

Australian Recordkeeping Metadata Schema

Version 1.0

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General Introduction

The Australian Recordkeeping Metadata Schema (RKMS) is the main deliverable from the 1998-99 [SPIRT Recordkeeping Metadata Research Project](#). The RKMS provides:

- a standardised set of structured recordkeeping metadata elements;
- a framework for developing and specifying recordkeeping metadata standards;
- a framework for reading or mapping metadata sets in ways which can enable their semantic interoperability by establishing equivalences and correspondences that can provide the basis for semi-automated translation between metadata schemas.

Description of Records in their Business Context

Recordkeeping metadata is defined broadly to include all standardised information that identifies, authenticates, describes, manages and makes accessible documents created in the context of social and organisational activity. The RKMS provides a standardised set of recordkeeping metadata that enables the identification and description of records that document social and organisational activity, as well as significant features of the business contexts in which records are created, managed and used. These features include:

- the people or agents involved in creating, controlling, managing and using records
- the functions, activities and transactions in which the people or agents are engaged
- recordkeeping functions, activities and transactions.

The RKMS also includes metadata elements that support the management of recordkeeping functions, activities and transactions, e.g. relating to appraisal, control, preservation, retrieval, access and use of records. There is also provision for tracking and documenting recordkeeping processes.

Relationship with Emerging Australian and International Metadata Standards

The Recordkeeping Metadata Schema has been developed using conventions and protocols adopted by the wider metadata community, in particular the Dublin Core (DC: http://purl.oclc.org/metadata/dublin_core/) and Australian Government Locator Service (AGLS: http://www.naa.gov.au/recordkeeping/gov_online/agls/user_manual/intro.html) metadata initiatives, to ensure compatibility, as far as practicable, between related resource management tools.

The Schema inherits part of the Australian Government Locator Service set and extends it to address the sector specific needs of recordkeeping.

The relationship between DC, AGLS and RKMS can be described as follows:

The main objective of AGLS is to improve the visibility, accessibility and interoperability of government information and services through the provision of standardised Web-based resource descriptions which enable users to locate the information *or* service that they require. At the conception of the AGLS schema it was recognised that a high proportion of information resources described or required online to support Internet based government services and transactions would be records, i.e. that in many cases AGLS metadata would be assigned to government records. Thus the metadata defined in the AGLS schema went beyond that required for the bibliographic description of information resources as defined in the Dublin Core. It was also recognised that the prime purpose of assigning AGLS metadata, namely enabling resource discovery and resource retrieval by authorised users, is also one of the requirements of a recordkeeping system. The SPIRT Recordkeeping Team therefore sees AGLS metadata as essentially a subset of any standardised metadata set specified for recordkeeping purposes.¹

The National Archives of Australia *Recordkeeping Metadata Standard for Commonwealth Agencies 1999* (<http://www.naa.gov.au/recordkeeping/control/rkms/summary.htm>) was developed by the major industry partner in the Project in tandem with the SPIRT Schema. Essentially a sub-set of the RKMS, it is designed

