resource
Specifications	Provides a more complete summary of the informational content of the *record resource* highlighting the information conveyed in the *record resource*, why it was created, received, and/or maintained, and the *agents* connected to it. It may include description of relations with *agents*, *activities*, *dates* and *places*, or with other *record resources*.
Extensibility	May be extended with any number of specific attributes.
Repeatability	Not repeatable
Value schema	Model-based text; free text
Scope	For *record set*, may additionally be used to summarize the scope and content of members of the *record set*. It is not to be confused with the *history* attribute which focuses on the origination and subsequent changes to a *record resource*.
Examples	Includes a detailed list of the lands and villages given by the King to the Abbey Among the witnesses, the Duke of Normandy The author explains why he does not agree with the decision made and adds that it cannot be applied Letter from Vlad the Impaler (Dracula) to the Council of Kronstadt asking them to send military support against the Ottomans, within the framework of their alliance treaty Se hace referencia a construcción del Gran Hotel, iniciada en 1899 bajo el nombre de Casa Celestino. Tras su interrupción en 1902, continuó la obra ya con su nombre actual

ID	**RiC-A39**
Name	**State**
Definition	Description of the production or reproduction status of the *record* or *record part*.
Domain	Record Set; Record; Record Part
Specifications	
Extensibility	May be extended with any number of specific attributes.
Repeatability	Not repeatable on *record* or *record part*, or on *record set* when describing all members of the *record set* Repeatable on *record set* when describing some members of the *record set*
Value schema	Controlled value
Scope	May be used in a *record set* description when the attribute value is shared by some or all members of the *record set*.

	Can refer both to a *record's* stage of creation (for example "draft") and its form of transmission when the *record* was received (for example "copy").
Examples	draft final draft original simple copy certified copy

ID	**RiC-A40**
Name	**Structure**
Definition	Information about the intellectual arrangement and composition of a *record resource* or the physical arrangement and composition of an *instantiation*.
Domain	Record Resource; Instantiation
Specifications	For *record* and *record part*, encompasses information about the intellectual composition of the *record*, the presence of *record parts* and their functions. For *record set*, encompasses information about the methodology or criteria used for arranging the member *record sets* and *records* within the containing *record set*. For *instantiation*, may comprise information about the composition of the physical elements of the *instantiation.*
Extensibility	May be extended with any number of specific attributes.
Repeatability	Not repeatable
Value schema	Model-based text; free text
Scope	Should not be confused with the *classification* attribute, which provides information about the category which the *record set* belongs to within a classification scheme.
Examples	The *record* has two appendices, comprising a full account of the income from car taxes and real estate taxes The series have the files arranged according to the alphabetical order of the places concerned Inside each file, the *records* are arranged chronologically The database has three related tables: names, addresses, and passport numbers

ID	**RiC-A41**
Name	**Technical Characteristics**
Definition	Describes any relevant physical or software feature of any device involved in the creation or management of a *record resource*.
Domain	Mechanism
Specifications	
Extensibility	May be extended with any number of specific attributes.
Repeatability	Not repeatable
Value schema	Free text
Scope	Does not include references to the workflow that the *mechanism* is involved in which is described under the *activity* entity. It emphasizes those features that provide a better understanding of the impact of the *mechanism* on the *records*.

Examples	Hubble Space Telescope had until 2002 a flawed mirror that introduced severe spherical aberration for the images

4 Entities with Attributes

In this section the attributes for each of the entities are set out. Definitions of each attribute are found in section 3 above.

The attributes for each entity are presented in the order suggested by the entity hierarchy (see the diagram in section 2.1 above). It should be noted that the attributes of each superior entity are shared with each sub-entity. This being the case all of the attributes of *thing* are shared by all of the entities as they are all below it in the hierarchy, and all of the attributes of *record resource* are shared by the *record set*, *record*, and *record part* entities, and so on for each entity.

At each level of the hierarchy, the attributes introduced at that level are listed in alphabetical order. Colors, as given in the entity hierarchy diagram in section 3.1 above, reflect the attributes shared with each superior entity in the hierarchy. Attributes that are specific to an entity have no color-coding.

The relative importance of each attribute in description is not represented in either the grouping or order within groups.

4.1 Attributes of Thing

Attributes shared by all entities.

RiC-E01	**Thing**
Attribute ID	**Attribute Name**
RiC-A16	Descriptive Note
RiC-A22	Identifier
RiC-A28	Name

4.2 Attributes of Record Resource

Attributes shared by *record set*, *record* and *record part*.

RiC-E02	**Record Resource**
Attribute ID	**Attribute Name**
RiC-A16	Descriptive Note
RiC-A22	Identifier
RiC-A28	Name
RiC-A21	History
RiC-A35	Record Resource Extent
RiC-A38	Scope and content
RiC-A40	Structure

4.2.1 Attributes of Record Set

Attributes that may be used in the description of all or some members of a *record set* rather than the *record set* itself are indicated with an asterisk *, while those that may be used to describe both the *record set* and all or some of its members are indicated by a dagger †.

RiC-E03	**Record Set**
Attribute ID	**Attribute Name**
RiC-A16	Descriptive Note
RiC-A22	Identifier
RiC-A28	Name
RiC-A21	History†
RiC-A35	Record Resource Extent
RiC-A38	Scope and content†
RiC-A40	Structure
RiC-A01	Accrual
RiC-A36	Record Set Type
RiC-A03	Authenticity Note
RiC-A07	Classification*
RiC-A08	Conditions of Access*
RiC-A09	Conditions of Use*
RiC-A10	Content Type*
RiC-A17	Documentary Form Type*
RiC-A24	Integrity*
RiC-A25	Language*
RiC-A26	Legal Status*
RiC-A39	State*

4.2.2 Attributes of Record

RiC-E04	**Record**
Attribute ID	**Attribute Name**
RiC-A16	Descriptive Note
RiC-A22	Identifier
RiC-A28	Name
RiC-A21	History
RiC-A35	Record Resource Extent
RiC-A38	Scope and content
RiC-A40	Structure
RiC-A03	Authenticity Note

RiC-A07	Classification
RiC-A08	Conditions of Access
RiC-A09	Conditions of Use
RiC-A10	Content Type
RiC-A17	Documentary Form Type
RiC-A24	Integrity
RiC-A25	Language
RiC-A26	Legal Status
RiC-A39	State

4.2.3 Attributes of Record Part

RiC-E05	**Record Part**
Attribute ID	**Attribute Name**
RiC-A16	Descriptive Note
RiC-A22	Identifier
RiC-A28	Name
RiC-A21	History
RiC-A35	Record Resource Extent
RiC-A38	Scope and content
RiC-A40	Structure
RiC-A03	Authenticity Note
RiC-A07	Classification
RiC-A08	Conditions of Access
RiC-A09	Conditions of Use
RiC-A10	Content Type
RiC-A17	Documentary Form Type
RiC-A24	Integrity
RiC-A25	Language
RiC-A26	Legal Status
RiC-A39	State

4.3 Attributes of Instantiation

RiC-E06	**Instantiation**
Attribute ID	**Attribute Name**
RiC-A16	Descriptive Note
RiC-A22	Identifier
RiC-A28	Name
RiC-A03	Authenticity Note
RiC-A04	Carrier Extent

RiC-A05	Carrier Type
RiC-A08	Conditions of Access
RiC-A09	Conditions of Use
RiC-A21	History
RiC-A23	Instantiation Extent
RiC-A24	Integrity
RiC-A31	Physical Characteristics
RiC-A33	Production Technique
RiC-A34	Quality of Representation
RiC-A37	Representation Type
RiC-A40	Structure

4.4 Attributes of Agent

Attributes shared by *person*, *group*, *position*, and *mechanism*.

RiC-E07	**Agent**
Attribute ID	**Attribute Name**
RiC-A16	Descriptive Note
RiC-A22	Identifier
RiC-A28	Name
RiC-A21	History
RiC-A25	Language
RiC-A26	Legal Status

4.4.1 Attributes of Person

RiC-E08	**Person**
Attribute ID	**Attribute Name**
RiC-A16	Descriptive Note
RiC-A22	Identifier
RiC-A28	Name
RiC-A21	History
RiC-A25	Language
RiC-A26	Legal Status
RiC-A15	Demographic Group
RiC-A30	Occupation Type

4.4.2 Attributes of Group

RiC-E09	**Group**
Attribute ID	**Attribute Name**
RiC-A16	Descriptive Note

RiC-A22	Identifier
RiC-A28	Name
RiC-A21	History
RiC-A25	Language
RiC-A26	Legal Status
RiC-A15	Demographic Group

4.4.2.1 Attributes of Family

RiC-E10	**Family**
Attribute ID	**Attribute Name**
RiC-A16	Descriptive Note
RiC-A22	Identifier
RiC-A28	Name
RiC-A21	History
RiC-A25	Language
RiC-A26	Legal Status
RiC-A20	Family Type

4.4.2.2 Attributes of Corporate Body

RiC-E11	**Corporate Body**
Attribute ID	**Attribute Name**
RiC-A16	Descriptive Note
RiC-A22	Identifier
RiC-A28	Name
RiC-A21	History
RiC-A25	Language
RiC-A26	Legal Status
RiC-A12	Corporate Body Type

4.4.3 Attributes of Position

RiC-E12	**Position**
Attribute ID	**Attribute Name**
RiC-A16	Descriptive Note
RiC-A22	Identifier
RiC-A28	Name
RiC-A21	History
RiC-A25	Language
RiC-A26	Legal Status

4.4.4 Attributes of Mechanism

RiC-E13	Mechanism
Attribute ID	**Attribute Name**
RiC-A16	Descriptive Note
RiC-A22	Identifier
RiC-A28	Name
RiC-A21	History
RiC-A25	Language
RiC-A26	Legal Status
RiC-A41	Technical Characteristics

4.5 Attributes of Event

Attributes shared by *activity*.

RiC-E14	Event
Attribute ID	**Attribute Name**
RiC-A16	Descriptive Note
RiC-A22	Identifier
RiC-A28	Name
RiC-A06	Certainty
RiC-A18	Event Type
RiC-A21	History

4.5.1 Attributes of Activity

RiC-E15	Activity
Attribute ID	**Attribute Name**
RiC-A16	Descriptive Note
RiC-A22	Identifier
RiC-A28	Name
RiC-A06	Certainty
RiC-A18	Event Type
RiC-A21	History
RiC-A02	Activity Type

4.6 Attributes of Rule

Attributes shared by *mandate*.

RiC-E16	Rule
Attribute ID	**Attribute Name**
RiC-A16	Descriptive Note

RiC-A22	Identifier
RiC-A28	Name
RiC-A21	History

4.6.1 Attributes of Mandate

RiC-E17	**Mandate**
Attribute ID	**Attribute Name**
RiC-A16	Descriptive Note
RiC-A22	Identifier
RiC-A28	Name
RiC-A21	History

4.7 Attributes of Date

Attributes shared by *single date*, *date range*, and *date set*.

RiC-E18	**Date**
Attribute ID	**Attribute Name**
RiC-A16	Descriptive Note
RiC-A22	Identifier
RiC-A28	Name
RiC-A06	Certainty
RiC-A13	Date Qualifier
RiC-A14	Date Standard
RiC-A19	Expressed Date
RiC-A29	Normalized Date

4.7.1 Attributes of Single Date

RiC-E19	**Single Date**
Attribute ID	**Attribute Name**
RiC-A16	Descriptive Note
RiC-A22	Identifier
RiC-A28	Name
RiC-A06	Certainty
RiC-A13	Date Qualifier
RiC-A14	Date Standard
RiC-A19	Expressed Date
RiC-A29	Normalized Date

4.7.2 Attributes of Date Range

RiC-E20	Date Range
Attribute ID	**Attribute Name**
RiC-A16	Descriptive Note
RiC-A22	Identifier
RiC-A28	Name
RiC-A06	Certainty
RiC-A13	Date Qualifier
RiC-A14	Date Standard
RiC-A19	Expressed Date
RiC-A29	Normalized Date

4.7.3 Attributes of Date Set

RiC-E21	Date Set
Attribute ID	**Attribute Name**
RiC-A16	Descriptive Note
RiC-A22	Identifier
RiC-A28	Name
RiC-A06	Certainty
RiC-A13	Date Qualifier
RiC-A14	Date Standard
RiC-A19	Expressed Date
RiC-A29	Normalized Date

4.8 Attributes of Place

RiC-E22	Place
Attribute ID	**Attribute Name**
RiC-A16	Descriptive Note
RiC-A22	Identifier
RiC-A28	Name
RiC-A11	Coordinates
RiC-A21	History
RiC-A27	Location
RiC-A32	Place Type

5 Relations

5.1 Introduction

In order to understand and describe *record resources*, it is essential to document the context in which those *record resources* were created, accumulated, and managed through time and space. The role of relations in RiC-CM is to describe the connections between entities as they contribute to the context of record making and keeping and, as a result, express significant characteristics of the history and management of archival records. Relations in RiC-CM are focused on documenting connections that have an impact on the world from an archival point of view and are not meant to be exhaustive. Relations defined in this model should provide a basic foundation for archival description and there are likely to be instances where more specific vocabularies could build on this foundation to satisfy the needs of specific implementations.

RiC-CM relations diverge conceptually from ISAD(G) as formalized in XML-based standards like EAD and EAC that rely on structural hierarchy to define connections between, for example, items to files to series to fonds. Instead, RiC-CM relations are based on a graph model, similar to the Resource Description Framework (RDF), which allows for simpler and more flexible connections. As an example, a *record* can be part of several different *record sets*, both as part of its archival fonds and also in a temporary *record set* curated by a researcher or as part of a physical or virtual exhibition.

By making connections between entities in this way, it will be possible to infer more complex information about record context that might not be explicitly recorded as part of a background note or provenance statement. Some brief examples of the type of complex scenarios that may now be described are:

- Two *agents* are both connected to an *activity* in some way, and have sent *records* to each other, which they keep as evidence of their transactions.
- An *agent* occupies a *position* held at an earlier *date* by another *agent* for the purpose of performing an *activity*. The *records* held by the latter *agent* include some *record sets* created by the former *agent*.
- A *record* is a copy of another *record* and conveys the same content. However, the message has a different "meaning" in its new context where it is linked with other materials that modify how the source is understood.

