

Setting a new standard in Resource Description and Access

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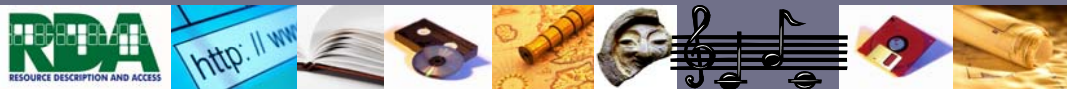
Chair, Joint Steering Committee for the Development of RDA

Deutscher Bibliothekartag, June 2008



Setting a new standard

- Goals for RDA
- Principles and Models
- Structure of RDA
- RDA and other standards
- RDA in the web environment
- RDA developers and Timeline



Thank you for inviting me to speak about RDA at your conference.

Resource Description and Access (RDA) is a new standard for description and access. It will replace the Anglo-American Cataloguing Rules (AACR) in 2009.

Today I will speak about :

The change from AACR to RDA, and our goals for RDA

The principles and models which guide RDA's development

The structure of the RDA standard, and how RDA relates to some other standards

How it will be used in the web environment

And lastly, about the group who is developing RDA and the timeline for RDA's development.

Towards RDA

AACR

- 1967 – 1st edition
- 1978 – 2nd edition
- 1988 – Revised
- 1998 – Revised
- 2002 – Revised
- 2003-2005 – Updates

RDA

- 1997 Conference
- 2003 AACR3 draft
- 2005 Move to RDA
- 2009 RDA release



Let me tell you a little of the history of AACR & RDA.

AACR is the result of an international co-operative effort that has taken place in the English-speaking world over more than five decades. The first edition of AACR was published in 1967. More than forty years later it is the most widely-used standard for the description of library materials in the English-speaking world. It has also been translated into 24 other languages. (German in 1998 by K.G. Saur Verlag)

AACR has always been revised incrementally, but in 2005 the final update to AACR was released. At that time it was decided to develop a new standard to replace AACR. This decision was the end result of a long process of consultations within the international library community that use AACR. The process began with the 1997 Conference on the Principles & Future Development of AACR held in Toronto. At first it was thought that only a new edition would be required. But, the comments we received when the draft of a third edition was released, led to a re-think. We decided to make more radical changes to the content, structure and style of the standard.

Resource Description and Access or RDA is to be a new standard for description and access designed for the digital world.

New goals for RDA were developed.

Strategic Plan - Goals for RDA

RDA as a standard

- Cover all types of *resources* and *content*
- Be usable outside the library community
- Be adaptable to languages other than English

RDA data

- Support FRBR and FRAD user tasks
- Be compatible with existing library catalogues
- Be independent of encoding formats



These goals for RDA are given in our Strategic Plan. The goals relate firstly to RDA as a standard, and secondly to the data produced using RDA. Some of the key goals are on this slide. I would like to highlight of these.

Firstly that RDA, as a standard

- will provide a comprehensive set of instructions covering all types of resources and all types of content.
- While RDA is being developed for use in English-language communities, it can also be adapted for use in other language communities. RDA will allow the use of different scripts, different numerals and different calendars, as well as different languages. We hope that, as with AACR, other countries will translate RDA and adjust its instructions and add examples which follow their preferred language and script conventions.

Secondly, our goal is that data produced using RDA

- should support the FRBR and FRAD user tasks – more on these later. It should enable users of library catalogues and resource discovery services to find, identify, select, and obtain resources appropriate to their information needs.
- needs to be compatible with existing library catalogues, and
- independent of any particular system of encoding.

Underpinning all of the changes to RDA are the goals of making RDA more principles-based, and to place the standard on stronger conceptual footings. Next I will speak about the principles and concepts on which RDA is based.

Principles

International Cataloguing Principles

- Update of the “Paris Principles”
- Draft now available for comment



RDA Objectives & principles for

The design of RDA, and The functionality of records produced using RDA

Need to balance principles



RDA is being guided by IFLA's 'Statement of International Cataloguing Principles'. The original Statement of Principles, the 'Paris Principles' was approved by the International Conference on Cataloguing Principles in 1961. Over the past few years the IFLA Cataloguing Section has held a series of five regional meetings with the intention of updating those principles. The goal is to develop a common set of principles to cover the content of bibliographic and authority records used in library catalogues worldwide. Representatives from the Joint Steering Committee for the Development of RDA (JSC) were present, along with the European rule-makers, at the first regional meeting held in Frankfurt in 2003 to draft these principles. The draft *Statement of International Cataloguing Principles* is now available for review. The JSC, along with other participants, will be commenting on that draft.

