



RECORDKEEPING METADATA GUIDELINE FOR ALL PUBLIC AGENCIES

Date Effective: October 1, 2008

Approved: August 29, 2008

Introduction

The purpose of this guideline is to provide guidance and advice to public agencies in the selection and use of recordkeeping metadata that support the interoperability, management, accessibility, and preservation of government records.

Background

Records management is a statutory obligation of every public agency in the State of Vermont. One resource that facilitates the effective and efficient management of records, while also describing their content, context and structure, is metadata. In general, metadata is information about an asset or resource. It can be used to describe the characteristics of the asset or resource. Where applicable, metadata can also be used to describe the content of an asset or resource.

One example of metadata in which many people are familiar is the library card catalog. A catalog card describes the characteristics of a publication – author, title, dimensions of the publication, number of pages, call number, etc. – and also the content of a publication – subjects. The card catalog compiles the same information about every publication and the catalog itself can be manual or electronic.

Recordkeeping metadata is a combination of descriptive information about the properties of the record itself and the content of the record. Recordkeeping metadata is comprised of elements, which address distinct characteristics or qualities in a record. This guideline includes metadata elements consistent with the requirements of two international standards for managing records: *ISO 15489: Records Management*; and *ISO 32081: Records Management Processes – Metadata for Records*.

Related Policies and Guidelines

- *Records Management Best Practice for All Public Agencies* (October 2008)
- *File Formats Policy for All Public Agencies* (November 2007)
- *File Formats Guideline for All Public Agencies* (December 2007)

Intended Audience

This guideline is intended for any public employee involved in the management of records for his or her agency, department, or office. This guideline is also intended for any public employee responsible for the interoperability, management, accessibility, and preservation of records.



1 SELECTING RECORDKEEPING METADATA

1.1 Business and Recordkeeping Requirements

The selection of recordkeeping metadata elements should be based on business and recordkeeping requirements, which are documented in strategic plans, project charters, record schedules, and related sources. Agencies may also have a need to implement additional metadata for different reasons, such as compliance purposes. If business requirements have not been cross-referenced with recordkeeping requirements, this should be done prior to selecting recordkeeping metadata.

1.2 Interoperability

Recordkeeping metadata is intended to facilitate records management actions such as retrieval pursuant to public records and discovery requests, disposition, and preservation. The recordkeeping metadata selection process requires a clear understanding of the systems – paper, electronic, or a combination of the two -- through which the records are or will be managed. The proliferation of systems used by one agency can significantly complicate the management of records, thus reducing the effectiveness of retrieval and other management actions. It is important to select recordkeeping metadata that can be used to achieve or improve interoperability, particularly records retrieval, among various systems.

1.3 Vermont Functional Classification System (VCLAS)

VCLAS is an interoperability metadata standard developed and maintained by the Vermont State Archives and Records Administration for managing Vermont public records pursuant to 1 V.S.A. § 317, 3 V.S.A. § 117, and 3 V.S.A. § 218. VCLAS defines a standard set of recordkeeping metadata elements for describing and managing Vermont public records. VCLAS is not a replacement for metadata schemes developed or adopted by a particular agency. Rather, VCLAS should be used as a guideline to develop a faithful crosswalk between other metadata standards and those used for managing and sharing Vermont public records.



2 ADDITIONAL CONSIDERATIONS

There are several other issues, such as existing or planned systems, particularly those classified by the State of Vermont as “enterprise systems,” and associated costs, which need to be considered and addressed beyond selecting recordkeeping metadata.

2.1 *Cost-Benefit Analysis*

A cost-benefit analysis should be completed before choosing to implement any metadata standard. In conducting the analysis, tangible savings and benefits and intangible benefits should be equally considered.

2.2 *Workflow*

In most situations, records support current agency functions and activities and therefore need to be readily accessible and searchable. Therefore the need to assign metadata to records at the point of their creation or receipt should be introduced into the agency’s workflow. Issues to consider include: how and when metadata will be added; the ability to automate the addition of metadata; and staff awareness, education, and training.