In many cases, simply connecting two entities does not provide sufficient information. RiC-CM also defines a set of attributes specific to relations that can be used to add a date range, cite relevant sources, or add a location where a connection might have taken place. A complete list of attributes can be found in 5.5.

Relations in RiC-CM are organized into categories based on the type of relation and, like terms in many controlled vocabularies, range from broader to narrower. In addition to a detailed

description of each relation and a full list of relations, this section will also provide a hierarchical map of relations, showing how they fit into a broader/narrower scheme.

5.2 Types of Relations

All relations fit into *one or more* of the following thirteen conceptual categories. Understanding a relation's type can help clarify its role within a descriptive system or practice.

Whole-part relations
The relation that holds between a whole and its parts, for example the relation between a *record* and its constituent *record part(s)*.

Sequential relations
Any relation that describes a logical sequence between two entities, for example the relation between an *agent* and its antecedent *agent*.

Subject relations
Any relation that holds between a *record resource* and a subject or topic, for example the relation between a *record resource* and the main subject(s) which that *record resource* describes or is about.

Record Resource to Record Resource relations
Any relation that holds between a *record resource* and another *record resource*, for example the relation between a *record resource* and a draft or copy of that *record resource*.

Record Resource to Instantiation relations
Any relation that holds between a *record resource* and an *instantiation* of that *record resource*, for example the relation between a *record resource* and a digitized version of that *record resource*.

Provenance relations
Any relation that describes the provenance or origin of a *record resource* or *instantiation*, for example the relation between a *record resource* and the *agent* which created it or the *activity* from which it resulted.

Instantiation to Instantiation relations
Any relation that holds between an *instantiation* and another *instantiation*, for example the relation between a digital *instantiation* and a migrated version of that *instantiation*.

Management relations
Any relation that describes the authority of an *agent* over another entity, for example the relation between a *person* and that person's subordinates in an organization.

Agent to Agent relations
Any relation that holds between an *agent* and another *agent*.

Event relations
Any relation that holds between an entity and an *event*, for example the relation between a *record resource* and an *event* which resulted in the creation or modification of that *record resource*.

Rule relations
Any relation that holds between an entity and a *rule*, for example the relation between an *agent* and the *mandate* authorizing the existence and/or actions of that *agent*.

Date relations
Any relation that holds between an entity and a *date*, for example the relation between a *record resource* and the *date(s)* at which it was created or modified.

Spatial relations
Any relation that holds between an entity and a *place*, for example the relation between an *agent* and the *place(s)* in which that *agent* was located or had some jurisdiction.

5.3 Chart

Relations move from broad to narrow in a hierarchical fashion. The broadest, or most general relation, *is related to,* can connect any RiC-CM entity and makes no specific statement about how or why those entities are connected. As you move down the hierarchy, each relation becomes more specific, while inheriting the properties of relations immediately above it in the hierarchy.

The following chart demonstrates how relations are hierarchically arranged. The top level of the chart is occupied by *is related to*. The next level down lists the broadest term for each relation type and then works down through up to five levels of narrower relations.

The chart is also poly-hierarchical, which means that some relations may appear in multiple places, and levels, in the chart.

Level One	Level Two	Level Three	Level Four	Level Five
RIC-R001: *Thing* ***is related to*** *Thing*	Type: whole/part relations RiC-R002: *Thing* ***has or had part*** *Thing*	RiC-R003: *Record* ***has or had constituent*** *Record Part* (see also below)		

		RiC-R004: *Instantiation* ***has or had component*** *Instantiation* (see also below) RiC-R005: *Group* ***has or had subdivision*** *Group* (see also below) RiC-R006: *Event* ***has or had subevent*** *Event* (see also below) RiC-R007: *Place* ***contains or contained*** *Place* (see also below)		
	Type: <u>sequential relations</u> RiC-R008: *Thing* ***precedes or preceded*** *Thing*	RiC-R009: *Thing* ***precedes in time*** *Thing*	RiC-R010: *Record* ***is original of*** *Record* RiC-R011: *Record* ***is draft of*** *Record* RiC-R012: *Record Resource* ***has copy*** *Record Resource* (see also below) RiC-R013: *Record Resource* ***has reply*** *Record Resource* (see also below) RiC-R014: *Instantiation* ***has derived instantiation*** *Instantiation* (see also below) RiC-R016: *Agent* ***has successor*** *Agent* (see also below)	RiC-R015: *Instantiation* ***migrated into*** *Instantiation* RiC-R017: *Person* ***has descendant*** *Person* (and the sixth level RiC-R018: *Person* ***has child***

				Person) (see also below)
	Type: <u>subject relations</u> RiC-R019: *Record Resource* ***has or had subject*** *Thing*	RiC-R020: *Record Resource* ***has or had main subject*** *Thing* RiC-R021: *Record Resource* ***describes or described*** *Thing*		
	Type: <u>Record Resource to Record Resource relations</u> RiC-R022: *Record Resource* ***is record resource associated with record resource*** *Record Resource*	RiC-R023: *Record Resource* ***has genetic link to record resource*** *Record Resource* RiC-R013: *Record Resource* ***has reply*** *Record Resource* (see also above) RiC-R003: *Record* ***has or had constituent*** *Record Part* (see also above) RiC-R024: *Record Set* ***includes or included*** *Record* or *Record Set*	RiC-R010: *Record* ***is original of*** *Record* (see also above) RiC-R011: *Record* ***is draft of*** *Record* (see also above) RiC-R012: *Record Resource* ***has copy*** *Record Resource* (see also above)	
	Type: <u>Record Resource to Instantiation relations</u> RiC-R025: *Record Resource* ***has instantiation*** *Instantiation*			

	Type: <u>provenance relations</u> RiC-R026: *Record Resource* or *Instantiation* ***has provenance*** *Agent* RiC-R033: *Record Resource* or *Instantiation* ***documents*** *Activity* (see also below)	RiC-R027: *Record Resource* or *Instantiation* ***has creator*** *Agent* RiC-R028: *Record Resource* or *Instantiation* ***has accumulator*** *Agent* RiC-R031: *Record Resource* or *Instantiation* ***has sender*** *Agent* RiC-R032: *Record Resource* or *Instantiation* ***has addressee*** *Agent*	RiC-R079: *Record* ***has author*** *Person*, *Group* or *Position* RiC-R029: *Record Resource* or *Instantiation* ***has receiver*** *Agent* RiC-R030: *Record Resource* or *Instantiation* ***has collector*** *Agent*	
	Type: <u>Instantiation to Instantiation relations</u> RiC-R034: *Instantiation* ***is instantiation associated with instantiation*** *Instantiation*	RiC-R035: *Instantiation* ***is functionally equivalent to*** *Instantiation* RiC-R014: *Instantiation* ***has derived instantiation*** *Instantiation* (see also above) RiC-R004: *Instantiation* ***has or had component*** *Instantiation*	RiC-R015: *Instantiation* ***migrated into*** *Instantiation*	

		(see also above)		
	Type: <u>management relations</u> RiC-R036: *Agent* ***has or had authority over*** *Thing*	RiC-R037: *Person* or *Group* or *Position* ***is or was owner of*** *Thing* RiC-R038: *Agent* ***is or was manager of*** *Record Resource* or *Instantiation* RiC-R040: *Person* or *Group* or *Position* ***is or was holder of intellectual property rights of*** *Record Resource* or *Instantiation* RiC-R041: *Agent* ***is or was controller of*** *Agent* (see also below)	RiC-R039: *Agent* ***is or was holder of*** *Record Resource* or *Instantiation* RiC-R042: *Person* ***is or was leader of*** *Group*	
	Type: <u>Agent to Agent relations</u> RiC-R044: *Agent* ***is agent associated with agent*** *Agent*	RiC-R045: *Agent* ***has or had subordinate*** *Agent* RiC-R046: *Agent* ***has or had work relation with*** *Agent* RiC-R016: *Agent* ***has successor*** *Agent* (see also above)	RiC-R041: *Agent* ***is or was controller of*** *Agent* (see also above) RiC-R005: *Group* ***has or had subdivision*** *Group* (see also above) RiC-R017: *Person* ***has descendant*** *Person* (see also below)	RiC-R042: *Person* ***is or was leader of*** *Group* RiC-R018: *Person* ***has child*** *Person*

		RiC-R047: *Person* ***has family association with*** *Person* RiC-R050: *Person* ***knows of*** *Person* RiC-R051: *Person* ***knows*** *Person* RiC-R054: *Person* ***occupies or occupied*** *Position* RiC-R055: *Group* ***has or had member*** *Person* RiC-R056: *Position* ***exists or existed in*** *Group*	RiC-R017: *Person* ***has descendant*** *Person* (see also above) RiC-R048: *Person* ***has sibling*** *Person* RiC-R049: *Person* ***has or had spouse*** *Person* RiC-R052: *Person* ***has or had correspondent*** *Person* RiC-R053: *Person* ***has or had teacher*** *Person*	RiC-R018: *Person* ***has child*** *Person*
	Type: <u>event relations</u> RiC-R057: *Event* ***is event associated with*** *Thing*	RiC-R058: *Event* ***has or had participant*** *Thing* RiC-R061: *Event* ***results or resulted in*** *Thing* RiC-R006: *Event* ***has or had subevent*** *Event* (see also above)	RiC-R059: *Event* ***affects or affected*** *Thing* RiC-R060: *Activity* ***is or was performed by*** *Agent* RiC-R033i: *Activity* ***documented by*** *Record Resource* (see also above)	

	Type: <u>rule relations</u> RiC-R062: *Rule* ***is rule associated with*** *Thing*	RiC-R063: *Rule* ***regulates or regulated*** *Thing* RiC-R064: *Rule* ***is or was expressed by*** *Record Resource* RiC-R065: *Rule* ***issued by*** *Agent* RiC-R066: *Rule* ***is or was enforced by*** *Agent* RiC-R067: *Mandate* ***authorizes*** *Agent*		
	Type: <u>date relations</u> RiC-R068: *Date* ***is date associated with*** *Thing*	RiC-R069: *Date* ***is beginning date of*** *Thing* RiC-R071: *Date* ***is end date of*** *Thing* RiC-R073: *Date* **is** ***modification date*** of *Thing*	RiC-R070: *Date* ***is birth date of*** *Person* RiC-R072: *Date* ***is death date of*** *Person*	
	Type: <u>spatial relations</u> RiC-R074: *Place* ***is place associated with*** *Thing*	RiC-R075: *Place* ***is or was location of*** *Thing* RiC-R076: *Place* ***is or was jurisdiction of*** *Agent* RiC-R007: *Place* ***contains or contained*** *Place* (see also above) RiC-R077: *Place* ***is or was adjacent to*** *Place* RiC-R078: Place ***overlaps or overlapped*** Place		

5.4 Description of Relations

ID	**RiC-R001**	
Name	***is related to***	Inverse relation: ***is related to***
Domain/Range	Thing	Thing
Cardinality	M to M	
Definition	The most generic relation, *is related to,* connects any RiC-CM entity (*thing*) to any other RiC-CM entity. This relation is symmetric.	
Scope Notes	Can be used in order to record a current or past connection between any RiC entity. Should be used only if it is not possible to specify the nature of the relation more accurately.	
Examples		
Broader relations	None (top level relation)	
Narrower relations	RiC-R002 *has or had part* RiC-R008 p*recedes or preceded* RiC-R019 *has or had subject* RiC-R022 *is record resource associated with record resource* RiC-R025 *has instantiation* RiC-R026 *has provenance* RiC-R033 *documents* RiC-R034 *is instantiation associated with instantiation* RiC-R036 *has or had authority over* RiC-R044 *is agent associated with agent* RiC-R057 *is event associated with* RiC-R062 *is rule associated with* RiC-R068 *is date associated with* RiC-R074 *is place associated with*	

ID	**RiC-R002**	
Name	***has or had part***	Inverse relation: ***is or was part of***
Domain/Range	Thing	Thing
Cardinality	1 to M	
Definition	Connects a *thing* to a *thing* that is or was a constitutive or component part of it.	
Scope Notes	Can be used for connecting a *record* and a *record part*, a *corporate body* and a subdivision or unit of that *corporate body*, an *activity* and a constituent *activity*, an *event* and an *event* component, a *place* (as a geographical or administrative area), and a specific region within that *place*. The end of existence of a whole/part relation may affect the integrity or nature of the domain entity.	
Examples		
Relation types	Whole/part relations	
Broader relations	RiC-R001 *is related to*	
Narrower relations	RiC-R003 *has or had constituent* RiC-R004 h*as or had component* RiC-R005 *has or had subdivision* RiC-R006 *has or had subevent*	

	RiC-R007 *contains or contained*

ID	**RiC-R003**	
Name	***has or had constituent***	inverse relation: ***is or was constituent of***
Domain/Range	Record	Record Part
Cardinality	1 to M	
Definition	Connects a *record* to a *record part* that is or was a component of that *record*.	
Scope Notes		
Examples	The Charter of the Massachusetts Agricultural College *has or had constituent* Page 10. El Sello de placa de la Reina Isabel la Católica *has or had constituent* Testamento de la Reina Isabel la Católica (12-10-1504). Requerimento de privilégio industrial de máquina de colheita de cana e análogos *has or had constituent* desenho técnico. Desenho técnico *is or was constituent of* requerimento de privilégio industrial de máquina de colheita de cana e análogos.	
Relation types	Whole/part relations Record resource to record resource relations	
Broader relations	RiC-R002 *has or had part* RiC-R022 i*s record resource associated with record resource*	
Narrower relations	None	

ID	**RiC-R004**	
Name	***has or had component***	inverse relation: ***is or was component of***
Domain/Range	Instantiation	Instantiation
Cardinality	M to M	
Definition	Connects an *instantiation* to one of its present or past component *instantiations*.	
Scope Notes		
Examples		
Relation types	Whole/part relations Instantiation to instantiation relations	
Broader relations	RiC-R002 *has or had part* RiC-R034 *is instantiation associated with instantiation*	
Narrower relations	None	

ID	**RiC-R005**	
Name	***has or had subdivision***	inverse relation: ***is or was subdivision of***
Domain/Range	Group	Group
Cardinality	1 to M	
Definition	Connects a *group* to one of its present or past subdivisions.	
Scope Notes		
Examples	Since January 2010, the French Ministry of Culture *has or had subdivision* the Direction générale des Patrimoines. O Departamento Federal de Segurança Pública *has or had subdivision* a Divisão de Polícia Marítima Aérea e de Fronteiras.	