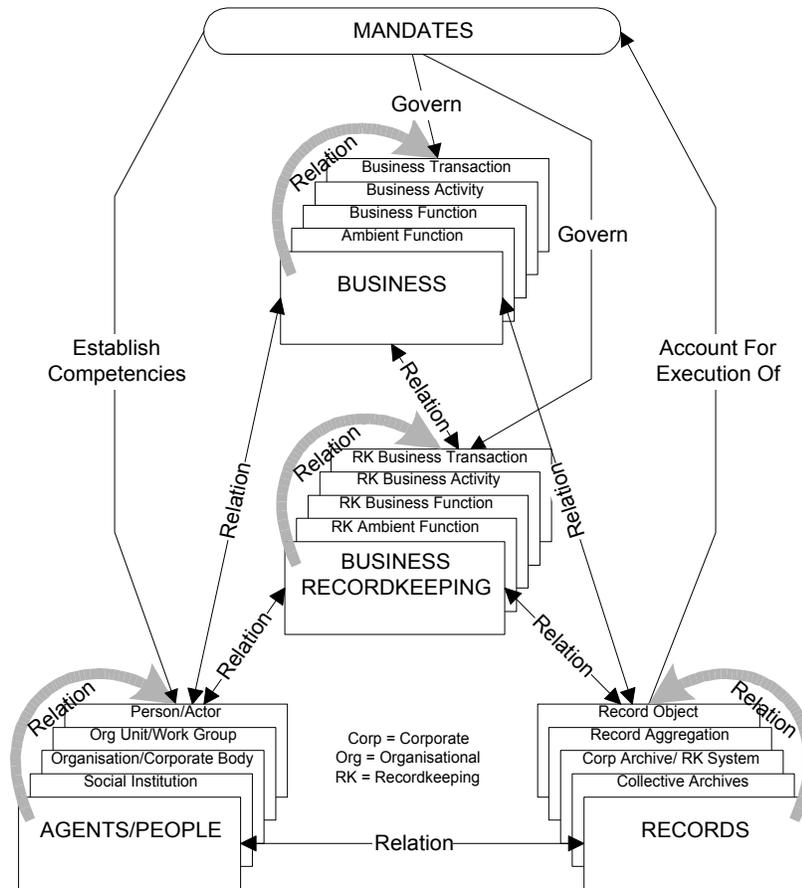
for implementation by Commonwealth government agencies in electronic systems which create and manage records.

Technical Introduction

This Section provides a roadmap for understanding the recordkeeping metadata element definitions.

Conceptual Framework

The Recordkeeping Metadata Element Schema (RKMS) is built on a [conceptual framework](#), shown in the diagram below. The framework is concerned with four main classes of entities - **Business** entities, **Agents** (people) entities, **Records** entities, and **Business-Recordkeeping** entities – as well as the **Relationships** between entities and the **Mandates** that govern the entities and their relationships. The framework envisions description of entities at various layers of aggregation. The following diagram represents the entities as boxes, relationships as arrows, and aggregation layers as cascading boxes.



Each of the Business, Agents, Records, and Business-Recordkeeping classes has a separate metadata element set. Each set shares ten common metadata elements, and includes other elements specific to the description of each entity:

- BUSINESS**
- Category Type
 - Identifier
 - Title
 - Date
 - Mandate
 - Place
 - Functional Classification
 - Relation
 - Abstract
 - Language
 - Business Rules

- BUSINESS
RECORDKEEPING**
- Category Type
 - Identifier
 - Title
 - Date
 - Mandate
 - Place
 - Functional Classification
 - Relation
 - Abstract
 - Language
 - Business Rules

- AGENTS/PEOPLE**
- Category Type
 - Identifier
 - Title
 - Date
 - Mandate
 - Place
 - Functional Classification
 - Relation
 - Abstract
 - Language

- RECORDS**
- Category Type
 - Identifier
 - Title
 - Date
 - Mandate
 - Place
 - Functional Classification
 - Relation
 - Abstract
 - Language
 - Subject Classification
 - Documentary Form
 - Appraisal
 - Control
 - Preservation
 - Retrieval
 - Access
 - Use
 - Event History

Entity Types and Aggregation Levels

A feature of RKMS is that it is possible to indicate the type of entity being described as well as the level of aggregation of the entity. The type of entity being described is indicated by including the name of the element set with the name of each element. That is, the "Title" element from the Agents and Records sets are identified as "Agents.Title" and "Records.Title" respectively.

An entity's level of aggregation is indicated using the **Category Type** element. For example, the description of a person would contain an "Agents.CategoryType" element with value "Person / Actor". The complete list of RKMS layers of aggregation are defined in the RKMS Category Type Scheme, described in the Schemes section below.

Relationships and Mandates

Another feature of RKMS is the ability to describe relationships between entities, and the mandates that govern those relationships. Although the conceptual framework is concerned with relations and mandates these are not considered primary entities in the RKMS conceptual model and so do not have separate metadata element sets. It was decided that modelling relationships and mandates as entities would distract from the task of defining metadata for the primary recordkeeping entities (Agents, Business, Records). They are described, instead, using the **Relation** and **Mandate** elements within the metadata element sets.

