

To: Joint Steering Committee for Development of RDA
From: Deirdre Kiorgaard, Chair, JSC
Subject: RDA Scope and Structure

This document was originally released in December 2006. The majority of changes in the attached revision were made to reflect changes made in the latest version of the DCMI Abstract Model. Other changes were made in response to comments from the members of the JSC, and the comments in 5JSC/ALA/5.

Two supplementary documents have also been prepared:

5JSC/RDA/Element analysis

5JSC/RDA/RDA to FRBR mapping

There are no plans at this stage to issue an RDA to DCMI element mapping as a separate document, but there will be a DC-RDA mapping in Appendix D of RDA.

The JSC is committed to ensuring that the metadata produced using RDA will be well-formed, i.e., instructions are provided on how to record the values of elements, controlled vocabularies are used where appropriate, and the overall structure is governed by a formal model. These documents have been issued for the JSC and Editor to refer to, in the process of developing RDA, to ensure this aim is met. In addition, we hope that these documents will be useful to the metadata and semantic web communities and in our ongoing discussions with these communities.

RDA — Resource Description and Access

Scope and Structure

This document is one of three that define the framework for the development of *RDA*. The *RDA Strategic Plan* establishes long-term goals for *RDA* and the strategies for achieving those goals in the period 2005-2008. The *RDA Objectives and Principles* document sets out the objectives and principles that govern the overall design of *RDA* as well as objectives and principles relating to the functionality of the data produced through the application of *RDA*. This document defines the scope and structure of *RDA* in relation to its underlying conceptual models (*FRBR*¹ and *FRAD*²) and to two related metadata models (the *DCMI Abstract Model*³ and *The <indec> Metadata Framework*⁴).

1. Scope

RDA provides a set of guidelines and instructions on formulating descriptive data and access point control data to support resource discovery.

1.1 Key Concepts

For purposes of defining the scope of *RDA*, the terms *resource*, *resource discovery*, *descriptive data*, and *access point control data* are defined as follows:

Resource

A *resource* is an identifiable information object. The object may be either tangible or intangible in nature.

Resource discovery

Resource discovery encompasses the following generic user tasks:⁵

- *FIND* — i.e., to find resources that correspond to the user's stated search criteria
- *IDENTIFY* — i.e., to confirm that the resource described corresponds to the resource sought, or to distinguish between two or more resources with similar characteristics
- *SELECT* — i.e., to select a resource that is appropriate to the user's needs

¹ IFLA Study Group on the Functional Requirements for Bibliographic Records, *Functional Requirements for Bibliographic Records: Final Report* (München: K.G. Saur, 1998). Cited hereafter as *FRBR*.

² IFLA Working Group on Functional Requirements and Numbering of Authority Records (FRANAR), *Functional Requirements for Authority Data: A Conceptual Model* (Draft 2007-04-01). Cited hereafter as *FRAD*.

³ Andy Powell, Mikael Nilsson, Ambjörn Naeve, Pete Johnston, and Thomas Baker, *DCMI Abstract Model* (2007-04-02). Cited hereafter as *DCMI Abstract Model*.

⁴ Godfrey Rust and Mark Bide, *The <indec> Metadata Framework: Principles, Model and Data Dictionary* (June 2000). Cited hereafter as *Indecs*.

⁵ Based on the user tasks defined in *FRBR*, p.82.

- *OBTAIN* — i.e., to acquire or access the resource described

Descriptive data

Descriptive data are data (i.e., property/value pairs⁶) that describe a resource.

Access point control data

Access point control data are data (i.e., property/value pairs) that describe an entity (e.g., a person, family, or corporate body) represented by a controlled access point.⁷

1.2 Descriptive data

The *descriptive data* covered in *RDA* generally reflect the attributes and relationships associated with the entities *work*, *expression*, *manifestation*, and *item*, as defined in *FRBR*.⁸

The scope of *descriptive data* covered in *RDA* may be extended in future releases to cover additional attributes and relationships associated with the entities *work*, *expression*, *manifestation*, and *item* not currently defined in *FRBR* that support resource discovery.

Attributes and relationships associated with the entities *work*, *expression*, *manifestation*, and *item* whose primary function is to support user tasks related to resource management (e.g., acquisition, preservation) are currently out of scope.