	A Divisão de Polícia Marítima Aérea e de Fronteiras *is or was subdivision of* Departamento Federal de Segurança Pública.
Relation types	Whole/part relations Agent to agent relations
Broader relations	RiC-R002 *has or had part* RiC-R045 *has or had subordinate*
Narrower relations	None

ID	**RiC-R006**	
Name	***has or had subevent***	inverse relation: ***is or was subevent of***
Domain/Range	Event	Event
Cardinality	1 to M	
Definition	Connects an *event* to one or more of a series of *events* that constitute the original, broader, past or ongoing *event*.	
Scope Notes	Since an *activity* is a kind of *event*, this relation can also be used for *activity*.	
Examples	The Spanish Civil War (1936-1939) has or had subevent the Bombing of Guernica (1937). A Guerra do Paraguai *has or had subevent* a Batalha Naval do Riachuelo. A Batalha Navald do Riachuelo *is or was subevent of* a Guerra do Paraguai.	
Relation types	Whole/part relations Event relations	
Broader relations	RiC-R002 *has or had part* RiC-R057 i*s event associated with*	
Narrower relations	None	

ID	**RiC-R007**	
Name	***contains or contained***	inverse relation: ***is or was contained by***
Domain/Range	Place	Place
Cardinality	M to M	
Definition	Connects a *place* to a region that is or was within it.	
Scope Notes	Use for connecting two geographical or administrative regions.	
Examples	The French Auvergne-Rhône-Alpes region *contains or contained* the French Ain département. *Date* attribute for this relation: 2016/ La Comunidad Autónoma de Canarias *contains or contained* el Parque Nacional de Timanfaya (Las Palmas). A Amazõnia legal *contains or contained* os estados brasileiros do Acre, Amapá, Amazonas, Mato Grosso, Pará, Rondônia, Roraima, Tocantins e Maranhão. Acre, Amapá, Amazonas, Mato Grosso, Pará, Rondônia, Roraima, Tocantins e Maranhão *is or was contained by* a Amazonia Legal.	
Relation types	Whole/part relations Spatial relations	
Broader relations	RiC-R002 *has or had part* RiC-R074 *is place associated with*	
Narrower relations	None	

ID	**RiC-R008**	
Name	***precedes or preceded***	inverse relation: ***follows or followed***
Domain/Range	Thing	Thing
Cardinality	M to M	
Definition	Connects a *thing* to a *thing* that follows or followed it in some sequence.	
Scope Notes	The relation does not specify by itself what criteria are used for ordering the sequence. There may be zero to many intermediate entities, ignored or unknown, in the sequence between the two connected *things*. Can be used, for example, for specifying that a *record* "has next" another *record* within a *record set*.	
Examples	Page 1 *precedes or preceded* Page 2.	
Relation types	Sequential relations	
Broader relations	RiC-R001 *is related to*	
Narrower relations	RiC-R009 p*recedes in time*	

ID	**RiC-R009**	
Name	***precedes in time***	inverse relation: ***follows in time***
Domain/Range	Thing	Thing
Cardinality	M to M	
Definition	Connects a *thing* to a *thing* that follows it in chronological order.	
Scope Notes	There may be zero to many intermediate entities, ignored or unknown, in the chronological sequence between the two connected entities.	
Examples	El Ministerio de Educación y Cultura (1996-2000) *precedes in time* el Ministerio de Ciencia y Tecnología (2000-2004). O Departamento Federal de Segurança Pública *precedes in time* o Departamento de Polícia Federal. O Departamento de Pollícia Federal *follows in time* o Departamento Federal de Segurança Pública.	
Relation types	Sequential relations	
Broader relations	RiC-R008 *precedes or preceded*	
Narrower relations	RiC-R010 *is original of* RiC-R011 *is draft of* RiC-R012 *has copy* RiC-R013 *has reply* RiC-R014 *has derived instantiation* RiC-R016 *has successor*	

ID	**RiC-R010**	
Name	***is original of***	inverse relation: ***has original***
Domain/Range	Record	Record
Cardinality	1 to M	
Definition	Connects the original version of a *record* to a copy or a later version. It is both a temporal and genetic relation between the two *records*.	

Scope Notes	There may be zero to many intermediate *records*, ignored or unknown, between the two connected *records*.
Examples	The charter whose *instantiation* S/2262A n° 4 is held by the Archives nationales de France, and whose *date* is August 1239, *is original of* the *record* instantiated within the Cartulaire blanc of the abbey of Saint-Denis (Cart. blanc, t. I, p. 374a, n° XIIII, rubric: 'De uno modio et dimidio vini empto a Renaldo de Logiis'). A Lei Áureaé *is original of* o documento cujocódigo de referênciaé BR RJANRIO_EH_0_FOT_EVE_04933 (Reprodução da Lei Áurea). O documento cujocódigo de referênciaé BR RJANRIO_EH_0_FOT_EVE_04933 (Reprodução da Lei Áurea) *has original* a Lei Áurea.
Relation types	Sequential relations Record resource to record resource relations
Broader relations	RiC-R009 *precedes in time* RiC-R023 *has genetic link to record resource*
Narrower relations	None

ID	**RiC-R011**	
Name	***is draft of***	inverse relation: ***has draft***
Domain/Range	Record	Record
Cardinality	M to M	
Definition	Connects a draft to the final version of a *record*.	
Scope Notes	There may be zero to many intermediate *records*, ignored or unknown, between the two connected *records*.	
Examples	Manuscript dated April 1957 *is draft of* The Ugly American, 1958.	
Relation types	Sequential relations Record resource to record resource relations	
Broader relations	RiC-R009 p*recedes in time* RiC-R023 *has genetic link to record resource*	
Narrower relations	None	

ID	**RiC-R012**	
Name	***has copy***	inverse relation: ***is copy of***
Domain/Range	Record Resource	Record Resource
Cardinality	1 to M	
Definition	Connects a *record resource* to a copy of that *record resource*.	
Scope Notes	Is both a temporal and genetic relation between the two *record resources*.	
Examples		
Relation types	Sequential relations Record resource to record resource relations	
Broader relations	RiC-R009 p*recedes in time* RiC-R023 h*as genetic link to record resource*	
Narrower relations	None	

ID	**RiC-R013**	
Name	***has reply***	inverse relation: ***is reply to***
Domain/Range	Record Resource	Record Resource

Cardinality	M to M
Definition	Connects a *record resource* to a reply, usually in the form of correspondence.
Scope Notes	
Examples	Letter from Mary White Ovington to William E. Walling, October 1, 1917 *has reply* Letter from William E. Walling to Mary White Ovington, October 21, 1917.
Relation types	Sequential relations Record resource to record resource relations
Broader relations	RiC-R009 *precedes in time* RiC-R022 *is record resource associated with record resource*
Narrower relations	None

ID	**RiC-R014**	
Name	***has derived instantiation***	inverse relation: ***is derived from instantiation***
Domain/Range	Instantiation	Instantiation
Cardinality	1 to M	
Definition	Connects an *instantiation* to an *instantiation* that is derived from it.	
Scope Notes		
Examples	The print aerial view of the French city of Ambérieux-en-Dombes (Ain), within the 1PH/C/1album of fonds Lapie, *has derived instantiation* the digital image whose local identifier is FRAN_0207_0001_A.	
Relation types	Sequential relations Instantiation to instantiation relations	
Broader relations	RiC-R009 *precedes in time* RiC-R034 *is instantiation associated with instantiation*	
Narrower relations	RiC-R015 *migrated into*	

ID	**RiC-R015**	
Name	***migrated into***	inverse relation: ***migrated from***
Domain/Range	Instantiation	Instantiation
Cardinality	1 to M	
Definition	Connects an *instantiation* to a version it has been migrated into.	
Scope Notes	Use for digital *instantiations*.	
Examples	Microsoft Word document with the filename Draft_2019.docx *migrated into* normalized PDF/A with filename mums1023_00_b1.pdf	
Relation types	Sequential relations Instantiation to instantiation relations	
Broader relations	RiC-R014 *has derived instantiation*	
Narrower relations	None	

ID	**RiC-R016**	
Name	***has successor***	inverse relation: ***is successor of***
Domain/Range	Agent	Agent
Cardinality	M to M	
Definition	Connects an *agent* to another *agent* that succeeds it chronologically.	
Scope Notes	There may be zero to many intermediate *agents*, ignored or unknown, between the two connected *agents*.	

	Can be used when there is a transfer of function from the first *agent* to the second *agent*.
Examples	The Bureau des Monuments historiques (1863-1870) (within the Surintendance des Beaux-Arts, a subdivision of the French Ministère de la maison de l'Empereur) *has successor* the Bureau des Monuments historiques (1870-1907) within the Direction des Beaux-Arts, a subdivision of the French Ministère de l'Instruction publique. La Administración de Hacienda de la provincia de Barcelona *has successor* la Delegación Provincial de Hacienda de Barcelona y *is successor of* la Intendencia de Ejército y Provincia del Principado de Cataluña, en sus funciones Hacendísticas. O Departamento Federal de Segurança Pública *has successor* o Departamento de Polícia Federal. O Departamento de Pollícia Federal *is successor of* o Departamento Federal de Segurança Pública.
Relation types	Sequential relations Agent to agent relations
Broader relations	RiC-R009 p*recedes in time* RiC-R044 *is agent associated with agent*
Narrower relations	RiC-R017 *has descendant*

ID	**RiC-R017**	
Name	***has descendant***	inverse relation: ***has ancestor***
Domain/Range	Person	Person
Cardinality	M to M	
Definition	Connects a *person* to one of their descendants.	
Scope Notes	There may be zero to many intermediate *persons*, ignored or unknown, between the two connected *persons*.	
Examples	Marc Ferrez *has descendant* Gilberto Ferrez. Gilberto Ferrez *has ancestor* Marc Ferrez.	
Relation types	Sequential relations Agent to agent relations	
Broader relations	RiC-R016 *has successor* RiC-R047 *has family association with*	
Narrower relations	RiC-R018 *has child*	

ID	**RiC-R018**	
Name	***has child***	inverse relation: ***is child of***
Domain/Range	Person	Person
Cardinality	M to M	
Definition	Connects a *person* to one of their children.	
Scope Notes		
Examples	Alfonso Carlos de Borbón y Austria-Este (1849-1936) *is child of* Mª Beatriz de Austria-Este (1824- 1906). Júlio Ferrez *has child* Gilberto Ferrez. Gilberto Ferrez *is child of* Júlio Ferrez.	
Relation types	Sequential relations Agent to agent relations	

Broader relations	RiC-R017 *has descendant*
Narrower relations	None

ID	**RiC-R019**	
Name	***has or had subject***	inverse relation: ***is or was subject of***
Domain/Range	Record Resource	Thing
Cardinality	M to M	
Definition	Connects a *record resource* to a *thing* that is or was its subject.	
Scope Notes	A *record set* may not have a *thing* as subject after it loses some included *records*.	
Examples	Susan Kleckner Papers *has or had subject* Anti-nuclear movement. La fotografía 'Evacuation des enfants de Madrid' [1937] de Robert Capa *has or had subject* la Guerra Civil Española (1936-1939). O processo da Revolta da Chibata *has or had subject* o movimento de marinheiros contra a chibata, usada por oficiais como medida punitiva. O movimento de marinheiros contra a chibata, usada por oficiais como medida punitiva, *is or was subject of* o processo da Revolta da Chibata.	
Relation types	Subject relations	
Broader relations	RiC-R001 *is related to*	
Narrower relations	RiC-R020 *has or had main subject* RiC-R021 d*escribes or described*	

ID	**RiC-R020**	
Name	***has or had main subject***	inverse relation: ***is or was main subject of***
Domain/Range	Record Resource	Thing
Cardinality	M to M	
Definition	Connects a *record resource* to a *thing* that is or was its main subject.	
Scope Notes	Use for specifying, for example, that a personal file (*record set*) has a *person* as its main subject, in order to help end users retrieve the main archival resources about that *person*.	
Examples		
Relation types	Subject relations	
Broader relations	RiC-R019 *has or had subject*	
Narrower relations	None	

ID	**RiC-R021**	
Name	***describes or described***	inverse relation: ***is or was described by***
Domain/Range	Record Resource	Thing
Cardinality	M to M	
Definition	Connects a *record resource* to a *thing* that it describes or described.	
Scope Notes	Can be used for specifying that a finding aid, which is a specific type of *record*, describes a *record set*.	
Examples	Guide to the Roxbury Action Project Records *describes or described* Roxbury Action Project Records.	
Relation types	Subject relations	
Broader relations	RiC-R019 *has or had subject*	

Narrower relations	None

ID	**RiC-R022**	
Name	***is record resource associated with record resource***	inverse relation: ***is record resource associated with record resource***
Domain/Range	Record Resource	Record Resource
Cardinality	M to M	
Definition	Connects two *record resources*. This relation is symmetric.	
Scope Notes	Use to connect two *record resources* only if it is not possible to use a narrower, more specific relation, for example *has genetic link to*.	
Examples	La Planta de la ciudadela, ciudad y puerto de Messina (Sicilia) [por Carlos Grunembergh] [1686] *is record resource associated with record resource* el fondo de Consejo de Italia (siglos XVI-XVIII). Graças Honoríficas *is record resource associated with record resource* a Ordens Honoríficas. Ordens Honoríficas *is record resource associated with record resource* a Graças Honoríficas.	
Relation types	Record resource to record resource relations	
Broader relations	RiC-R001 *is related to*	
Narrower relations	RiC-R023 *has genetic link to record resource* RiC-R013 *has reply* RiC-R003 *has or had constituent* RiC-R024 *includes or included*	

ID	**RiC-R023**	
Name	***has genetic link to record resource***	inverse relation: ***has genetic link to record resource***
Domain/Range	Record Resource	Record Resource
Cardinality	M to M	
Definition	Connects two *record resources* when there is a genetic link between them. Genetic in this sense is as defined by diplomatics, i.e., the process by which a *record resource* is developed. This relation is symmetric.	
Scope Notes	Use to connect two *record resources* only if it is not possible to be more accurate and specify a narrower, asymmetric relation, for example *is original of*.	
Examples		
Relation types	Record resource to record resource relations	
Broader relations	RiC-R022 *is record resource associated with record resource*	
Narrower relations	RiC-R010 *is original of* RiC-R011 *is draft of* RiC-R012 *has copy*	