The Objectives and Principles for RDA are also still in draft form, and are updated as our discussions progress. Like our Strategic Plan, we have set objectives and principles for both the design of RDA as a standard, and for the functionality of the data produced using RDA. Although we use the Objectives and Principles to guide RDA's development, we have found that the instructions often need to find a balance between one principle and another. For example, the principle of uniformity needs to be balanced with the principle of common usage; the principle of accuracy needs to be balanced with the principle of representation, and so on.

FRBR-FRAD-FRSAR Conceptual Model

Bibliographic records, Authority data, Subject records

- Entities – What things are important?
- Relationships – How do those things relate?
- Attributes – What are their characteristics?



FRBR/FRAD user tasks

“ a structured framework for relating the data recorded in bibliographic (and authority) records to the needs of the users of those records.”

RDA is also being built on IFLA’s FRBR conceptual model. FRBR is the Functional Requirements for Bibliographic Records. FRAD and FRSAR will extend the model for authority data.

Conceptual models are important because they help us develop a better understanding of the domain they describe. In the case of the FRBR model, we are able to develop a better understanding of bibliographic and authority data. Many of you will already be familiar with the FRBR conceptual model. The model identifies and defines bibliographic entities, their attributes and the relationships between them.

But FRBR and FRAD do more than simply list the entities, attributes and relationships. An important feature of FRBR and FRAD is that they relate the data recorded in bibliographic and authority records to the needs of the users of those records. They do this by mapping the data elements to the specific user tasks they assist.

Although conceptual models can be implemented in different ways, consistency with the FRBR model will facilitate interoperability between implementations.

FRBR/FRAD and RDA

FRBR and FRAD (and FRSAR) are reflected in RDA in:

1. RDA's scope
2. The entities, attributes and relationships described
3. RDA's structure
4. RDA's terminology
5. RDA's core elements



These models will be reflected in RDA in a number of ways.

- Firstly they will be reflected in RDA's scope. The scope of RDA will cover bibliographic data and authority data as it is represented in FRBR and FRAD. Work on FRSAR is just beginning and so RDA will not cover FRSAR in its first release. However, placeholders for concepts covered in FRSAR have been built into RDA. FRSAR entities have been shown in blue on these slides to indicate they will be covered by placeholders only.
- Secondly, the models will be reflected in RDA through the entities, attributes and relationships described by the RDA data elements.
- Thirdly, the models will be reflected in RDA's structure, that is in the organisation of the chapters in RDA. The chapters will be linked to the user tasks they relate to.
- Fourthly, the terminology used in the models will be reflected in RDA, for example the terms work, expression, manifestation and item.
- Finally, the FRBR user tasks will influence the RDA elements that are defined as 'core' or essential elements.

It is difficult to imagine that FRBR can be realised without changes to descriptive standards such as RDA. However, FRBR cannot be realised through RDA alone, but also requires changes to encoding and to the systems used to support resource discovery.

Implementation Scenarios

RDA needs to support:

- **The present** – data stored in bibliographic records, authority records, and holdings records
- **The future** – relational or object-oriented databases
 - Separate records for each entity
 - Links using persistent identifiers

<http://www.collectionscanada.gc.ca/jsc/docs/5editor2.pdf>



In developing RDA we are conscious that it will be implemented in any number of present and future database structures. To help us in our thinking about how RDA data can be used the Editor, Tom Delsey, has developed three implementation scenarios.

RDA data can be readily mapped to any one of these implementation scenarios. In all cases the data will support the functional objectives that RDA is designed to fulfill. However, the data structures used to store the data and to reflect relationships will affect the efficiency of data creation and maintenance. It will also affect the ease and effectiveness with which users are able to access the data and navigate the database.