Attributes and relationships associated with the entities *concept*, *object*, *event*, and *place*, as defined in *FRBR*, fall outside the current scope of *RDA*. Subject relationships, as defined in *FRBR*, are also currently out of scope.

1.3 Access point control data

The *access point control data* covered in *RDA* reflect the attributes and relationships associated with the entities *person*, *family*, *corporate body*, *place*, *work*, *expression*, *manifestation*, and *item*, as defined in *FRAD*.⁹

Attributes associated with the entities *name*, *identifier*, *controlled access point*, and *rules*, as defined in *FRAD*, are covered selectively.

The scope of *access point control data* covered in *RDA* may be extended in future releases to cover additional attributes and relationships associated with the entities

⁶ The term *property/value pair* is used as defined in the *DCMI Abstract Model*: "the combination of a property and a value, used to describe a characteristic of a resource".

⁷ A controlled access point is an access point formulated according to a specific set of guidelines and instructions. In this context, the guidelines and instructions are those in part B of *RDA*. Controlled access points include both preferred (or authorized) and variant forms of access points.

⁸ See the attributes defined in sections 4.2-4.5 and the relationships defined in sections 5.2-5.3 of *FRBR*. For details on the correspondence between *RDA* elements and *FRBR* attributes and relationships, see the *RDA-FRBR Mapping*.

⁹ See the attributes defined in sections 4.1-4.7 and the relationships defined in sections 5.3-5.4 of *FRAD*. A detailed mapping of *RDA* elements to *FRAD* attributes and relationships will be issued with the first draft of *RDA Part B* (scheduled for December 2007).

person, family, corporate body, place, work, expression, manifestation, item, name, identifier, controlled access point, and rules not currently defined in *FRAD* that support resource discovery.

Attributes and relationships associated with the entities *concept, object, and event*, as defined in *FRAD*, fall outside the current scope of *RDA*. Relationships between *controlled access points*, as defined in *FRAD*, are also currently out of scope.

Attributes and relationships associated with the entities *person, family, corporate body, work, expression, manifestation, and item* whose primary function is to support user tasks related to rights management are currently out of scope.

1.4 Elements

Attributes and relationships associated with a resource or other entity are formally represented in *RDA* as *elements* (i.e., *properties*¹⁰).

An *RDA element* generally corresponds to an attribute or relationship as defined in *FRBR* or *FRAD* (e.g., the *RDA title* element corresponds to the *FRBR* attribute *title of manifestation*). The scope of each *RDA element* is normally determined by the scope of the corresponding attribute or relationship, as defined in *FRBR* or *FRAD*.

For any *RDA element*, one or more *element sub-types* (i.e., *sub-properties*¹¹) may be defined. For example, for the *RDA title* element, sub-types are defined for *title proper, parallel title, alternative title, other title information, parallel other title information, variant title, earlier/later variant title, key title, and devised title*. Each *element sub-type* is a *sub-property* of the *element* under which it is defined (i.e., the defined scope of the *element sub-type* falls within the broader scope defined for the *element*). *RDA element sub-types* are generally defined for purposes of mapping more precisely to elements defined in related metadata schemes for encoding or presentation (e.g., MARC 21,¹² ISBD¹³). For example, the sub-type of the *title* element defined in *RDA* for *abbreviated title* allows precise mapping to the field for abbreviated title defined in MARC 21.

For any *RDA element* or *element sub-type*, one or more *sub-elements* (i.e., element components) may be defined. For example, for the *RDA publication statement* element, *sub-elements* are defined for *publisher, place of publication, and date of publication*. Each *sub-element* is a discrete component of the *element* or *element sub-type* under which it is defined (i.e., the defined scope of the *sub-element* covers only a part or component of the defined scope of the *element* or *element sub-type*).

¹⁰ The term *property* is used as defined in the *DCMI Abstract Model*: "a specific aspect, characteristic, attribute, or relation used to describe resources".

¹¹ The term *sub-property* is used as defined in the *DCMI Abstract Model*: "a relationship between two properties which indicates that the two properties are defined such that whenever a resource is related to a value by the sub-property, it follows that the resource is also related to that same value by the property".

¹² *MARC 21 Format for Bibliographic Data* (Washington: Library of Congress; Ottawa: National Library of Canada, 1999-) and *MARC 21 Format for Authority Data* (Washington: Library of Congress; Ottawa: National Library of Canada, 1999-).

¹³ *ISBD(G): General International Standard Bibliographic Description, 2004 Revision* (International Federation of Library Associations and Institutions, 2004).