ID	**RiC-R024**	
Name	***includes or included***	inverse relation: ***is or was included in***
Domain/Range	Record Set	Record or Record Set
Cardinality	M to M	
Definition	Connects a *record set* to a *record* or *record set* it aggregates or aggregated in the past.	
Scope Notes	A *record* or *record set* can be aggregated in one or many *record sets* simultaneously or through time.	
Examples	The W.E.B. Du Bois Papers *includes or included* Series 1. Correspondence. Consejo Supremo de Italia (*record set*) *includes or included* Secretaría de Nápoles (*record set*). Departamento Nacional do Povoamento (fundo) *includes or included* Hospedaria de Imigrantes da Ilha das Flores (subsérie). Hospedaria de Imigrantes da Ilha das Flores (subsérie) *is or was included in* Departamento Nacional do Povoamento (fundo).	
Relation types	Record resource to record resource relations	
Broader relations	RiC-R022 *is record resource associated with record resource*	
Narrower relations	None	

ID	**RiC-R025**	
Name	***has instantiation***	inverse relation: ***is instantiation of***
Domain/Range	Record Resource	Instantiation
Cardinality	1 to M	
Definition	Connects a *record resource* to one of its *instantiations*.	
Scope Notes		
Examples	The series (*record set*) of aerial views that concern the district of Ambérieux-en-Dombes (Ain) in the Fonds Lapie *has instantiation* the print photos referenced "C.T. 104 1K-2K." It also *has instantiation* the digital images identified by FRAN_0207_0001_A#FRAN_0207_0002_A.	
Relation types	Record resource to instantiation relations	
Broader relations	RiC-R001 *is related to*	
Narrower relations	None	

ID	**RiC-R026**	
Name	***has provenance***	inverse relation: ***is provenance of***
Domain/Range	Record Resource or Instantiation	Agent
Cardinality	M to M	
Definition	Connects a *record resource* or an *instantiation* to an *agent* that creates or accumulates the *record resource* or receives or sends it.	
Scope Notes	This is the generic organic provenance relation.	
Examples		
Relation types	Provenance relations	
Broader relations	RiC-R001 *is related to*	
Narrower relations	RiC-R027 *has creator*	

	RiC-R028 *has accumulator* RiC-R031 *has sender* RiC-R032 *has addressee*

ID	**RiC-R027**	
Name	***has creator***	inverse relation: ***is creator of***
Domain/Range	Record Resource or Instantiation	Agent
Cardinality	M to M	
Definition	Connects a *record resource* or an *instantiation* to the *agent* that is either responsible for all or some of the content of the *record resource* or is a contributor to the genesis or production of an *instantiation*.	
Scope Notes	Covers the definition of "author" in diplomatics, and any contribution to the intellectual content of a *record resource*. Can also be used for any *agent* that was involved in the genesis (with the role of witness, representative of the author…) or in the production (with the role of scribe, secretary, notary, printer...) of the *record resource* or *instantiation*.	
Examples	Matilde de Baviera (1877-1906) *is creator of* la Carta de Mathilde de Baviera a María de las Nieves, anunciándole su compromiso con el Príncipe Luis de Sajonia-Coburgo (15-12-1899). Serviço Nacional de Informações (entidade coletiva) *is creator of* Serviço Nacional de Informações (fundo). Serviço Nacional de Informações (fundo) *has creator* Serviço Nacional de Informações (entidade coletiva).	
Relation types	Provenance relations	
Broader relations	RiC-R026 *has provenance*	
Narrower relations	RiC-R079 h*as author*	

ID	**RiC-R028**	
Name	***has accumulator***	inverse relation: ***is accumulator of***
Domain/Range	Record Resource or Instantiation	Agent
Cardinality	M to M	
Definition	Connects a *record resource* or an *instantiation* to the *agent* that accumulated it, be it intentionally (collecting) or not (receiving in the course of the *agent's* activities).	
Scope Notes		
Examples		
Relation types	Provenance relations	
Broader relations	RiC-R026 h*as provenance*	
Narrower relations	RiC-R029 h*as receiver* RiC-R030 *has collector*	

ID	RiC-R029	
Name	***has receiver***	inverse relation: ***is receiver of***
Domain/Range	Record Resource or Instantiation	Agent
Cardinality	M to M	
Definition	Connects a *record resource* or an *instantiation* to the *agent* that receives it in the course of the *agent's* activities.	
Scope Notes		
Examples	Carta de Mathilde de Baviera a María de las Nieves, anunciándole su compromiso con el Príncipe Luis de Sajonia-Coburgo (15-12-1899) *has receiver* Mª de las Nievesde Braganza y Borbón (1852-1941).	
Relation types	Provenance relations	
Broader relations	RiC-R028 h*as accumulator*	
Narrower relations	None	

ID	RiC-R030	
Name	***has collector***	inverse relation: ***is collector of***
Domain/Range	Record Resource or Instantiation	Agent
Cardinality	M to M	
Definition	Connects a *record resource* or an *instantiation* to the *agent* that collects it intentionally (is a collector).	
Scope Notes		
Examples	The poster *¡Miliciano!: antes morir que retroceder* [1936-1937] *has collector* José Mario Armero Alcántara (1927-1995). A coleção Fotografias avulsas *has collector* lo Arquivo Nacional (Brasil). Arquivo Nacional (Brasil) *is collector of* a coleção Fotografias Avulsas.	
Relation types	Provenance relations	
Broader relations	RiC-R028 *has accumulator*	
Narrower relations	None	

ID	RiC-R031	
Name	***has sender***	inverse relation: ***is sender of***
Domain/Range	Record Resource or Instantiation	Agent
Cardinality	M to M	
Definition	Connects a *record resource* or an *instantiation* to the *agent* that sends it.	
Scope Notes	The identity of the sender is (usually) evidenced by the *record resource* or *instantiation* itself.	
Examples	La Carta de Mathilde de Baviera a María de las Nieves, anunciándole su compromiso con el Príncipe Luis de Sajonia-Coburgo (15-12-1899) *has sender* Matilde de Baviera (1877-1906). Ofício encaminhando ao diretor do Serviço Nacional de Informações documentos referentes a pessoa indiciada por participação em atividades subversivas *has sender* o diretor da Divisão de Informações do Departamento Federal de Segurança Pública.	

	Diretor da Divisão de Informações do Departamento Federal de Segurança Pública *is sender of* ofício encaminhando ao diretor do Serviço Nacional de Informações documentos referentes a pessoa indiciada por participação em atividades subversivas.
Relation types	Provenance relations
Broader relations	RiC-R026 *has provenance*
Narrower relations	None

ID	**RiC-R032**	
Name	***has addressee***	inverse relation: ***is addressee of***
Domain/Range	Record Resource or Instantiation	Agent
Cardinality	M to M	
Definition	Connects a *record resource* or an *instantiation* to the *agent* that it is addressed to.	
Scope Notes	The identity of the addressee is (usually) evidenced by the *record resource* or *instantiation* itself.	
Examples	La Carta de Mathilde de Baviera a María de las Nieves, anunciándole su compromiso con el Príncipe Luis de Sajonia-Coburgo (15-12-1899) *has addressee* Mª de las Nieves de Braganza y Borbón (1852-1941). Ofício do diretor da Divisão de Informações do Departamento Federal de Segurança Pública encaminhando documentos referentes a pessoa indiciada por participação em atividades subversivas *has addressee* o diretor do Serviço Nacional de Informações. Diretor do Serviço Nacional de Informações *is addressee of* o diretor da Divisão de Informações do Departamento Federal de Segurança Pública encaminhando documentos referentes a pessoa indiciada por participação em atividades subversivas.	
Relation types	Provenance relations	
Broader relations	RiC-R026 *has provenance*	
Narrower relations	None	

ID	**RiC-R033**	
Name	***documents***	inverse relation: ***documented by***
Domain/Range	Record Resource or Instantiation	Activity
Cardinality	M to M	
Definition	Connects a *record resource* or an *instantiation* to the *activity* that generates the *record resource* or *instantiation*.	
Scope Notes	This is the generic functional provenance relation.	
Examples	El Título de Duque de Terranova a Carlo d'Aragona Tagliavia (20-7-1561) (*record resource*) *documents* la Concesión de títulos nobiliarios (*activity*).	
Relation types	Provenance relations Event relations	
Broader relations	RiC-R001 *is related to* RiC-R061i *results or resulted from*	
Narrower relations	None	

ID	**RiC-R034**	
Name	***is instantiation associated with instantiation***	inverse relation: ***is instantiation associated with instantiation***
Domain/Range	Instantiation	Instantiation
Cardinality	M to M	
Definition	Connects two *instantiations*. This relation is symmetric.	
Scope Notes	Use only if it is not possible to specify a narrower relation, for example *is functionally equivalent to*.	
Examples		
Relation types	Instantiation to instantiation relations	
Broader relations	RiC-R001 is related to	
Narrower relations	RiC-R035 *is functionally equivalent to* RiC-R014 *has derived instantiation* RiC-R004 *has or had component*	

ID	**RiC-R035**	
Name	***is functionally equivalent to***	inverse relation: ***is functionally equivalent to***
Domain/Range	Instantiation	Instantiation
Cardinality	M to M	
Definition	Connects two *instantiations* which may be considered as equivalent. This relation is symmetric.	
Scope Notes	Two *instantiations*, from some point of view, may be considered as equivalent. This equivalence is usually based upon the fact that the *instantiations* have at least the same intellectual content (they instantiate the same *record resource*).	
Examples		
Relation types	Instantiation to instantiation relations	
Broader relations	RiC-R034 *is instantiation associated with instantiation*	
Narrower relations	None	

ID	**RiC-R036**	
Name	***has or had authority over***	inverse relation: ***is or was under authority of***
Domain/Range	Agent	Thing
Cardinality	M to M	
Definition	Connects an *agent* to a *thing* over which the *agent* has or had some kind of authority.	
Scope Notes	Use only if it is not possible to be more accurate and specify a narrower relation, for example *is or was owner of*.	
Examples		
Relation types	Management relations	
Broader relations	RiC-R001 *is related to*	
Narrower relations	RiC-R037 *is or was owner of* RiC-R038 *is or was manager of* RiC-R040 *is or was holder of intellectual property rights of* RiC-R041 *is or was controller of*	

ID	**RiC-R037**	
Name	***is or was owner of***	inverse relation: ***has or had owner***
Domain/Range	Group or Person or Position	Thing
Cardinality	M to M	
Definition	Connects an *agent* to a *thing* that the *agent* owns or owned.	
Scope Notes		
Examples	La Universidad Pública de Navarra (*agent*) *is or was owner of* los Expedientes de personal investigador en formación (*record set*). Ruy Alexandre Guerra Coelho Pereira (pessoa) *is or was owner of* Ruy Guerra (fundo). Ruy Guerra (fundo) *has or had owner* Ruy Alexandre Guerra Coelho Pereira (pessoa).	
Relation types	Management relations	
Broader relations	RiC-R036 *has or had authority over*	
Narrower relations	None	

ID	**RiC-R038**	
Name	***is or was manager of***	inverse relation: ***has or had manager***
Domain/Range	Agent	Record Resource or Instantiation
Cardinality	M to M	
Definition	Connects an *agent* to a *record resource* or *instantiation* that the *agent* manages or managed.	
Scope Notes		
Examples		
Relation types	Management relations	
Broader relations	RiC-R036 *has or had authority over*	
Narrower relations	RiC-R039 *is or was holder of*	

ID	**RiC-R039**	
Name	***is or was holder of***	inverse relation: ***has or had holder***
Domain/Range	Agent	Record Resource or Instantiation
Cardinality	M to M	
Definition	Connects an *agent* to a *record resource* or *instantiation* that the *agent* holds.	
Scope Notes		
Examples	The National Archive of Spain (*agent*) *is or was holder of* Junta Central Suprema Gubernativa del Reino (Siglo XIX) (*record set*). Arquivo Nacional (Brasil) *is or was holder of* Departamento Nacional do Povoamento (fundo). Departamento Nacional do Povoamento (fundo) *has or had holder* Arquivo Nacional (Brasil).	
Relation types	Management relations	
Broader relations	RiC-R038 *is or was manager of*	
Narrower relations	None	

ID	RiC-R040	
Name	***is or was holder of intellectual property rights of***	inverse relation: ***has or had intellectual property rights holder***
Domain/Range	Agent	Record Resource or Instantiation
Cardinality	M to M	
Definition	Connects an *agent* to a *record resource* or *instantiation* in which the *agent* has or had some intellectual property rights.	
Scope Notes		
Examples	Los herederos de Pablo Pérez-Mínguez (a*gent*) *is or was holder of intellectual property rights of* el Archivo Fotográfico Pablo Pérez-Mínguez (*record resource*). Ruy Alexandre Guerra Coelho Pereira (pessoa) *is or was holder of intellectual property rights of* Ruy Guerra (fundo). Ruy Guerra (fundo) *has or had intellectual property rights holder* Ruy Alexandre Guerra Coelho Pereira (pessoa).	
Relation types	Management relations	
Broader relations	RiC-R036 *has or had authority over*	
Narrower relations	None	

ID	RiC-R041	
Name	***is or was controller of***	inverse relation: ***has or had controller***
Domain/Range	Agent	Agent
Cardinality	M to M	
Definition	Connects an *agent* to another *agent* it controls or controlled.	
Scope Notes		
Examples		
Relation types	Management relations Agent to agent relations	
Broader relations	RiC-R036 *has or had authority over* RiC-R045 *has or had subordinate*	
Narrower relations	RiC-R042 *is or was leader of*	

ID	RiC-R042	
Name	***is or was leader of***	inverse relation: ***has or had leader***
Domain/Range	Person	Group
Cardinality	M to M	
Definition	Connects a *person* to the *group* the *person* leads or led in the past.	
Scope Notes		
Examples	Jean Favier (1932-2014) *is or was leader of* the Bibliothèque nationale de France. *Date* attribute of this relation: 1994/1997. *Description* attribute of this relation: Jean Favier was president of the BnF. João Cândido *is or was leader of* a Revolta da Chibata. Revolta da Chibata *has or had leader* João Cândido.	
Relation types	Management relations Agent to agent relations	
Broader relations	RiC-R041 *is or was controller of*	
Narrower relations	None	