The decision to describe relations and mandates using element has many implications. In particular, the amount of information that can be recorded about relationships and mandates is limited, and only binary

relationships can be depicted. Given the complexity and importance of relationships and mandates in defining records context and the possibility that depicting only binary relationships is too restrictive, this decision may be revisited in future revisions of the RKMS. These issues are discussed in greater depth in the [Modelling and Relationships](#) section of the [RKMS Issues](#) document.

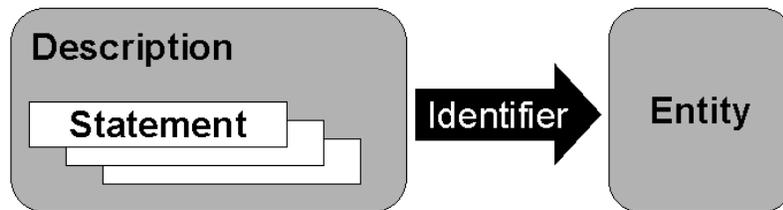
Metadata Model

RKMS supports highly structured descriptions of entities. This structure is defined in a data model informed by the metadata modelling work of the W3C Resource Description Framework (RDF: <http://www.w3.org/RDF>) initiative and the Dublin Core Metadata Initiative (DC: http://purl.oclc.org/metadata/dublin_core/).

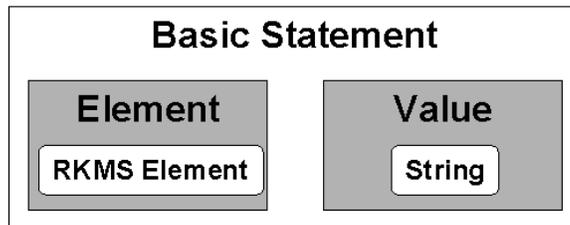
Structure

Abstractly, the data model supports *descriptions* of entities. Descriptions are realised by aggregations of *statements* about entities. A statement is any *characteristic* of the entity, and the *value* of that characteristic. For example, an Agents entity might have a "Title" characteristic with value "Loans Officer".

The RKMS data model supports description of any Business, Agents, Records and Business-Recordkeeping entities that have *identity*.



Statements come in two forms: Basic and Qualified. A basic statement consists of a metadata element and a simple text value.



For example, a collection of two basic statements about title and date characteristics of an Agents entity might be:

Element	Value
Agents.Title	<i>Loan Officer</i>
Agents.Date	<i>1998-01-07</i>

Qualified statements consist of elements and values that are structured. Elements can be structured with *element qualifiers* that specialise or refine the meaning of an element. For example, "Established" is an element qualifier that can refine the meaning of the "Date" element for an Agents entity.

Values can be qualified in two ways:

Schemes

These indicate either:

- An authority for the terms used in the value. For example, the AGIFT thesaurus could be used as an authority for the terms used in the value of the "Functional Classification" element.
- A notation or encoding syntax used to represent the value. For example, the ISO 8601 standard could be used as an encoding scheme for values of the "Date" element.