RDA *sub-elements* are generally defined for purposes of mapping more precisely to sub-elements defined in related metadata schemes for encoding or presentation.

1.5 Attribute types

The attributes and relationships represented by RDA *elements* (or *element sub-types* or *sub-elements*) are categorized according to the following generic attribute types:¹⁴

Label

A string whose function is to distinguish one entity from another (e.g., identifiers, names, titles).

Quantity

A number measuring some aspect of an entity (e.g., extent, dimensions, duration).

Quality

A characteristic of the structure or nature of an entity (e.g., colour, language, gender).

Type

A categorization of one or more characteristics of an entity (e.g., media type, carrier type, content type).

Role

A part played or function fulfilled by an entity in relation to another entity or entities (e.g., the function performed by a person, family, or corporate body in relation to the content of a resource, the relationship between a derivative work and the work from which it was derived, or the relationship between a resource and a specific type of equipment required to view, play, etc., the content of the resource).¹⁵

1.6 Value surrogates

The *value surrogates*¹⁶ specified in RDA are classed as either *literal value surrogates*¹⁷ or *non-literal value surrogates*¹⁸. The RDA guidelines and instructions

¹⁴ Based on the generic attributes types defined in *Indecs* p. 17.

¹⁵ The term *role*, as used in *Indecs*, includes all associations categorized as “relationships” in *FRBR*, as distinguished from the narrower sense in which *role* is used in *RDA* (i.e., only to designate a relationship between a resource and a person, family, or corporate body associated with the resource).

¹⁶ The term *value surrogate* is used as defined in the *DCMI Abstract Model*: “a literal value surrogate or a non-literal value surrogate”.

¹⁷ The term *literal value surrogate* is used as defined in the *DCMI Abstract Model*: “a value surrogate for a literal value, made up of exactly one value string (a literal that encodes the value)”.

¹⁸ The term *non-literal value surrogate* is used as defined in the *DCMI Abstract Model*: “a value surrogate for a non-literal value, made up of a property URI (a URI that identifies a property), zero or one value URI (a URI that identifies the non-literal value associated with the property), zero or one vocabulary encoding scheme URI (a URI that identifies the vocabulary encoding

for a particular *element* (or *element sub-type* or *sub-element*) specify the use of either a *literal value surrogate* or *non-literal value surrogate*.

A *literal value surrogate* is used to represent a *literal value*¹⁹ (i.e., a value expressed by means of a lexical representation, such as a title or statement of responsibility).

A *non-literal value surrogate* is used to represent a non-literal value (i.e., a value that is a physical or conceptual entity, such as a colour or language).

The type of *value surrogate* specified in RDA corresponds to the generic attribute type that is represented by the *element*:

- A *label* is represented by a *literal value surrogate*.
- A *quantity* is represented by a *non-literal value surrogate*
- A *quality* is represented by a *non-literal value surrogate*.
- A *type* represented by a *non-literal value surrogate*
- A *role* is represented by a *non-literal value surrogate*.

1.7 Value strings

The *value strings*²⁰ specified in RDA are classed as either *plain value strings*²¹ or *typed value strings*²².

A *typed value string* will conform to the specifications of a *syntax encoding scheme*²³ associated with the particular *element* (or *element sub-type*, or *sub-element*). The specifications for the *syntax encoding scheme* may be internal to RDA or they may be external (i.e., the RDA instructions may reference an external *syntax encoding scheme*, such as the encoding schemes defined in various ISO standards for international standard identifiers).

A *literal value surrogate* for a *label* (e.g., title, statement of responsibility) is normally encoded using a *plain value string*. There are some cases, however, where a *literal value surrogate* for a *label* is encoded using a *typed value string* (e.g., an ISSN encoded in the form specified in ISO 3297).

scheme of which the value is a member), zero or more value strings (literals that represent the value)".

¹⁹ The term *literal value* is used as defined in the *DCMI Abstract Model*: "a value which is a literal".

²⁰ The term *value string* is used as defined in the *DCMI Abstract Model*: "a literal, optionally associated with either a syntax encoding scheme URI or a value string language".

²¹ The term *plain value string* is used as defined in the *DCMI Abstract Model*: "a value string with no associated syntax encoding scheme URI".

²² The term *typed value string* is used as defined in the *DCMI Abstract Model*: "a value string with an associated syntax encoding scheme URI".