ID	**RiC-R044**	
Name	***is agent associated with agent***	inverse relation: ***is agent associated with agent***
Domain/Range	Agent	Agent
Cardinality	M to M	
Definition	Connects two *agents*. This relation is symmetric.	
Scope Notes	Use to connect two *agents* only if it is not possible to be more accurate and use a narrower agent to agent relation, for example *has or had work relation with*.	
Examples	El Ayuntamiento de Soria (*agent*) *is agent associated with agent* la Junta de Castilla y León (*agent*). Ministro de Estado da Justiça e Segurança Pública *is agent associated with agent* o presidente da República Federativa do Brasil. Presidente da República Federativa do Brasil *is agent associated with agent* o *m*inistro de Estado da Justiça e Segurança Pública.	
Relation types	Agent to agent relations	
Broader relations	RiC-R001 *is related to*	
Narrower relations	RiC-R045 *has or had subordinate* RiC-R046 *has or had work relation with* RiC-R016 *has successor* RiC-R047 *has family association with* RiC-R050 *knows of* RiC-R051 *knows* RiC-R054 *occupies or occupied* RiC-R055 *has or had member* RiC-R056 *exists or existed in*	

ID	**RiC-R045**	
Name	***has or had subordinate***	inverse relation: ***is or was subordinate to***
Domain/Range	Agent	Agent
Cardinality	M to M	
Definition	Connects an *agent* to an *agent* that is hierarchically inferior.	
Scope Notes	The hierarchical relation can be an authority relation, or a whole/part relation between two *agents*.	
Examples	La Real Audiencia y Chancillería de Valladolid (*agent*) *has or had subordinate* la Sala Primera de lo Civil (*agent*). Presidente da República Federativa do Brasil *has or had subordinate* o ministro de Estado da Justiça e Segurança Pública. Ministro de Estado da Justiça e Segurança Pública *is or was subordinate to* o Presidente da República Federativa do Brasil.	
Relation types	Agent to agent relations	
Broader relations	RiC-R044 *is agent associated with agent*	
Narrower relations	RiC-R041 *is or was controller of* RiC-R005 *has or had subdivision*	

ID	RiC-R046	
Name	***has or had work relation with***	inverse relation: ***has or had work relation with***
Domain/Range	Agent	Agent
Cardinality	M to M	
Definition	Connects two *agents* that have or had some type of work relation in the course of their activities. This relation is symmetric.	
Scope Notes		
Examples	Presidente da República Federativa do Brasil *has or had work relation with* o ministro de Estado da Justiça e Segurança Pública. Ministro de Estado da Justiça e Segurança Pública *has or had work relation with* o Presidente da República Federativa do Brasil.	
Relation types	Agent to agent relations	
Broader relations	RiC-R044 *is agent associated with agent*	
Narrower relations	None	

ID	RiC-R047	
Name	***has family association with***	inverse relation: ***has family association with***
Domain/Range	Person	Person
Cardinality	M to M	
Definition	Connects two *persons* that have some type of family link, i.e., belong to the same family. This relation is symmetric.	
Scope Notes	Use RiC-055 *has or had member* for connecting a *family* and a *person*.	
Examples	Fernando VI (Rey de España) (*person*) *has family association with* Isabel II (Reina de España (*person*).	
Relation types	Agent to agent relations	
Broader relations	RiC-R044 *is agent associated with agent*	
Narrower relations	RiC-R017 *has descendant* RiC-R048 *has sibling* RiC-R049 *has or had spouse*	

ID	RiC-R048	
Name	***has sibling***	inverse relation: ***has sibling***
Domain/Range	Person	Person
Cardinality	M to M	
Definition	Connects two *persons* that are siblings. This relation is symmetric.	
Scope Notes		
Examples	Francisco Franco Bahamonde (1892-1975) (*person*) *has sibling* Ramón Franco Bahamonde (1896-1938) (*person*).	
Relation types	Agent to agent relations	
Broader relations	RiC-R047 *has family association with*	

Narrower relations	None

ID	**RiC-R049**	
Name	***has or had spouse***	inverse relation: ***has or had spouse***
Domain/Range	Person	Person
Cardinality	M to M	
Definition	Connects two *persons* that are or were married. This relation is symmetric.	
Scope Notes		
Examples	Margarita de Borbón-Parma (1847-1893) (*person*) *has or had spouse* Carlos María de Borbón y Austria-Este (1848-1909) (*person*).	
Relation types	Agent to agent relations	
Broader relations	RiC-R047 *has family association with*	
Narrower relations	None	

ID	**RiC-R050**	
Name	***knows of***	inverse relation: ***known by***
Domain/Range	Person	Person
Cardinality	M to M	
Definition	Connects a *person* to another *person* they have some knowledge of through time or space.	
Scope Notes		
Examples		
Relation types	Agent to agent relations	
Broader relations	RiC-R044 *is agent associated with agent*	
Narrower relations	None	

ID	**RiC-R051**	
Name	***knows***	inverse relation: ***knows***
Domain/Range	Person	Person
Cardinality	M to M	
Definition	Connects two *persons* that directly know each other during their existence. This relation is symmetric.	
Scope Notes	The relation implies that the two *persons* met or at least corresponded with each other.	
Examples		
Relation types	Agent to agent relations	
Broader relations	RiC-R044 *is agent associated with agent*	
Narrower relations	RiC-R052 *has or had correspondent* RiC-R053 *has or had teacher*	

ID	RiC-R052	
Name	***has or had correspondent***	inverse relation: ***has or had correspondent***
Domain/Range	Person	Person
Cardinality	M to M	
Definition	Connects two *persons* that correspond or have corresponded with each other. This relation is symmetric.	
Scope Notes		
Examples		
Relation types	Agent to agent relations	
Broader relations	RiC-R051 *knows*	
Narrower relations	None	

ID	RiC-R053	
Name	***has or had teacher***	inverse relation: ***has or had student***
Domain/Range	Person	Person
Cardinality	M to M	
Definition	Connects a *person* to another *person* who is or was their student.	
Scope Notes		
Examples	Beatriz Galindo, la Latina (c.1465-1535) (*person*) *has or had student* Isabel I la Católica (1474-1504) (*person*).	
Relation types	Agent to agent relations	
Broader relations	RiC-R051 *knows*	
Narrower relations	None	

ID	RiC-R054	
Name	***occupies or occupied***	inverse relation: ***is or was occupied by***
Domain/Range	Person	Position
Cardinality	M to M	
Definition	Connects a *person* to a *position* they occupy or occupied.	
Scope Notes	Pío Cabanillas Gallas (1923-1991) (*person*) *occupies or occupied* el cargo de Ministro de Cultura (*position*) (fechas de la relación: 1977-1979).	
Examples		
Relation types	Agent to agent relations	
Broader relations	RiC-R044 *is agent associated with agent*	
Narrower relations	None	

ID	RiC-R055	
Name	***has or had member***	inverse relation: ***is or was member of***
Domain/Range	Group	Person
Cardinality	M to M	
Definition	Connects a *group* to a *person* that is or was a member of that *group*.	
Scope Notes		
Examples	The French Conseil constitutionnel (*corporate body*) *has or had member* Simone Veil (Person). *Date* attribute for this relation: 1998/2007	

	Francisco Cabarrús (1752-1810) (*person*) *is or was member of* el Ministerio del Interior (*group*). Fecha de la relación: 1808.
Relation types	Agent to agent relations
Broader relations	RiC-R044 *is agent associated with agent*
Narrower relations	None

ID	**RiC-R056**	
Name	***exists or existed in***	inverse relation: ***has or had position***
Domain/Range	Position	Group
Cardinality	M to 1	
Definition	Connects a *position* to a *group* in which that *position* exists or existed, or that is defined by that *group's* organizational structure.	
Scope Notes		
Examples		
Relation types	Agent to agent relations	
Broader relations	RiC-R044 *is agent associated with agent*	
Narrower relations	None	

ID	**RiC-R057**	
Name	***is event associated with***	inverse relation: ***is associated with event***
Domain/Range	Event	Thing
Cardinality	M to M	
Definition	Connects an *event* to a *thing* that is associated with the existence and lifecycle of the *event*.	
Scope Notes	This relation should be used to connect an *event* and an entity only if it is not possible to be more accurate and use a narrower event relation, for example *has or had participant*.	
Examples		
Relation types	Event relations	
Broader relations	RiC-R001 *is related to*	
Narrower relations	RiC-R058 *has or had participant* RiC-R061 *results or resulted in* RiC-R006 *has or had subevent*	

ID	**RiC-R058**	
Name	***has or had participant***	inverse relation: ***is or was participant in***
Domain/Range	Event	Thing
Cardinality	M to M	
Definition	Connects an *event* to a *thing* that is or was actively or passively involved in it.	
Scope Notes		
Examples		
Relation types	Event relations	
Broader relations	RiC-R057 *is event associated with*	
Narrower relations	RiC-R059 *affects or affected* RiC-R060 *is or was performed by*	

ID	RiC-R059	
Name	***affects or affected***	inverse relation: ***is or was affected by***
Domain/Range	Event	Thing
Cardinality	M to M	
Definition	Connects an *event* to a *thing* on which the *event* has or had some significant impact.	
Scope Notes		
Examples	The first ANF digitization program (*event*) *affects or affected* the fonds Napoléon held by the Archives nationales de France (*record set*).	
Relation types	Event relations	
Broader relations	RiC-R058 *has or had participant*	
Narrower relations	None	

ID	RiC-R060	
Name	***is or was performed by***	inverse relation: ***performs or performed***
Domain/Range	Activity	Agent
Cardinality	M to M	
Definition	Connects an *activity* to an *agent* that performs or performed the *activity*.	
Scope Notes		
Examples	Town planning (*activity*) *is or was performed by* City hall of Madrid (*agent*).	
Relation types	Event relations	
Broader relations	RiC-R058 *has or had participant*	
Narrower relations	None	

ID	RiC-R061	
Name	***results or resulted in***	inverse relation: ***results or resulted from***
Domain/Range	Event	Thing
Cardinality	M to M	
Definition	Connects an *event* to a *thing* that results or resulted from the *event*.	
Scope Notes		
Examples		
Relation types	Event relations	
Broader relations	RiC-R057 *is event associated with*	
Narrower relations	RiC-R033i *documented by* (inverse of RiC-R033 *documents*)	

ID	RiC-R062	
Name	***is rule associated with***	inverse relation: ***is associated with rule***
Domain/Range	Rule	Thing
Cardinality	M to M	
Definition	Connects a *rule* to a *thing* that is associated with the existence and lifecycle of the *rule*.	
Scope Notes	This relation should be used to connect a *rule* and a *thing* only if it is not possible to be more accurate and use a narrower *rule* relation, for example *regulates or regulated*.	
Examples		
Relation types	Rule relations	

Broader relations	RiC-R001 is related to
Narrower relations	RiC-R063 *regulates or regulated* RiC-R064 *is or was expressed by* RiC-R065 *issued by* RiC-R066 *is or was enforced by* RiC-R067 *authorizes*

ID	**RiC-R063**	
Name	***regulates or regulated***	inverse relation: ***is or was regulated by***
Domain/Range	Rule	Thing
Cardinality	M to M	
Definition	Connects a *rule* to a *thing* that it regulates or regulated.	
Scope Notes		
Examples	The 'Règlement intérieur de l'Assemblée nationale constituante' *regulates or regulated* the French Assemblée nationale constituante (1789-1791). *Date* attribute for this relation: 1789-07-29/1791-09-30. La Universidad Complutense de Madrid (*thing*) *is or was regulated by* la Ley Orgánica 11/1983 de Reforma Universitaria (25-8-1983) (*rule*).	
Relation types	Rule relations	
Broader relations	RiC-R062 *is rule associated with*	
Narrower relations	None	

ID	**RiC-R064**	
Name	***is or was expressed by***	inverse relation: ***expresses or expressed***
Domain/Range	Rule	Record Resource
Cardinality	M to M	
Definition	Connects a *rule* to a *record resource* that expresses or expressed the *rule*.	
Scope Notes		
Examples	The French *Déclaration des droits de l'homme et du citoyen*, dated 1793, August 13 *is or was expressed by* the *record* whose *instantiation* FRAN AE/II/3701 is held by the Archives nationales de France (see https://commons.wikimedia.org/wiki/File:Declaration_des_Droits_de_lHomme.jpg <accessed 20190912>).	
Relation types	Rule relations	
Broader relations	RiC-R062 *is rule associated with*	
Narrower relations	None	

ID	**RiC-R065**	
Name	***issued by***	inverse relation: ***is responsible for issuing***
Domain/Range	Rule	Agent
Cardinality	M to M	
Definition	Connects a *rule* to the *agent* that issued or published the *rule*.	
Scope Notes		
Examples	The Cádiz Corts (1810-1814) (*agent*) *is responsible for issuing* the Spanish Constitution of 1812 (*rule*).	
Relation types	Rule relations	

Broader relations	RiC-R062 *is rule associated with*
Narrower relations	None

ID	**RiC-R066**	
Name	***Is or was enforced by***	inverse relation: ***is or was responsible for enforcing***
Domain/Range	Rule	Agent
Cardinality	M to M	
Definition	Connects a *rule* to an *agent* that enforces or enforced the *rule*.	
Scope Notes		
Examples		
Relation types	Rule relations	
Broader relations	RiC-R062 *is rule associated with*	
Narrower relations	None	

ID	**RiC-R067**	
Name	***authorizes***	inverse relation: ***authorized by***
Domain/Range	Mandate	Agent
Cardinality	M to M	
Definition	Connects a *mandate* to the *agent* that the *mandate* gives the authority or competencies to act.	
Scope Notes		
Examples		
Relation types	Rule relations	
Broader relations	RiC-R062 *is rule associated with*	
Narrower relations	None	