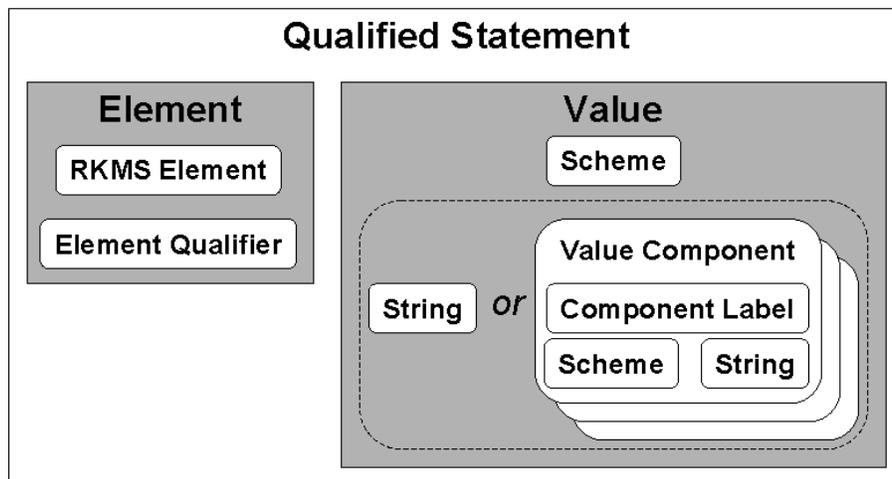
Value Components

These identify structure within the value. For example, the value of a "Mandate" element may have value components representing the "Title", "Date", "Description", and "Jurisdiction" of the mandate. These value components can be thought of as metadata about the value itself. In the above example, this is metadata for the mandate.

A qualified value can have a single text value (like a basic value), or multiple value components. Value components consist of *value component labels* representing the name of the value component and the value itself, represented as text value.

A qualified value may have a scheme relating to the whole value. When the value is a simple text string, this scheme defines an authority or structure for that text. For example, the scheme may indicate that the simple text value "1999-01-01" conforms to the ISO 8601 format for dates. When the value is a set of value components, the scheme usually indicates a naming authority for the value component labels. For example, the scheme may indicate that the labels come from the [vCard](#) system for describing people.

Additionally, if the value consists of value components, then each value component may have an individual scheme.



When the value consists of multiple value components, at least one of those components should represent the information that would be entered into the "unstructured value". For example, the "Business.Mandate" element is defined as "Information about the mandate or instrument that provides the legal or administrative basis of the business, ...". It has many value components: "Title", "ID", "Date", "Description", and "Jurisdiction". A Mandate description that only used the "Date" and "Jurisdiction" components is not a valid description because it does not convey enough information to effectively describe the Mandate. Such a description should at least use the "Title" or "ID" components.

The following table contains examples of four qualified statements about an Agents entity.

Element		Value		
Element	Element Qualifier	Value Component	Value	Scheme
Agents.Title			<i>Loans Officer</i>	
Agents.Functional Classification			<i>Loans Establishment</i>	<i>EastPAC Functional Thesaurus</i>
Agents.Date	Established		<i>1998-01-07</i>	<i>ISO 8601</i>
Agents.Mandate		<i>Title</i>	<i>Loan Management Authority</i>	
		<i>ID</i>	<i>LM23</i>	
		<i>Jurisdiction</i>	<i>Victoria</i>	

Identifying Entities

The RKMS data model supports description of any Business, Agents, Records and Business-Recordkeeping entities that have *identity*. Entities are identified using the RKMS **Identifier** element. Every description must contain at least one instance of this element.

The value of the Identifier element is a text string that acts as a reference to the entity. In general, understanding this reference involves understanding the context of the reference. For example, the identifier "ACN 052 372 577" is probably understandable within an Australian context as an Australian Company Number, but would probably not be well understood outside Australia. For this reason, it is recommended that identifiers contain context information that allows understanding beyond the immediate domain of application. For instance, the previous example could be better written as "[Australian Securities and Investments Commission, Australian Company Number] ACN 052 372 577".

Some qualified metadata statements contain an "ID" value component, intended to identify the value being described. These identifiers should also contain context if they are to be understood beyond the immediate domain.

Redundancy and Robustness of Descriptions

A fundamental premise of RKMS is that it should support persistence and understanding of records *through time and space*. To achieve this, metadata descriptions must contain enough of their original context to be understood independent of that context.

Context is captured within RKMS descriptions in two ways: as text within a metadata description, and as relationships to other entities. For example, the title of a Records entity would be described in the "Records.Title" metadata element, but the creator of the record would be described within the "Records.Relation" metadata element as a reference to a separate Agents entity.

The viability of capturing context using references to other entities depends on the feasibility of achieving persistent associations between entity descriptions, and the persistence of the other entity descriptions themselves. Uncertainties about persistence may lead to implementation of recordkeeping metadata in records-centric ways – if other systems cannot be trusted to sustain the links over time, then metadata must be brought explicitly within the boundaries of the records system itself.