2.3 *Existing Use of Metadata*

Metadata has already been captured for most, if not all, agency records to some extent. Metadata is regularly being applied to electronic records by software applications and network configurations. Before selecting recordkeeping metadata, an inventory of existing metadata elements applied to records, whether purposely or automatically, should be completed. Proper mapping between old and new metadata will be necessary to ensure that records can be searched and retrieved.

2.4 *Controlled Vocabulary*

The ability to effectively search and retrieve records is dependent on how well metadata has been applied to the records and if key elements are populated by controlled vocabulary terms. It is important to consider standardizing elements to increase access and retrieval by internal and external users. In addition, agencies should consider embedding metadata in each record; records should not be fully dependent on external metadata, such as databases, for contextual information.

2.5 *Sustainability*

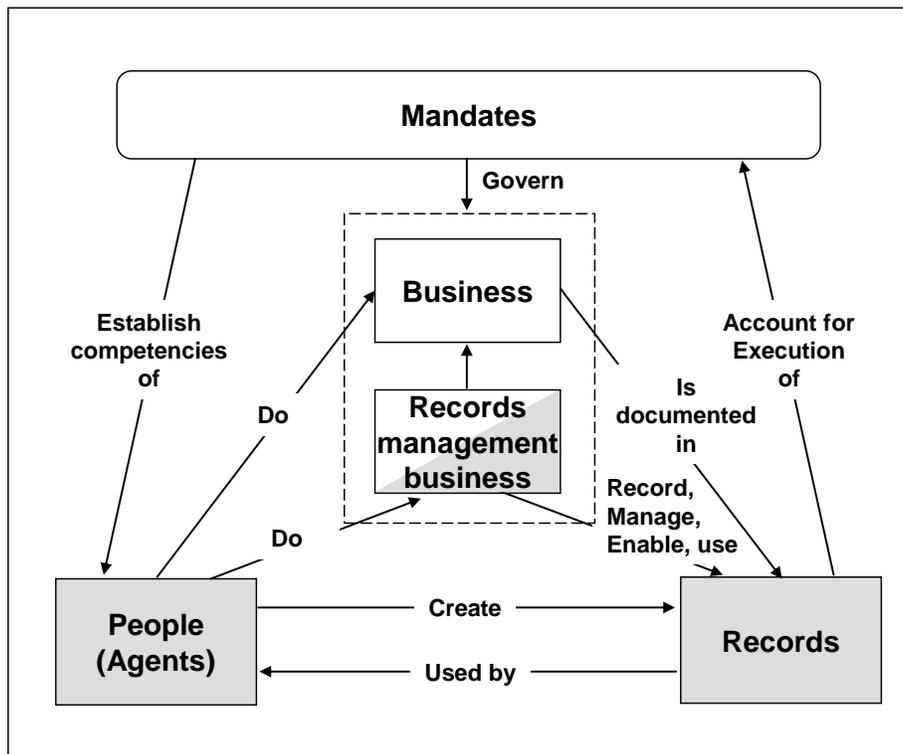
It is inevitable that metadata will evolve; therefore metadata needs to be managed as well. Agencies should reflect on the need for additional staff or specialized expertise to sustain their recordkeeping metadata. Agencies should also consider if other entities are already maintaining the metadata they wish to use and if the metadata is widely adopted and applied. If so, the need to internally sustain certain metadata elements for records management purposes will be diminished.



3 PREFERRED RECORDKEEPING METADATA

Below are the preferred recordkeeping metadata entities for records. Entities are defined as physical or abstract objects that exist, did exist, or may have existed. For the purpose of this guideline, recordkeeping metadata entities are defined as: Record; Agent; Business; and Mandate. (Specifications for each entity are outlined in *Section 4: Specifications*.) These preferences do not preclude the use of other metadata to describe the characteristics or content of records.

3.1 Entity Model¹



3.2 Record Entity

The Record Entity describes records and aggregation of records. Metadata may be used to describe a single document, a file or folder, a record series, or a business or information system. Metadata may be inherited from different aggregation levels. A single document, for example, can inherit metadata from a file or record series. Decisions for what level of aggregation is appropriate should be done prior to implementation. Such decisions depend on the systems or systems used or planned for managing records.

¹ This model appears in the *Model Requirements Specification for the Management of Electronic Records*, commonly referred to as MoReq2, and is based on ISO 23081. The shaded portions represent sections of the model covered by MoReq2.