ID	**RiC-R068**	
Name	***is date associated with***	inverse relation: ***is associated with date***
Domain/Range	Date	Thing
Cardinality	M to M	
Definition	Connects a *date* to a *thing* with whose existence and lifecycle the *date* is associated.	
Scope Notes	This relation should be used to connect a *date* and an entity only if it is not possible to be more accurate and use a narrower date relation, for example *is beginning date of*.	
Examples		
Relation types	Date relations	
Broader relations	RiC-R001 *is related to*	
Narrower relations	RiC-R069 *is beginning date of* RiC-R071 *is end date of* RiC-R073 *is modification date of*	

ID	**RiC-R069**	
Name	***is beginning date of***	inverse relation: ***has beginning date***
Domain/Range	Date	Thing
Cardinality	1 to M	
Definition	Connects a *date* to a *thing* that came into existence on that *date*.	
Scope Notes		
Examples	La Guerra de la Independencia Española (*thing*) *has beginning date* el 2 de mayo de 1808 (*date*).	
Relation types	Date relations	
Broader relations	RiC-R068 *is date associated with*	
Narrower relations	RiC-R070 *has birth date*	

ID	**RiC-R070**	
Name	***is birth date of***	inverse relation: ***has birth date***
Domain/Range	Date	Person
Cardinality	1 to M	
Definition	Connects a *date* to a *person* who was born on that *date*.	
Scope Notes		
Examples	El 1 de mayo de 1852 (*date*) *is birth date of* Premio Nobel, Santiago Ramón y Cajal (*person*).	
Relation types	Date relations	
Broader relations	RiC-R069 *is beginning date of*	
Narrower relations	None	

ID	**RiC-R071**	
Name	***is end date of***	inverse relation: ***has end date***
Domain/Range	Date	Thing
Cardinality	1 to M	
Definition	Connects a *date* to a *thing* whose existence ended on that *date*.	
Scope Notes		
Examples	La Guerra de la Independencia Española (*thing*) *has end date* el 17 de abril de 1814 (*date*).	
Relation types	Date relations	
Broader relations	RiC-R068 *is date associated with*	
Narrower relations	RiC-R072 *is death date of*	

ID	**RiC-R072**	
Name	***is death date of***	inverse relation: ***has death date***
Domain/Range	Date	Person
Cardinality	1 to M	
Definition	Connects a *date* to a *person* who died on that *date*.	
Scope Notes		
Examples	El Premio Nobel, Santiago Ramón y Cajal (*person*), *has death date* el 17 de octubre de 1934 (*date*).	
Relation types	Date relations	

Broader relations	RiC-R071 *is end date of*
Narrower relations	None

ID	**RiC-R073**	
Name	***is modification date of***	inverse relation: ***has modification date***
Domain/Range	Date	Thing
Cardinality	M to M	
Definition	Connects a *date* to a *thing* that was modified on that *date*.	
Scope Notes		
Examples		
Relation types	Date relations	
Broader relations	RiC-R068 *is date associated with*	
Narrower relations	None	

ID	**RiC-R074**	
Name	***is place associated with***	inverse relation: ***is associated with place***
Domain/Range	Place	Thing
Cardinality	M to M	
Definition	Connects a *place* to a *thing* with whose existence and lifecycle the *place* is associated.	
Scope Notes	This relation should be used to connect a *place* to an entity only if it is not possible to be more accurate and use a narrower spatial relation, for example *is or was location of*.	
Examples	El Mar Jónico (*place*) *is place associated with* la Batalla de Lepanto (1571) (*thing*).	
Relation types	Spatial relations	
Broader relations	RiC-R001 *is related to*	
Narrower relations	RiC-R075 *is or was location of* RiC-R076 *is or was jurisdiction of* RiC-R007 *contains or contained* RiC-R077 *is or was adjacent to* RiC-R078 *overlaps or overlapped*	

ID	**RiC-R075**	
Name	***is or was location of***	inverse relation: ***has or had location***
Domain/Range	Place	Thing
Cardinality	M to M	
Definition	Connects a *place* to a *thing* that is or was located in the *place*.	
Scope Notes		
Examples	El Archivo General de Indias (*thing*) *has or had location* Sevilla (*place*).	
Relation types	Spatial relations	
Broader relations	RiC-R074 *is place associated with*	
Narrower relations	None	

ID	RiC-R076	
Name	***is or was jurisdiction of***	inverse relation: ***has or had jurisdiction***
Domain/Range	Place	Agent
Cardinality	M to M	
Definition	Connects a *place* to an *agent* that has or had jurisdiction over the *place*.	
Scope Notes	Not to be confused with RiC-R0 *is or was location of*.	
Examples	El Tribunal Supremo (*agent*) *has or had jurisdiction* todo el territorio de España (*place*).	
Relation types	Spatial relations	
Broader relations	RiC-R074 *is place associated with*	
Narrower relations	None	

ID	RiC-R077	
Name	***is or was adjacent to***	inverse relation: ***is or was adjacent to***
Domain/Range	Place	Place
Cardinality	M to M	
Definition	Connects two *places* that are or were geographically adjacent. This relation is symmetric.	
Scope Notes	Use for connecting two geographical or administrative regions.	
Examples	The French Ain département *is or was adjacent to* the Haute-Savoie département.	
Relation types	Spatial relations	
Broader relations	RiC-R074 *is place associated with*	
Narrower relations	None	

ID	RiC-R078	
Name	***overlaps or overlapped***	inverse relation: ***overlaps or overlapped***
Domain/Range	Place	Place
Cardinality	M to M	
Definition	Connects two *places* that geographically overlap or overlapped. This relation is symmetric.	
Scope Notes	Use for connecting two geographical or administrative areas.	
Examples	The French geographical region of Bresse *overlaps or overlapped* the administrative Auvergne-Rhône-Alpes region.	
Relation types	Spatial relations	
Broader relations	RiC-R074 *is place associated with*	
Narrower relations	None	

ID	RiC-R079	
Name	***has author***	inverse relation: ***is author of***
Domain/Range	Record	Person or Group or Position
Cardinality	M to M	
Definition	Connects a *record* to the *group*, *person* or *position* that is responsible for conceiving and formulating the information contained in the *record*.	
Scope Notes	To be used for any contribution to the content of a *record*.	

	Includes the *person*, *group* or *position* in whose name or by whose command the content may have been formulated and first instantiated (for example the *person* who signed it).
Examples	
Relation types	Provenance relations
Broader relations	RiC-R027 *has creator*
Narrower relations	None

5.5 Attributes of Relations

ID	**RiC-RA01**
Name	**Certainty**
Definition	Qualifies the level of certainty about the accuracy of the relation.
Specifications	
Extensibility	Not extensible
Repeatability	Not repeatable
Value schema	Model-based text, free text, controlled value
Scope Notes	
Examples	certain; uncertain; unknown

ID	**RiC-RA02**
Name	**Date**
Definition	The date or date range when the relation occurred.
Specifications	
Extensibility	
Repeatability	
Value schema	Rule-based value, model-based text, free text
Scope Notes	
Examples	

ID	**RiC-RA03**
Name	**Description**
Definition	Further information about a relation that is not otherwise addressed.
Specifications	
Extensibility	The attribute may be extended with any number of specific attributes.
Repeatability	Not repeatable
Value schema	Free text
Scope Notes	
Examples	

ID	RiC-RA04
Name	**Identifier**
Definition	A word, number, letter, symbol, or any combination of these used to uniquely identify or reference an individual instance of a relation within a specific information domain.
Specifications	The attribute can include Global Persistent Identifiers (globally unique and persistently resolvable identifier for the relation) and/or Local Identifiers. Both the domain within which the identifier is unique, and the rules used in forming the identifier value should be provided with the identifier value.
Extensibility	May be extended with any number of specific attributes.
Repeatability	Repeatable
Value schema	Rule-based value; model-based text; free text
Scope Notes	Within a given domain (a closed system), identifiers are used to uniquely reference instances of a relation. Identifiers are instruments of control that facilitate management of the relations within the domain. The formulation of identifiers commonly is based on rules. In addition to an identifier needing to be unique within a domain, it is also highly desirable that it is persistent, that is, that the identifier uniquely identifies the relation over time. A variety of organizations provide rules for the formation of identifiers, and services designed to facilitate the persistence of the identifiers. Such identifiers are commonly referred to as Persistent Identifiers (or PIDS). PIDs conform to RFC 3986, but impose additional rules. Common examples are Archival Resource Keys (ARKS)1 and Digital Object Identifiers (DOIs)2. Within the global environment of the Internet, there are special rules for the formation of identifiers to ensure that they are unique within the domain of the Internet. Such identifiers must conform to the Internet Engineering Task Force (IETF) Uniform Resource Identifier rules (RFC 3986)3.
Examples	

ID	RiC-RA05
Name	**Source**
Definition	A source of information used for identifying and describing the relation.
Specifications	Source could point to an identifier of a RiC *record resource* or of any cultural heritage object that is the source of the relation.
Extensibility	
Repeatability	Repeatable
Value schema	Model-based text, free text
Scope Notes	
Examples	

5.6 List of Relations

The full list of relations in the table below is sorted by domain ID, then by range ID, and then by name (in alphabetical order). The list includes the inverse relations (whose IDs are formed using the ID of the relation, followed by the letter "i").

Relation ID	Domain	ID of domain	Name	ID of range	Range	Inverse relation ID and name
RiC-R009i	Thing	RiC-E01	follows in time	RiC-E01	Thing	RiC-R009 precedes in time
RiC-R008i	Thing	RiC-E01	follows or followed	RiC-E01	Thing	RiC-R008 precedes or preceded
RiC-R002	Thing	RiC-E01	has or had part	RiC-E01	Thing	RiC-R002i is or was part of
RiC-R002i	Thing	RiC-E01	is or was part of	RiC-E01	Thing	RiC-R002 has or had part
RiC-R001	Thing	RiC-E01	is related to	RiC-E01	Thing	RiC-R001 is related to
RiC-R009	Thing	RiC-E01	precedes in time	RiC-E01	Thing	RiC-R009i follows in time
RiC-R008	Thing	RiC-E01	precedes or preceded	RiC-E01	Thing	RiC-R008i follows or followed
RiC-R021i	Thing	RiC-E01	is or was described by	RiC-E02	Record Resource	RiC-R021 describes or described
RiC-R020i	Thing	RiC-E01	is or was main subject of	RiC-E02	Record Resource	RiC-R020 has or had main subject
RiC-R019i	Thing	RiC-E01	is or was subject of	RiC-E02	Record Resource	RiC-R019 has or had subject
RiC-R036i	Thing	RiC-E01	is or was under authority of	RiC-E07	Agent	RiC-R036 has or had authority over
RiC-R037i	Thing	RiC-E01	has or had owner	RiC-E08; RiC-E09; RiC-E12	Person; Group; Position	RiC-R037 is or was owner of
RiC-R057i	Thing	RiC-E01	is associated with event	RiC-E14	Event	RiC-R057 is event associated with
RiC-R059i	Thing	RiC-E01	is or was affected by	RiC-E14	Event	RiC-R059 affects or affected
RiC-R058i	Thing	RiC-E01	is or was participant in	RiC-E14	Event	RiC-R058 has or had participant
RiC-R061i	Thing	RiC-E01	results or resulted from	RiC-E14	Event	RiC-R061 results or resulted in
RiC-R062i	Thing	RiC-E01	is associated with rule	RiC-E16	Rule	RiC-R062 is rule associated with
RiC-R063i	Thing	RiC-E01	is or was regulated by	RiC-E16	Rule	RiC-R063 regulates or regulated
RiC-R069i	Thing	RiC-E01	has beginning date	RiC-E18	Date	RiC-R069 is beginning date of
RiC-R071i	Thing	RiC-E01	has end date	RiC-E18	Date	RiC-R071 is end date of

Relation ID	Domain	ID of domain	Name	ID of range	Range	Inverse relation ID and name
RiC-R073i	Thing	RiC-E01	has modification date	RiC-E18	Date	RiC-R073 is modification date of
RiC-R068i	Thing	RiC-E01	is associated with date	RiC-E18	Date	RiC-R068 is date associated with
RiC-R075i	Thing	RiC-E01	has or had location	RiC-E22	Place	RiC-R075 is or was location of
RiC-R074i	Thing	RiC-E01	is associated with place	RiC-E22	Place	RiC-R074 is place associated with
RiC-R021	Record Resource	RiC-E02	describes or described	RiC-E01	Thing	RiC-R021i is or was described by
RiC-R020	Record Resource	RiC-E02	has or had main subject	RiC-E01	Thing	RiC-R020i is or was main subject of
RiC-R019	Record Resource	RiC-E02	has or had subject	RiC-E01	Thing	RiC-R019i is or was subject of
RiC-R012	Record Resource	RiC-E02	has copy	RiC-E02	Record Resource	RiC-R012i is copy of
RiC-R023	Record Resource	RiC-E02	has genetic link to record resource	RiC-E02	Record Resource	RiC-R023 has genetic link to record resource
RiC-R013	Record Resource	RiC-E02	has reply	RiC-E02	Record Resource	RiC-R013i is reply to
RiC-R012i	Record Resource	RiC-E02	is copy of	RiC-E02	Record Resource	RiC-R012 has copy
RiC-R022	Record Resource	RiC-E02	is record resource associated with record resource	RiC-E02	Record Resource	RiC-R022 is record resource associated with record resource
RiC-R013i	Record Resource	RiC-E02	is reply to	RiC-E02	Record Resource	RiC-R013 has reply
RiC-R025	Record Resource	RiC-E02	has instantiation	RiC-E06	Instantiation	RiC-R025i is instantiation of
RiC-R064i	Record Resource	RiC-E02	expresses or expressed	RiC-E16	Rule	RiC-R064 is or was expressed by
RiC-R028	Record Resource; Instantiation	RiC-E02; RiC-E06	has accumulator	RiC-E07	Agent	RiC-R028i is accumulator of
RiC-R032	Record Resource; Instantiation	RiC-E02; RiC-E06	has addressee	RiC-E07	Agent	RiC-R032i is addressee of
RiC-R030	Record Resource; Instantiation	RiC-E02; RiC-E06	has collector	RiC-E07	Agent	RiC-R030i is collector of
RiC-R027	Record Resource; Instantiation	RiC-E02; RiC-E06	has creator	RiC-E07	Agent	RiC-R027i is creator of
RiC-R039i	Record Resource; Instantiation	RiC-E02; RiC-E06	has or had holder	RiC-E07	Agent	RiC-R039 is or was holder of