²³ The term *syntax encoding scheme* is used as defined in the *DCMI Abstract Model*: "a set of strings and an associated set of rules that describe a mapping between that set of strings and a set of resources".

A *non-literal value surrogate* for a *quantity* (e.g., extent, dimensions, duration) is normally encoded using a *typed value string* with an associated syntax encoding scheme. The *syntax encoding scheme* is normally internal to RDA (e.g., the syntax specified for recording *extent*).

A *non-literal value surrogate* for a *quality* (e.g., colour, language, gender) or *type* (e.g., media type, carrier type, content type) is normally encoded using a *non-literal value* drawn from a *vocabulary encoding scheme*²⁴. The *vocabulary encoding scheme* may be internal to RDA (e.g., the controlled list of terms for *reduction ratio*) or it may be external (e.g., a standard list of role designations used as an alternative to the RDA list of role designations).

A *non-literal value surrogate* for a *role* may be recorded using a *plain value string* (e.g., an unstructured description of a related resource), a *typed value string* (e.g., a controlled access point representing a person, family, or corporate body associated with a resource), a linked set of *plain* and/or *typed value strings* (e.g., a structured description of a related resource), or a URI reference (e.g., to an access point control record for a person, family, or corporate body associated with the resource, or to a related work, expression, manifestation, or item).

For details on the encoding conventions used for specific RDA elements, element sub-types, and sub-elements, see the *RDA Element Analysis*.

1.8 Application

For each element of descriptive data, *RDA* provides general guidelines and instructions that can be applied to any resource exhibiting the characteristic represented in that element. Where necessary, *RDA* specifies exceptions to the general guidelines and instructions that apply to specific types of media, content, mode of issuance, etc. Supplementary guidelines and instructions provide additional detail on formulating descriptive data for specific types of media, etc., and for resources that exhibit characteristics not covered by the general guidelines and instructions.

For each type of entity represented by a controlled access point (i.e., *person*, *family*, *corporate body*, etc.), *RDA* provides general instructions on elements of access point control data that can be applied to any entity of that type that exhibits the characteristic reflected in that element. Where necessary, *RDA* specifies exceptions for specific entity sub-types (e.g., government bodies as a sub-type of corporate body). Supplementary guidelines and instructions provide additional detail on formulating access point control data for specific entity sub-types, and for specific element sub-types (e.g., names of persons in specific languages) not covered by the general guidelines and instructions.

1.9 Record syntax

RDA does not specify a record syntax for the encoding or presentation of *descriptive data* or *access point control data*. *Property/value statements* formulated according to the guidelines and instructions in *RDA* are treated as discrete statements that can be stored or presented in a variety of record syntaxes.

²⁴ The term *vocabulary encoding scheme* is used as defined in the *DCMI Abstract Model*: "an enumerated set of resources".

Mappings of RDA elements to a select number of encoding and presentation syntaxes (e.g., MARC 21, ISBD) are provided in RDA appendices.

Planning is underway to develop an RDA element vocabulary and value vocabularies that would support the encoding of RDA data in RDF-compliant XML.

2. Structure

RDA is divided into two parts: part A covers *descriptive data*; part B covers *access point control data*.

2.1 Part A –Description

The initial chapter in part A provides general guidelines relating to various types of description, changes requiring a new description, required elements, language and script of the description, and conventions used in formulating transcribed, structured, and unstructured strings, etc. The remaining six chapters cover descriptive elements reflecting attributes of *work*, *expression*, *manifestation*, and *item* organized as follows:

Resource identification

The elements covered reflect the attributes of *manifestation* and *item* that are most commonly used to identify a resource. For the most part, the elements represent *labels* (e.g., title, statement of responsibility, edition) taken from the resource itself. Also included are a limited number of elements representing *qualities* (e.g., frequency), *types* (e.g., mode of issuance), or *roles* (e.g., creator of an archival resource or collection).

Carrier

The elements covered reflect attributes of *manifestation* and *item* associated with the carrier of a resource and with the formatting and encoding of the information stored on the carrier. The elements convey information that users typically rely on when selecting a resource to meet their needs with respect to the physical characteristics of the carrier and the formatting and encoding of the information stored on the carrier. The elements reflect both general and media-specific attributes. For the most part, the elements represent *quantities* (e.g., extent), *qualities* (e.g., layout, colour, digital characteristics), and *types* (e.g., media type, carrier type). Also included are a limited number of elements representing *roles* (e.g., equipment and system requirements).