RKMS addresses the problem of maintaining persistent metadata over time in three ways:

1. Allow the same context to be captured as a reference to another description, as an in-place description, or both.
2. Capture context in-place, even if it could be more efficiently be captured using a reference to another description.
3. Capture context as a reference, but annotate the reference itself with some of the context of the other entity.

The first approach is taken in the case of description of recordkeeping activities. These are captured either separately from the Records as Business-Recordkeeping entities referenced from a Records entity description, or within the description of the Records entity itself using the Appraisal, Control, Preservation, Retrieval, Access, and Use metadata elements. In this way, the RKMS has been designed to allow both the separated and record-centric description of recordkeeping business.

The second approach is taken in the case of mandate descriptions. Mandates are not separate entities in the RKMS conceptual framework. As a result, the description of a mandate that governs many entities will be repeated within the Mandate element of each of those entities. This ensures that Mandate descriptions are always accessible within the description of each entity. It does mean, however, that Mandate descriptions are less detailed than if they were separate entities that had own metadata sets.

The final approach is available to any context captured using a relationship. The RKMS Relation element is used to describe references to other entities. It has "Related To", "Type", "Definition", "Date", "Mandate", and "Business Rules" value components intended to capture some of the context of the referenced entity. This means that even if a description of the referenced entity is lost, some context is available within the referencing description.

Metadata Syntax

The element definition tables within the RKMS register contain examples of each element's use. The RKMS Simple Text Syntax used to express these examples is described below. This syntax is based on the proposed Dublin Core Structured Values scheme (<http://www.agcrc.csiro.au/projects/3018CO/metadata/dcsv/>). Future RKMS work will include definitions for HTML (<http://www.w3.org/TR/html4/>) and RDF (<http://www.w3.org/RDF>) representations of RKMS metadata.

An RKMS Simple Text Syntax metadata statement consists of an *element definition* and a *value definition*, separated by an equals sign (=):

element definition = value definition

Element definitions consist of a *schema identifier*(RKMS), *entity name*, *element name*, and an optional *element qualifier*, separated by dots (.). For example,

RKMS.Agents.Title = ...
RKMS.Agents.Date.Established = ...

Elements and element qualifiers with multiple word names are compacted by capitalising the first letter in each word and concatenating them together. For example,

RKMS.Business.FunctionalClassification = ...

Qualified values are represented in the syntax as a series of *value components*, separated by semi-colons (;). For example, a value with three value components c1, c2, c3 would be written as:

... = c1; c2; c3

Value components consist of *labels* representing the name of the value component and *values* representing the data itself. Colons (:) separate a value component label from the value component value. For example, the mandate description given in the data model section above would be written:

RKMS.Agents.Mandate = ID: LM23; Description: Loan Management Authority; Jurisdiction:
Victoria

Value component labels containing multiple words are compacted in the same way as multiple word elements:

RKMS.Business.Relation = RelatedTo: RECORD001; Definition: Document In

Schemes are represented in the syntax as names within square brackets (*[name]*) which precede values. The Functional Classification and Date examples given in the table above would be written as:

RKMS.Agents.FunctionalClassification = [EastPAC Functional Thesaurus] Loans Establishment
RKMS.Agents.Date.Established = [ISO 8601] 1998-01-07

Value component values can also have schemes. In the following example there is a scheme associated with the value of the "Date" value component:

RKMS.Agents.Mandate = Description: Loan Management Authority; Jurisdiction: Victoria; Date:
[ISO 8601] 1998-01-10

Extensibility

The RKMS envisages use of metadata elements, element qualifiers, value components and schemes from other metadata schemas. These allow RKMS descriptions to be extended using the structure and semantics from other descriptive standards.

Use of other independently maintained metadata schemas requires a metadata syntax that can distinguish between metadata components from different schemas. RDF has an XML syntax designed to support this requirement. The RKMS Simple Text Syntax, however, is restricted in this sense. It can only identify elements and schemes from other schemas, but not element qualifiers or value components from other schemas.