Relation ID	Domain	ID of domain	Name	ID of range	Range	Inverse relation ID and name
RiC-R038i	Record Resource; Instantiation	RiC-E02; RiC-E06	has or had manager	RiC-E07	Agent	RiC-R038 is or was manager of
RiC-R026	Record Resource; Instantiation	RiC-E02; RiC-E06	has provenance	RiC-E07	Agent	RiC-R026i is provenance of
RiC-R029	Record Resource; Instantiation	RiC-E02; RiC-E06	has receiver	RiC-E07	Agent	RiC-R029i is receiver of
RiC-R031	Record Resource; Instantiation	RiC-E02; RiC-E06	has sender	RiC-E07	Agent	RiC-R031i is sender of
RiC-R040i	Record Resource; Instantiation	RiC-E02; RiC-E06	has or had intellectual property rights holder	RiC-E08; RiC-E09; RiC-E12	Agent	RiC-R040 is or was holder of intellectual property rights of
RiC-R033	Record Resource; Instantiation	RiC-E02; RiC-E06	documents	RiC-E15	Activity	RiC-R033i documented by
RiC-R024	Record Set	RiC-E03	includes or included	RiC-E03; RiC-E04	Record Set; Record	RiC-R024i is or was included in
RiC-R024i	Record Set; Record	RiC-E03; RiC-E04	is or was included in	RiC-E03	Record Set	RiC-R024 includes or included
RiC-R011i	Record	RiC-E04	has draft	RiC-E04	Record	RiC-R011 is draft of
RiC-R010i	Record	RiC-E04	has original	RiC-E04	Record	RiC-R010 is original of
RiC-R011	Record	RiC-E04	is draft of	RiC-E04	Record	RiC-R011i has draft
RiC-R010	Record	RiC-E04	is original of	RiC-E04	Record	RiC-R010i has original
RiC-R003	Record	RiC-E04	has or had constituent	RiC-E05	Record Part	RiC-R003i is or was constituent of
RiC-R079	Record	RiC-E04	has author	RiC-E08; RiC-E09; RiC-E012	Person; Group; Position	RiC-R079i is author of
RiC-R003i	Record Part	RiC-E05	is or was constituent of	RiC-E04	Record	RiC-R003 has or had constituent
RiC-R025i	Instantiation	RiC-E06	is instantiation of	RiC-E02	Record Resource	RiC-R025 has instantiation
RiC-R014	Instantiation	RiC-E06	has derived instantiation	RiC-E06	Instantiation	RiC-R014i is derived from instantiation
RiC-R004	Instantiation	RiC-E06	has or had component	RiC-E06	Instantiation	RiC-R004i is or was component of
RiC-R014i	Instantiation	RiC-E06	is derived from instantiation	RiC-E06	Instantiation	RiC-R014 has derived instantiation
RiC-R035	Instantiation	RiC-E06	is functionally equivalent to	RiC-E06	Instantiation	RiC-R035 is functionally equivalent to
RiC-R034	Instantiation	RiC-E06	is instantiation associated with instantiation	RiC-E06	Instantiation	RiC-R034 is instantiation associated with instantiation

Relation ID	Domain	ID of domain	Name	ID of range	Range	Inverse relation ID and name
RiC-R004i	Instantiation	RiC-E06	is or was component of	RiC-E06	Instantiation	RiC-R004 has or had component
RiC-R015i	Instantiation	RiC-E06	migrated from	RiC-E06	Instantiation	RiC-R015 migrated into
RiC-R015	Instantiation	RiC-E06	migrated into	RiC-E06	Instantiation	RiC-R015i migrated from
RiC-R036	Agent	RiC-E07	has or had authority over	RiC-E01	Thing	RiC-R036i is or was under authority of
RiC-R028i	Agent	RiC-E07	is accumulator of	RiC-E02; RiC-E06	Record Resource; Instantiation	RiC-R028 has accumulator
RiC-R032i	Agent	RiC-E07	is addressee of	RiC-E02; RiC-E06	Record Resource; Instantiation	RiC-R032 has addressee
RiC-R030i	Agent	RiC-E07	is collector of	RiC-E02; RiC-E06	Record Resource; Instantiation	RiC-R030 has collector
RiC-R027i	Agent	RiC-E07	is creator of	RiC-E02; RiC-E06	Record Resource; Instantiation	RiC-R027 has creator
RiC-R039	Agent	RiC-E07	is or was holder of	RiC-E02; RiC-E06	Record Resource; Instantiation	RiC-R039i has or had holder
RiC-R038	Agent	RiC-E07	is or was manager of	RiC-E02; RiC-E06	Record Resource; Instantiation	RiC-R038i has or had manager
RiC-R026i	Agent	RiC-E07	is provenance of	RiC-E02; RiC-E06	Record Resource; Instantiation	RiC-R026 has provenance
RiC-R029i	Agent	RiC-E07	is receiver of	RiC-E02; RiC-E06	Record Resource; Instantiation	RiC-R029 has receiver
RiC-R031i	Agent	RiC-E07	is sender of	RiC-E02; RiC-E06	Record Resource; Instantiation	RiC-R031 has sender
RiC-R041i	Agent	RiC-E07	has or had controller	RiC-E07	Agent	RiC-R041 is or was controller of
RiC-R045	Agent	RiC-E07	has or had subordinate	RiC-E07	Agent	RiC-R045i is or was subordinate to
RiC-R046	Agent	RiC-E07	has or had work relation with	RiC-E07	Agent	RiC-R046 has or had work relation with
RiC-R016	Agent	RiC-E07	has successor	RiC-E07	Agent	RiC-R016i is successor of
RiC-R044	Agent	RiC-E07	is agent associated with agent	RiC-E07	Agent	RiC-R044 is agent associated with agent
RiC-R041	Agent	RiC-E07	is or was controller of	RiC-E07	Agent	RiC-R041i has or had controller

Relation ID	Domain	ID of domain	Name	ID of range	Range	Inverse relation ID and name
RiC-R045i	Agent	RiC-E07	is or was subordinate to	RiC-E07	Agent	RiC-R045 has or had subordinate
RiC-R016i	Agent	RiC-E07	is successor of	RiC-E07	Agent	RiC-R016 has successor
RiC-R060i	Agent	RiC-E07	performs or performed	RiC-E15	Activity	RiC-R060 is or was performed by
RiC-R066i	Agent	RiC-E07	is or was responsible for enforcing	RiC-E16	Rule	RiC-R066 is or was enforced by
RiC-R065i	Agent	RiC-E07	is responsible for issuing	RiC-E16	Rule	RiC-R065 issued by
RiC-R067i	Agent	RiC-E07	authorized by	RiC-E17	Mandate	RiC-R067 authorizes
RiC-R076i	Agent	RiC-E07	has or had jurisdiction	RiC-E22	Place	RiC-R076 is or was jurisdiction of
RiC-R017i	Person	RiC-E08	has ancestor	RiC-E08	Person	RiC-R017 has descendant
RiC-R018	Person	RiC-E08	has child	RiC-E08	Person	RiC-R018i is child of
RiC-R017	Person	RiC-E08	has descendant	RiC-E08	Person	RiC-R017i has ancestor
RiC-R047	Person	RiC-E08	has family association with	RiC-E08	Person	RiC-R047 has family association with
RiC-R052	Person	RiC-E08	has or had correspondent	RiC-E08	Person	RiC-R052 has or had correspondent
RiC-R049	Person	RiC-E08	has or had spouse	RiC-E08	Person	RiC-R049 has or had spouse
RiC-R053i	Person	RiC-E08	has or had student	RiC-E08	Person	RiC-R053 has or had teacher
RiC-R053	Person	RiC-E08	has or had teacher	RiC-E08	Person	RiC-R053i has or had student
RiC-R048	Person	RiC-E08	has sibling	RiC-E08	Person	RiC-R048 has sibling
RiC-R018i	Person	RiC-E08	is child of	RiC-E08	Person	RiC-R018 has child
RiC-R050i	Person	RiC-E08	known by	RiC-E08	Person	RiC-R050 knows of
RiC-R051	Person	RiC-E08	knows	RiC-E08	Person	RiC-R051 knows
RiC-R050	Person	RiC-E08	knows of	RiC-E08	Person	RiC-R050i known by
RiC-R042	Person	RiC-E08	is or was leader of	RiC-E09	Group	RiC-R042i has or had leader
RiC-R055i	Person	RiC-E08	is or was member of	RiC-E09	Group	RiC-R055 has or had member
RiC-R054	Person	RiC-E08	occupies or occupied	RiC-E12	Position	RiC-R054i is or was occupied by
RiC-R070i	Person	RiC-E08	has birth date	RiC-E18	Date	RiC-R070 is birth date of
RiC-R072i	Person	RiC-E08	has death date	RiC-E18	Date	RiC-R072 is death date of
RiC-R079i	Person; Group; Position	RiC-E08; RiC-E09; RiC-E012	is author of	RiC-E04	Record	RiC-R079 has author

Relation ID	Domain	ID of domain	Name	ID of range	Range	Inverse relation ID and name
RiC-R037	Person; Group; Position	RiC-E08; RiC-E09; RiC-E12	is or was owner of	RiC-E01	Thing	RiC-R037i has or had owner
RiC-R040	Agent	RiC-E08; RiC-E09; RiC-E12	is or was holder of intellectual property rights of	RiC-E02; RiC-E06	Record Resource; Instantiation	RiC-R040i has or had intellectual property rights holder
RiC-R042i	Group	RiC-E09	has or had leader	RiC-E08	Person	RiC-R042 is or was leader of
RiC-R055	Group	RiC-E09	has or had member	RiC-E08	Person	RiC-R055i is or was member of
RiC-R005	Group	RiC-E09	has or had subdivision	RiC-E09	Group	RiC-R005i is or was subdivision of
RiC-R005i	Group	RiC-E09	is or was subdivision of	RiC-E09	Group	RiC-R005 has or had subdivision
RiC-R056i	Group	RiC-E09	has or had position	RiC-E12	Position	RiC-R056 exists or existed in
RiC-R054i	Position	RiC-E12	is or was occupied by	RiC-E08	Person	RiC-R054 occupies or occupied
RiC-R056	Position	RiC-E12	exists or existed in	RiC-E09	Group	RiC-R056i had or has position
RiC-R059	Event	RiC-E14	affects or affected	RiC-E01	Thing	RiC-R059i is or was affected by
RiC-R058	Event	RiC-E14	has or had participant	RiC-E01	Thing	RiC-R058i is or was participant in
RiC-R057	Event	RiC-E14	is event associated with	RiC-E01	Thing	RiC-R057i is associated with event
RiC-R061	Event	RiC-E14	results or resulted in	RiC-E01	Thing	RiC-R061i results or resulted from
RiC-R006	Event	RiC-E14	has or had subevent	RiC-E14	Event	RiC-R006i is or was subevent of
RiC-R006i	Event	RiC-E14	is or was subevent of	RiC-E14	Event	RiC-R006 has or had subevent
RiC-R033i	Activity	RiC-E15	documented by	RiC-E02; RiC-E06	Record Resource; Instantiation	RiC-R033 documents
RiC-R060	Activity	RiC-E15	is or was performed by	RiC-E07	Agent	RiC-R060i performs or performed
RiC-R062	Rule	RiC-E16	is rule associated with	RiC-E01	Thing	RiC-R062i is associated with rule
RiC-R063	Rule	RiC-E16	regulates or regulated	RiC-E01	Thing	RiC-R063i is or was regulated by
RiC-R064	Rule	RiC-E16	is or was expressed by	RiC-E02	Record Resource	RiC-R064i expresses or expressed
RiC-R066	Rule	RiC-E16	is or was enforced by	RiC-E07	Agent	RiC-R066i is or was responsible for enforcing

Relation ID	Domain	ID of domain	Name	ID of range	Range	Inverse relation ID and name
RiC-R065	Rule	RiC-E16	issued by	RiC-E07	Agent	RiC-R065i is responsible for issuing
RiC-R067	Mandate	RiC-E17	authorizes	RiC-E07	Agent	RiC-R067i authorized by
RiC-R069	Date	RiC-E18	is beginning date of	RiC-E01	Thing	RiC-R069i has beginning date
RiC-R068	Date	RiC-E18	is date associated with	RiC-E01	Thing	RiC-R068i is associated with date
RiC-R071	Date	RiC-E18	is end date of	RiC-E01	Thing	RiC-R071i has end date
RiC-R073	Date	RiC-E18	is modification date of	RiC-E01	Thing	RiC-R073i has modification date
RiC-R070	Date	RiC-E18	is birth date of	RiC-E08	Person	RiC-R070i has birth date
RiC-R072	Date	RiC-E18	is death date of	RiC-E08	Person	RiC-R072i has death date
RiC-R075	Place	RiC-E22	is or was location of	RiC-E01	Thing	RiC-R075i has or had location
RiC-R074	Place	RiC-E22	is place associated with	RiC-E01	Thing	RiC-R074i is associated with place
RiC-R076	Place	RiC-E22	is or was jurisdiction of	RiC-E07	Agent	RiC-R076i has or had jurisdiction
RiC-R007	Place	RiC-E22	contains or contained	RiC-E22	Place	RiC-R007i is or was contained by
RiC-R077	Place	RiC-E22	is or was adjacent to	RiC-E22	Place	RiC-R077 is or was adjacent to
RiC-R007i	Place	RiC-E22	is or was contained by	RiC-E22	Place	RiC-R007 contains or contained
RiC-R078	Place	RiC-E22	overlaps or overlapped	RiC-E22	Place	RiC-R078 overlaps or overlapped

6 Documenting Description

6.1 Introduction

Descriptions of *record resources* are themselves *records*. The description *record* is created by an *agent* performing an *activity*, describing a *record resource* and related contextual entities. As a result, RiC-CM does not provide a specialized set of entities, attributes, and relations for documenting archival description. This section will give a brief description of the basic contexts for archival description and provide some simple examples of how to document description using RiC-CM.