3.3 *Agent Entity*

The Agent Entity describes the individual, workgroup, or agency responsible for some action on the record, such as records creation, receipt, and other management processes. Like the Record Entity, agencies will need to determine what level of aggregation is both appropriate and feasible within existing or planned systems. Metadata may also be inherited.

3.4 *Business Entity*

The Business Entity describes the business functions, activities and transactions that the record supports. When linked to the records, this entity helps define the business context of the records. This entity may also have aggregation levels and should be consistent with an agency's business classification scheme.

3.4 *Mandate Entity*

The Mandate Entity describes the legislative or regulatory basis for an agency to perform a specific business function or create, receive, or manage records. This entity is closely associated with the Business and Agent Entities.

6.5 *Relation Entity*

The Relation Entity describes the relationships among the Record, Agent, Business, and Mandate Entities. This Entity provides the mechanism for documenting the content, context, and structure of records, agents, businesses, and mandates over time. Metadata elements associated with the Relation Entity are found under the other four entities where appropriate.



4 SPECIFICATIONS²

4.1 RECORD ENTITY METADATA ELEMENTS

| Name | Description |
|-----------------------|--|
| Record Category Type | Identifies the level of aggregation of the record or group of records being described. |
| Record Identifier | Provides the unique identifier allocated to a record or aggregation of records, usually at the time of registration. |
| Record Title | States the name given to a record (or an aggregation of records) as free text. It can also be described with an alternative and/or abbreviated title. |
| Record Description | Provides a free text description of the contents and/or purpose of a record or aggregation of records. |
| Record Date | Specifies the date/time or a range of date/times applicable to a record or an aggregation of records. |
| Record Subject | Identifies the subject keywords, which describe the subject content of the record or aggregation of records. |
| Record Coverage | Identifies the jurisdiction in which the record is valid (i.e. place name, region, or geographical area) and/or the time period the record covers. |
| Record Language | Identifies the language in which the record is recorded. |
| Record Type | Identifies the type of record, its logical form. |
| Record Format | Identifies the media, data format, extent and physical form of a record or an aggregation of records. |
| Record Relation | Identifies and defines a relationship or set of relationships that exist between records/agent and functions. |
| Record Access | Identifies information that governs the accessibility of records. It includes business or legal requirements to prescribe access to records as open or closed to [organization] staff or the public, as appropriate. |
| Record Disposal | Documents the processes undertaken to ensure the appropriate disposal of a record or aggregation of records. |
| Record Location | Identifies the physical or virtual location of a record or aggregation of records. |
| Record Event History | Documents the preservation, retrieval, disposal, control, access or use related activities performed on a record or aggregation of records. |
| Record Classification | Identifies the business documented in the record or in an aggregation of records. |
| Record Agent | Identifies the corporate entity or individual responsible for some form of action on a record or aggregation of records. |

² The elements listed in this guideline are based on: Queensland State Archives. (2008) *Queensland Recordkeeping Metadata Standard and Guideline*. This Standard is the first published standard consistent with ISO 15489 and ISO 32081. It has also been selected by the ARMA Standards Development Committee (SDC) Records Management Metadata Task Force as a model standard for examining pursuant to the future ANSI/ARMA Standard on Records Management Metadata.



4.2 AGENT ENTITY METADATA ELEMENTS

| Name | Description |
|------------------------|--|
| Agency Category Type | Identifies the type of agent undertaking a business activity with, or on behalf of, [an organization]. That is, is the agent being described an individual; a workgroup; or an organization. |
| Agent Identifier | States the unique identification of an agent. |
| Agent Title | States the name of the agent. |
| Agent Date | Specifies the date or collection of dates applicable to an agent. |
| Agent Relation | Specifies and identifies the relationship or set of relationships between or among agents/records and functions. |
| Agent Location/Address | Identifies the physical or virtual address of an agent. |
| Agent Event History | Documents management events or actions relating to agents. |