Elements from other metadata schemas are identified in the RKMS Simple Text Syntax using an appropriate schema identifier. For example, a Records description could use a combination of elements from RKMS and the [Australian Government Locator Service](#) (AGLS):

RKMS.Records.Title = Youth Loans
RKMS.Records.Mandate = ID: LM23; Description: Loan Management Authority;
Jurisdiction: Victoria
AGLS.Audience = [AGLS Agegroup] youth, U25

Schemes from other metadata schemas are identified in the RKMS Simple Text Syntax as names within square brackets. For example,

RKMS.Agents.CategoryType = [RKMS Category Type Scheme] Organisational Unit / Work
Group
RKMS.Agents.FunctionalClassification = [EastPAC Functional Thesaurus] Loans Establishment
RKMS.Agents.Date.Established = [ISO 8601] 1998-01-07

Layout of Definitions

The definition of the Business, Agents, Records, and Business-Recordkeeping metadata sets is split into four documents, each with their own purpose and structure.

Summary of Elements and Qualifiers

The Summary of Elements and Qualifiers contains a quick reference to the structure of RKMS. It consists of a table indicating the element qualifiers and value components that apply within each of the RKMS elements.

RKMS Register Summary

The Register Summary is a quick reference for the structure of RKMS, and the schemes used within the metadata set. It consists of a table indicating the element qualifiers and value components that apply within each of the RKMS elements, and which schemes are applicable within this structure.

RKMS Register

The Register contains a highly detailed description of each RKMS metadata element. The elements are described using attributes from the ISO 11179 standard for the description of metadata elements². These attributes include:

- Name - The label assigned to the data element.
- Identifier - The unique identifier assigned to the data element.
- Version - The version of the data element.
- Registration Authority - The entity authorised to register the data element.
- Language - The language in which the data element is specified.
- Definition - A statement that clearly represents the concept and essential nature of the data element.
- Obligation - Indicates if the data element is required to always or sometimes be present (contain a value).
- Datatype - Indicates the type of data that can be represented in the value of the data element.
- Maximum Occurrence - Indicates any limit to the repeatability of the data element.
- Comment - A remark concerning the application of the data element.

Additionally, the following attributes are used to describe each element:

- Element Qualifier - A list of possible element qualifiers for the element.
- Value Components - A list of components that may be used to structure a value.
- Scheme - List of mandatory and relevant schemes, plus an indication of the element qualifiers and value components they may qualify.
- Description - An elaboration on or further explanation of the meaning of the element.
- Examples - Some examples of the element's use. These examples are intentionally fictional to avoid misrepresenting the business processes of real organisations. Any resemblance to records, businesses, or agents, living or dead, is purely coincidental.

Fortunately, some of these attributes are common to all RKMS elements, and so are not shown in the element definitions. These are:

Version	1.0
Registration Authority	Monash Records Continuum Research Group
Language	en
Datatype	Character String

Additionally, most elements have the same occurrence restrictions. That is, most elements have:

Obligation	Optional
Maximum Occurrence	Unlimited

There are two exceptions to this. The "Category Type" elements must occur exactly once:

Category Type	
Obligation	Mandatory
Maximum Occurrence	1

And "Identifier" elements must occur at least once:

Identifier	
Obligation	Mandatory
Maximum Occurrence	Unlimited

RKMS Schemes

The schemes section describes the schemes defined within RKMS. These are

- RKMS Category Type Scheme - a vocabulary of terms used within the Category Type element to indicate the level of aggregation of the entity being described, and within the Relation element to indicate the level of aggregation of the entities being related.
- RKMS Entity Relationships Scheme - a vocabulary of terms used within the Relation element for indicating the nature of the relationship. This scheme is currently under development.
- RKMS Extension for ISO 8601 - an encoding scheme for dates that extends ISO8601 to include open ended date ranges.
- RKMS Business-Recordkeeping Functions and Activities Scheme - a vocabulary of terms used to classify recordkeeping functions and activities. This scheme is currently under development.

RKMS Schemes

RKMS Category Type Scheme

The RKMS Category Type Scheme is a vocabulary of terms used in two places in the RKMS. It is primarily used by the "Category Type" element to indicate the level of aggregation of the entity being described. The values used within the Category Type element are taken directly from the tables below.