Documenting description involves four layers of context: 1) documenting the holding *agent*; 2) documenting the *position* responsible for processing and describing *records*; 3) documenting the archival description *record* itself; and, 4) documenting the evidence for assertions made in the description *record*. These layers go from broad to specific, much like zooming in on a web-based map. You start at the archive, then zoom further into the archival *position* performing the descriptive *activities*, then zoom further to the *record* itself, then finally to the content that makes up that *record*. Each layer is part of a whole, and RiC-CM makes it possible to describe each of these layers in a detailed manner, the broader layers providing essential context for the more specific.

6.2 Holding Agent

The broadest layer describes the holding *agent*, which has custody of and responsibility for managing archival *records*, and the *activities* pursued in fulfilment of this responsibility. The holding *agent* may have authority to perform its responsibilities derived from a *mandate*, and additional internal or external *rules* may and likely do govern the *activities*. *Rules* governing the *activities* of the holding *agent* may include, among others, national laws, institutional policy decisions, professional standards, or informal community agreements. The *activities* governed by the *rules* may cover a range of interrelated *activities* including acquisition, appraisal, processing, describing, and preservation.

Using RiC-CM entities and relations, a very high-level description of a university archives could look like this:

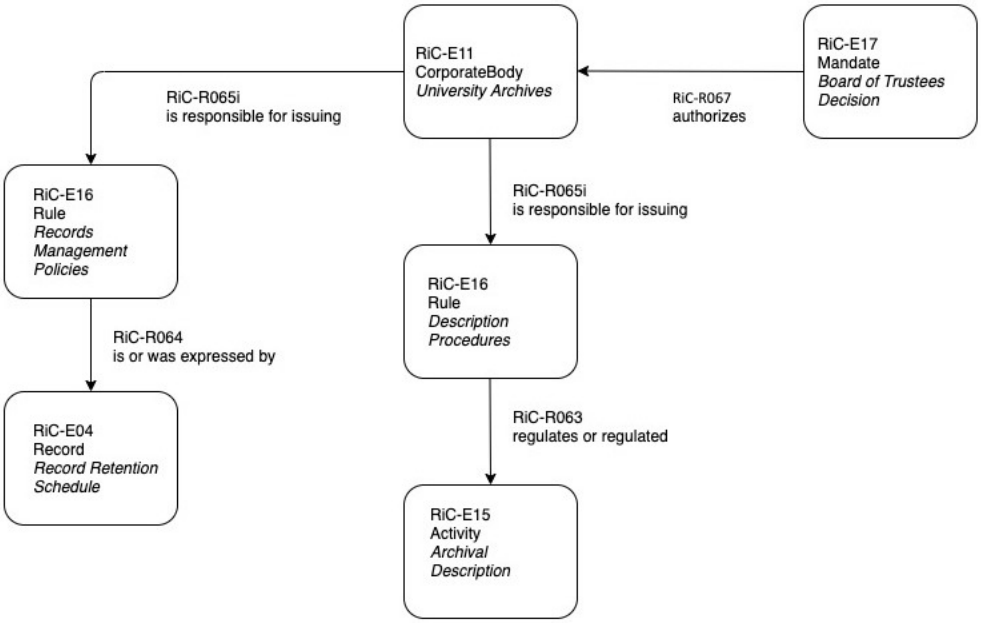

Figure 4: University archives description.

6.3 Position

The record keeping *activities* of the holding *agent* are performed by *positions* or *mechanisms* that have been given a *mandate* from the holding *agent* to perform record keeping *activities*. The *activities* of a *mechanism* are governed by *rules* and expressed in instructions executed by it, and a *position* is held by a *person*, who has training and experience, and whose work is also governed by organization, professional or other external or internal *rules*. The distinction between *position* and *person* helps to understand in which role and for which tasks a *person* was active in an organization at a certain time.

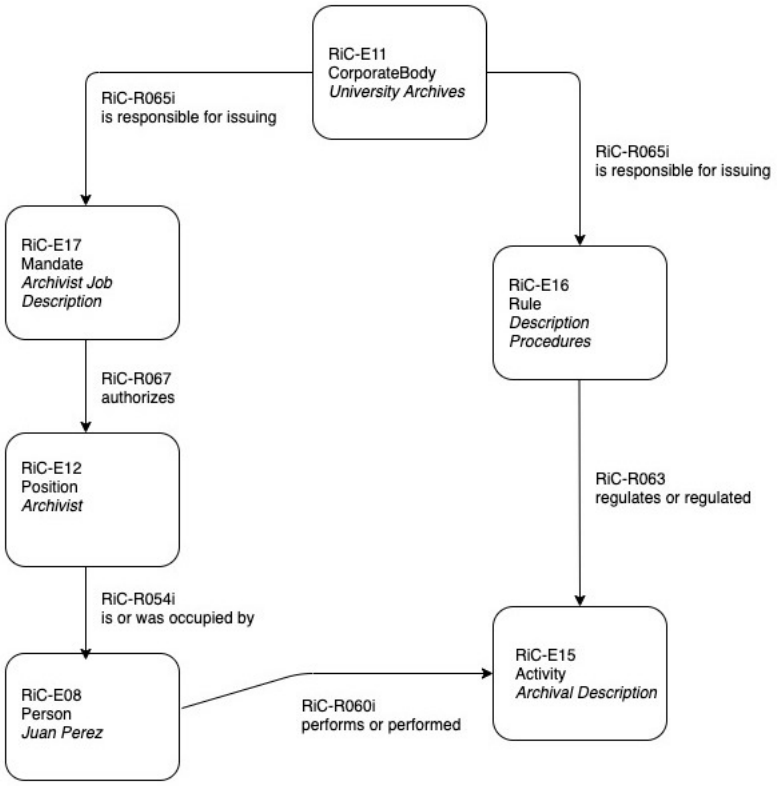

Figure 5: *Position* description for processing archivist.

6.4 Archival Resource Description

At this layer, context is provided for an instance of archival description, which can be as simple as documenting the evidence on which the description *record* is based, the describing *agent*, and the *date* of the describing. In that a description may be revised over time, the revision history may also be documented.

The following example shows basic documentation of a single archival description *record*:

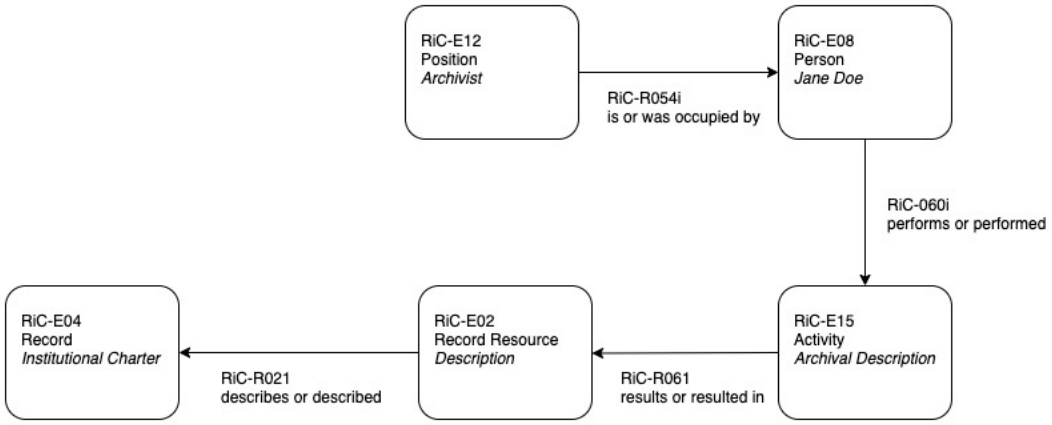

Figure 6: Description of a single archival description *record*.

And a modification to an existing description *record*:

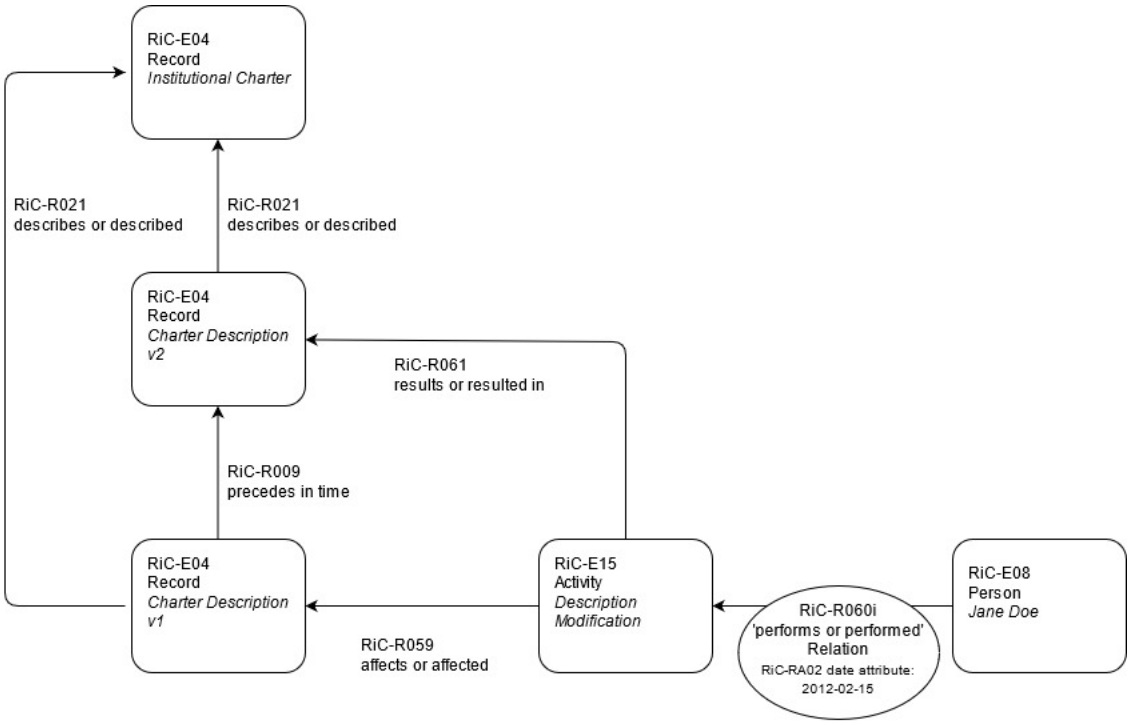

Figure 7: Modification of single description *record*.

6.5 Description Assertion Verification

The final, and most specific layer of documenting description provides context for the content of the description itself and the assertions made within. At the most general, this could include reference to *records* that provide evidence for the content of the description as a whole, for example, which sources were used to compile the description, or could be as detailed as providing evidence for each statement made in the description, for example this source provided evidence for the birth and death *dates* of this *person*, and this source provided

evidence that these two *persons* were married. It is also worth noting that the context in each of the previous layers of documenting description provide important verification of the authority and social environment that contributes to the information in archival description.

The following example shows a source cited for verifying a single statement within archival description.

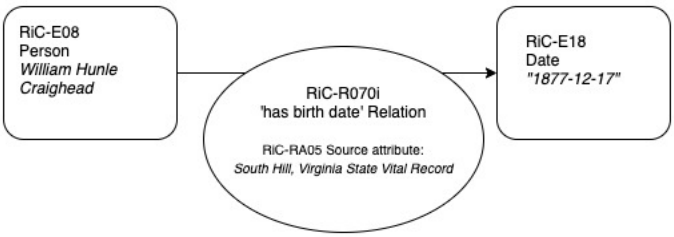

Figure 8: Description of an individual statement in an archival description *record.*

7 Appendices

7.1 Appendix 1 – EGAD Members

7.1.1 Current Members

Bethany Anderson	University of Virginia (2018-2019) University of Illinois, Urbana-Champaign (2019-)	United States	2019-
Florence Clavaud	Archives nationales	France	2012-
Adrian Cunningham	Retired Archivist	Australia	2012-
Beatriz Franco Espiño	Ministerio de Educación, Cultura y Deporte (2012-2018) Archivos Comunidad de Madrid (2018-)	Spain	2012-
Miia Herrala	Kansallisarkisto	Finland	2016-
Silke Jagodzinski	Bundesarchiv (2018-2019) Geheimes Staatsarchiv Preußischer Kulturbesitz (2020-)	Germany	2018-
Gavan McCarthy	University of Melbourne	Australia	2012-
Carina McDowell	Bibliothèque et Archives Canada / Library and Archives Canada	Canada	2018-
Vitor Manoel Marques da Fonseca	Arquivo Nacional; Universidade Federal Fluminense (2012-2015) Universidade Federal Fluminense (2016-)	Brazil	2012-
Gerhard Müller	Staatsbibliothek zu Berlin	Germany	2018-
Victoria Peters	University of Strathclyde	United Kingdom	2012-
Daniel Pitti (chair)	University of Virginia	United States	2012-
Bogdan-Florin Popovici	Arhivele Naţionale ale României	Romania	2012-
Javier E. Requejo Zalama	Ministerio de Educación, Cultura y Deporte	Spain	2014-
Aaron Rubinstein	University of Massachusetts Amherst	United States	2012-
Bill Stockting	British Library (2012-2016) Royal Archives (2016-)	United Kingdom	2012-
Martin Stuerzlinger	ARCHIVERSUM	Austria	2012-
Salvatore Vassallo	Archivum Romanum Societatis Iesu	Italy	2012-

Stefano Vitali	Archivio centrale dello Stato	Italy	2012-
Tobias Wildi	Docuteam GmbH (2019-2021) University of Applied Sciences of the Grisons (2021-)	Switzerland	2019-
Siân Wynn-Jones	The Purpose Business	Hong Kong	2018-

7.1.2 Past Members

Nils Brübach	Sächsisches Staatsarchiv / Saxon State Archives	Germany	2012-2018
Pete Johnston	Cambridge University Library	United Kingdom	2012-2017
Jaana Kilkki	Kansallisarkisto	Finland	2013-2016
Padré Lydie Gnessougou Baroan-Dioumency	Direction Générale du Trésor et de la Comptabilité Publique	Ivory Coast	2012-2020
Alice Motte	Service interministériel des Archives de France	France	2013-2016
Stéphanie Roussel	Service interministériel des Archives de France	France	2015-2016
Claire Sibille	Service interministériel des Archives de France	France	2012-2013
Katherine (Kat) Timms	Bibliothèque et Archives Canada / Library and Archives Canada	Canada	2013-2018
Irene Van Bavel	Bibliothèque et Archives Canada / Library and Archives Canada	Canada	2018-2020
Hélène Zettel	Service interministériel des Archives de France	France	2017