Content

The elements covered reflect attributes of *work* and *expression* associated with the intellectual or artistic content of a resource. The elements convey information that users typically rely on when selecting a resource to meet their needs with respect to the form of work, audience, language, etc. The elements reflect attributes that may apply to any type of content as well as those associated with specific types of content. For the most part, the elements represent *qualities* (e.g., nature of the content, intended audience, language) and *types* (e.g., content type). Also included are a limited number of elements

representing *labels* (e.g., format of notated music), *quantities* (e.g., duration, scale), or *roles* (e.g., date of capture).

Acquisition and access

The elements covered reflect attributes of *manifestation* and *item* associated with acquiring or obtaining access to a resource (e.g., terms of availability, contact information, restrictions on access). The elements represent *quantities* (e.g., price), *qualities* (e.g., restrictions on access), or *roles* (e.g., contact information for a supplier).

Persons, families, and corporate bodies associated with a resource

The elements covered reflect relationships between the resource described and *persons*, *families*, and *corporate bodies* associated with the resource (e.g., creators, contributors, publishers, custodians). The elements represent *roles* (e.g., the function performed by the person, etc., in relation to a work, expression, manifestation, or item). Supplementary instructions on relationships pertaining to specific types of works (e.g., legal works) are also included.

Related resources

The elements covered reflect relationships between the resource described and other resources (i.e., related *works*, *expressions*, *manifestations*, and *items*). The elements represent *roles* (e.g., the relationship between a work embodied in the resource being described and another work from which it is derived).

Supplementary instructions on relationships pertaining to specific types of content (e.g., musical works, art works) are also included.

2.2 Part B – Access point control

The initial chapter in part B provides general guidelines relating to preferred access points and references, required elements, language and script of access points, and conventions used in recording names and titles for use in controlled access points. The remaining five chapters cover access point control elements reflecting attributes associated with the entities *person*, *family*, *corporate body*, *place*, *work*, *expression*, *manifestation*, and *item*, organized as follows:

Persons

The elements covered reflect attributes of a *person* used in access point control. The elements represent *labels* (e.g., personal name, title) and *qualities* (e.g., date of birth). Supplementary instructions on names of persons in specific languages are also included.

Families

The elements covered reflect attributes of a *family* used in access point control. The elements represent *labels* (e.g., family name) and *qualities* (e.g., place associated with the family).

Corporate bodies

The elements covered reflect attributes of a *corporate body* used in access point control. The elements represent *labels* (e.g., corporate name) and *qualities* (e.g., place associated with the body). Supplementary instructions on names of

specific types of corporate bodies (e.g., government bodies, religious bodies) are also included.

Places

The elements covered reflect attributes of a *place* used in access point control (primarily as qualifiers in controlled access points for corporate bodies). The elements represent *labels* (e.g., place name) and *qualities* (e.g., type of jurisdiction).

Works, expressions, manifestations, and items

The elements covered reflect attributes of a *work, expression, manifestation, or item* used in access point control. The elements represent *labels* (e.g., title of work) and *qualities* (e.g., language of expression). Supplementary instructions on names of specific types of works (e.g., laws, sacred scriptures) are also included.

2.3 Specificity of instructions

Instructions on recording an *element, element sub-type, or sub-element* are presented in order of increased specificity. Basic instructions address aspects of the attribute or relationship reflected in the *element, element sub-type, or sub-element* that are most commonly encountered when formulating *descriptive data* or *access point control data*. Detailed instructions addressing less frequently encountered aspects of the attribute or relationship are presented under specific headings following the basic instructions, as required.

2.4 Appendices

The appendices to *RDA* provide information on the following:

Capitalization

Guidelines on capitalization conventions used in English and a selected number of other languages.

Abbreviations

Lists of abbreviations used in English and a selected number of other languages.

Initial articles

Lists of initial articles used in English and a selected number of other languages.

Record syntaxes for descriptive data

Mappings of RDA descriptive elements to a selected number of related metadata schemes for encoding or presentation of *descriptive data* (e.g., MARC 21, ISBD, Dublin Core).

Record syntaxes for access point control data

Mappings of RDA access point control elements to a selected number of related metadata schemes for encoding or presentation of *access point control data* (e.g., MARC 21).