The RKMS Category Type Scheme is also used within the "Type" value component of the "Relation" element to indicate the level of aggregation of the entities being related. In this case, two values are used. The first value indicates the category type of the current entity. The second value indicates the category type of the entity being referenced. These values are separated by a slash (-). For example, the relation between a business activity and the records associated with that activity would be described as:

RKMS.Business.Relation = RelatedTo: RECORD001; Type: Business Activity - Record
Aggregation

The taxonomy of aggregation layers has been defined with reference to the Records Continuum Model.³ For the **Business** entity class these layers are:

RKMS Category Type	Definition
Business Transaction	Acts, actions, decisions, communications or the component parts of business processes.
Business Activity	The social or organisational activities which organisations and people undertake in performing their functions.
Business Function	Major units of mandated activity performed by organisations or people in pursuance of their purposes.
Ambient Function	The broader societal purposes fulfilled by functions.

The **Business Recordkeeping** entity class is conceptually a sub-set of the Business entity class. It has been broken out and specified separately because it represents the social and organisational activities that are

concerned with recording, managing and enabling the use of records of other types of social and organisational activity. The layers of aggregation for this entity are:

RKMS Category Type	Definition
Business-Recordkeeping Transaction	Recordkeeping acts, actions, decisions, communications or the component parts of recordkeeping processes.
Business-Recordkeeping Activity	The social or organisational activities which organisations and people undertake in performing recordkeeping functions.
Business-Recordkeeping Function	Major units of mandated activity performed by organisations or people in pursuance of recordkeeping purposes.
Business-Recordkeeping Ambient Function	The broader societal purposes the recordkeeping functions fulfil.

Agents may be corporate bodies, persons or instruments. They may operate at any level in a hierarchy and may be responsible for creating, controlling and managing records, or they may be involved in their use. Examples include intelligent agents, operational positions, organisational units or work groups, organisations, social institutions (including social constructs such as motherhood or friendship), persons or families. The layers defined in this entity are:

RKMS Category Type	Definition
Person / Actor	Actors who carry out the transactions.
Organisational Unit / Work Group	Groups responsible for the activity.
Organisation / Corporate Body	Organisations mandated to carry out the function.
Social Institution	Institutions associated with ambient functions in the sense of high level societal purposes.

The **Records** entity class encompasses records at any layer of aggregation or disaggregation. The layers defined are:

RKMS Category Type	Definition
Record Object	AS4390 (Australian Standard: Records Management) ⁴ defines a <i>Record</i> as: recorded information, in any form, including data in computer systems, created or received and maintained by an organization or person in the transaction of business or the conduct of affairs and kept as evidence of such activity. RKMS defines a <i>Record Object</i> as the smallest unit of recorded information controlled by the recordkeeping system. A record object may be a whole record, or a component of a record.
Record Aggregation	Any organic grouping of records, series, files, or items.
Corporate Archive / Recordkeeping System	The whole of the records of an organisation, or the corporate recordkeeping system.
Collective Archives	All of the records within a specified society, jurisdiction, business or social sector brought into an encompassing framework to form collective memory.

RKMS Entity Relationship Scheme

Under development.

RKMS Extension for ISO8601

ISO 8601⁵ is an international standard for the representation of dates and times. The RKMS Schema extends this standard for two reasons:

- to reduce the number of possible date and time formats, and
- to allow open-ended date ranges.

Restricted Date and Time Formats

ISO 8601 describes a wider range of date and time formats than would normally be needed to describe recordkeeping entities. Both software and humans can find this variety of date formats difficult to recognise. For this reason, the RKMS Extension for ISO8601 defines a limited range of date formats likely to meet most recordkeeping requirements.

The RKMS Extension to ISO 8601 adopts the restricted set of date formats specified in the World Wide Web Consortium (W3C) Note on Date and Time Formats (<http://www.w3.org/TR/NOTE-datetime>). This note aims to simplify use of dates on the World Wide Web. All of the date formats specified in the note are valid ISO 8601 dates.