4.3 BUSINESS ENTITY METADATA ELEMENTS

| Name | Description |
|------------------------|--|
| Business Category Type | Identifies the type or category of function being described, whether it is: a business function – the major responsibilities managed by an organization to fulfill its goals; an activity – the major tasks performed by an organization to accomplish each of its functions; or a transaction – the smallest unit of a business activity. |
| Business Identifier | Specifies the unique identifier associated with a function, activity, or transaction. |
| Business Title | States the name of the business function, activity, or transaction. |
| Business Description | Provides a free text description of the scope and/or purpose of a business function, business activity or transaction group. Also referred to as scope note. |
| Business Date | Specifies the date or a collection of dates applicable to a function, commonly expressed as a date range. |
| Business Relation | Specifies and identifies a relationship or set of relationships between and among functions, records and agents. |
| Business Access | Provides information that governs the accessibility of, and use conditions relating to, business functions, business activities or transaction groups. |
| Business Location | Identifies the physical or virtual location of a function, business activity or transaction group. |
| Business Event History | Provides information about events or actions relating to business functions, activities or transaction groups. |



4.4 MANDATE ENTITY METADATA ELEMENTS

| Name | Description |
|-----------------------|--|
| Mandate Category Type | Identifies the type or category of mandate being described, whether it is: law; regulation; agreement; or policy. Includes both Federal and State mandates. |
| Mandate Identifier | Specifies the unique identifier associated with a mandate. |
| Mandate Title | States the name of the mandate. |
| Mandate Description | Provides a free text description of the scope and/or purpose of a business function, business activity or transaction group. Also referred to as scope note. |
| Mandate Date | Specifies the date or a collection of dates applicable to a function, commonly expressed as a date range. |
| Mandate Relation | Specifies and identifies a relationship or set of relationships between and among mandates, agents, business, and records. |
| Mandate Event History | Provides information about events or actions relating to the mandate. |

REVISION HISTORY

- 2016-10-19 Updated the citation and web address for *Queensland Recordkeeping Metadata Standard and Guideline*.
- 2010-10-12 Corrected the title of *ISO 15489-2:2001* under References to read Part 2 rather than Part 1 (typographical error).



5 REFERENCES

- ARMA International. (2006). *A metadata primer: Metadata creation, metadata use, metadata management*. ARMA International Standards Development Committee: Lenexa, Kansas. URL: <http://www.arma.org/pdf/articles/md.pdf> (Last accessed: 2008-08-03).
- Chan, L.M., and Zeng, M.L. (2006). Metadata interoperability and standardization: A study of methodology Part 1: Achieving interoperability at the schema level. *D-Lib Magazine*, 12:6. URL: <http://www.dlib.org/dlib/june06/chan/06chan.html> (Last accessed: 2008-08-04).
- European Commission. (2008). *Model requirements for the management of electronic records: Update and extension 2008*. URL: <http://www.moreq2.eu/downloads.htm> (Last accessed: 2008-08-12).
- Franks, P., and Kunde, N. (2006). "Why metadata matters." *The Information Management Journal*, September/October 2006, pp. 55-61. URL: <http://www.arma.org/pdf/articles/Franks-Kunde.pdf> (Last accessed: 2008-08-03).
- International Organization for Standardization. (2001). *ISO 15489-1:2001: Information and Documentation – Records Management – Part 1: General*. International Organization for Standardization: Geneva, Switzerland.
- International Organization for Standardization. (2001). *ISO 15489-2:2001: Information and Documentation – Records Management – Part 2: Guidelines*. International Organization for Standardization: Geneva, Switzerland.
- International Organization for Standardization. (2006). *ISO 23081-1:2006: Information and Documentation – Records management processes – Metadata for records – Part 1: Principles*. International Organization for Standardization: Geneva, Switzerland.
- International Organization for Standardization. (2007). *ISO 23081-2:2007: Information and Documentation – Records management processes – Metadata for records – Part 2: Conceptual and implementation issues*. International Organization for Standardization: Geneva, Switzerland.
- Queensland State Archives. (2012). *Queensland Recordkeeping Metadata Standard and Guideline, Version 1.1*. Queensland State Archives, Department of Science, Information Technology and Innovation: Brisbane, Queensland, Australia. URL <http://www.archives.qld.gov.au/Recordkeeping/GRKDownloads/Documents/QRKMS.pdf> (Last accessed: 2016-10-19)