In summary, the W3C note allows dates to be represented as:

Year:

CCYY (e.g. 1999)

Year and Month:

CCYY-MM (e.g. 1999-07)

Year and Month and Day:

CCYY-MM-DD (e.g. 1999-07-01)

Year and Month and Day and Hours and Minutes plus Time Zone offset:

CCYY-MM-DDThh:mmTZD (e.g. 1999-07-01T19:30+10:00)

Year and Month and Day and Hours and Minutes and Seconds plus Time Zone offset:

CCYY-MM-DDThh:mm:ssTZD (e.g. 1999-07-01T19:30:45+10:00)

where

CCYY is a two digit century followed by a two digit year

MM is a two-digit month (01 is January, 02 February, and so on)

DD is a two digit day of the month (01 through to 31)

hh is a two digit hour (00 through to 23)

mm is a two digit minute (00 through to 59)

ss is a two digit second (00 through to 59)

TZD is a time zone designator (+hh:mm or -hh:mm)

Open Date Ranges

Some recordkeeping metadata requires specification of date ranges. For example, a Business Activity may only have been valid between the years 1949 and 1953. ISO 8601 allows the specification of date ranges using a forward slash (/) to separate dates representing the start and end of the range. For example, "1949/1953".

Recordkeeping metadata also requires specification of open date ranges. For example, an Agency may have an operational period from July 1st 1998 until the present date. Open date ranges such as this are not defined in ISO 8601. The RKMS Extension to ISO 8601 allows open date ranges to be specified by extending the ISO 8601 syntax to allow the omission of either the start or end date in the range. Acceptable RKMS date ranges are then:

Closed date range:

DateTime/DateTime (e.g. 1949/1953-01-01)

Date range with unknown start:

/DateTime (e.g. /2000-12-31T11:59:59)

Date range with no end date:

DateTime/ (e.g. 1998-07-01/)

RKMS Business-Recordkeeping Functions and Activities Scheme

The RKMS Business-Recordkeeping Functions and Activities Scheme is a vocabulary of terms used in three places in the RKMS. It is used primarily by the Records entities within the "Event Type" value component of the "Event History" element as the mandatory scheme for the data values.

This scheme can also be used in Business-Recordkeeping entities to qualify the whole value of the "Identifier" and "Title" elements. It can qualify both the whole value of the "Functional Classification" element and the values of its Descriptor(s), ID and Description value components.

In addition, the RKMS Business-Recordkeeping Functions and Activities Scheme has been used to define and structure the element qualifiers in the Records entities unique elements "Appraisal" through to "Use".

The RKMS Business-Recordkeeping Functions and Activities Scheme is an embryonic scheme currently *under further development*. It is anticipated that it will change considerably once developed further.

Business-Recordkeeping Function	Business-Recordkeeping Activity
Appraisal	Recordkeeping Requirement Disposal Sentencing Destruction Retention Transfer
Control	Registration Classification Indexing Context Description Custody Metadata Management Arrangement
Preservation	Storage Refreshment Migration Conservation
Retrieval	Rendering Representation Transmission
Access	Rights Restrictions Permissions Conditions
Use	Rights Restrictions Permissions

	Conditions
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¹ Sue McKemmish, Glenda Acland and Barbara Reed, "Towards a Framework for Standardising Recordkeeping Metadata: The Australian Recordkeeping Metadata Schema", *Records Management Journal*, (November 1999): p.183)

² ISO 11179 - Specification and Standardization of Data Elements, Parts 1-6.

³ The Business entity class comprises entities represented on the Transactional Axis of the Model, the Agent entity class those on the Identity Axis, and the Records entity class those on the Recordkeeping Axis. For more information, see Frank Upward, "Structuring the Records Continuum Part One: Post-custodial Principles and Properties", *Archives and Manuscripts* 24, no. 2 (Nov 1996): 268-285, and "Structuring the Records Continuum Part Two: Structuration Theory and Recordkeeping", *Archives and Manuscripts* 25, no. 1 (May 1997): 10-35.

⁴ Standards Australia, *AS4390-1996, Australian Standard: Records Management*. For details of availability see <http://www.standards.org.au/>

⁵ ISO 8601 : 1988 (E), "Data elements and interchange formats - Information interchange - Representation of dates and times"