Two of these scenarios reflect the present. In the database structures usually used in library systems, data is stored or exchanged using bibliographic and authority records, and in some implementations in holdings records as well. The bibliographic and authority files may be linked, or there may be a flat file structure.

In the future we expect data will be stored in a relational or object-oriented database structure that mirrors the FRBR and FRAD conceptual models. In this type of structure there would be separate records for each FRBR entity. Relationships between the entities would be made using links. The links might be access points, but are more likely to be made using identifiers, preferably persistent identifiers. The changes made in RDA will help us move towards this future.

I will refer to both the present and future implementation scenarios as I outline the structure or organisation of RDA.

RDA Structure

- General Introduction
- Two main parts
 1. **Attributes** of the FRBR entities
 2. **Relationships** between the entities
- A chapter of general instructions for each section
- Chapters associated an FRBR user task



Let us now look at RDA.

RDA will begin with a general introduction which will cover the objectives and principles for resource description, plus information on the conceptual models that have informed RDA's development. The general introduction will also bring together information on RDA's core elements, although these will also be indicated throughout the text.

The main text of RDA has two parts, one covering attributes and another covering relationships. There are:

- Four sections defining the attributes that may be used to describe each of the entities, and also
- Six sections defining the relationships that may be made between these entities

Each section begins with a chapter of general instructions, followed by chapters for the specific entities.

Each chapter is also associated with a user task. Of course, many attributes of a resource will relate to more than one user task. Also, most of the chapters provide information relevant to the user task "find".

Recording Attributes

1. Manifestation and item
2. Work and expression
3. Person, family, and corporate body
4. Concept, object, event, place



The first four sections are about recording the attributes of the three groups of FRBR entities. These attributes are treated as separate data elements.

Sections 1 and 2 cover the Group 1 entities, although in RDA they are not arranged in the FRBR order of “Work, expression, manifestation, and item”. Instead the RDA structure is an acknowledgement that the cataloguer starts with the item in front of them, which is representative of the manifestation.

The instructions in Section 1 are what you would use to create a bibliographic description. The instructions in Section 2 cover elements that would be found in a name/title or title authority record. However, there are also instructions for recording elements to do with the work or expression such as a summary of the content, which you would currently find in bibliographic records.

Section 3 covers the Group 2 entities. These instructions cover what you would use today to create name authority records.

Section 4 for the Group 3 entities covered by FRSAR will mostly contain placeholders with the exception of the chapter on “Place”. By “placeholders” I mean that there will be no instructions for these included in RDA when it is first released. Concepts, objects and events are usually found in subject authority records. They were not covered in AACR, and they will not be in scope for the first release of RDA.

Recording Relationships

Relationships can be recorded using access points, links, and relationship designators.

5: Primary relationships between works, expressions, manifestations, and items

- Work expressed, expression manifested, etc.

6. Relationships to persons, families, and corporate bodies associated with a resource

- Creator/work; Contributor/Expression, etc.
- Role designators – composer, interviewer, etc.

7. Subject relationships



The next part of RDA covers the recording of relationships. When I say ‘relationships’ in this context, I mean bibliographic relationships, such as between an author and the book they wrote, or between one version of a symphony and another. The introduction of these concepts into RDA is an important step. Relationships allow the user to navigate the catalogue or resource discovery system. For example, they allow resources to be grouped to show they belong to a particular work or expression. This can be used to organize large results sets in a way that is more meaningful to users, or to allow users to move between related works.

RDA will allow for different conventions in recording relationships: both the use of access points and the use of identifiers for linking. Relationship designators are also used.

Section 5 covers primary relationships between the Group 1 entities of work, expression, manifestation and item such as ‘the work expressed’, or ‘the expression manifested’.

Section 6 deals with relationships from Group 1 entities to Group 2 entities. This will include relationships between a creator and a work, a contributor and an expression, and so on. In our bibliographic records today we reflect these relationships by adding access points. In addition, RDA will allow for the use of role designators so you can be more specific about the nature of the relationship. For example, you could specify that Vivaldi is the composer of ‘The four seasons’.

Section 7 will be a placeholder. Today, we would show these relationships by adding subject terms to bibliographic records.

Recording Relationships

8. Between works, expressions, manifestations, and items

- Equivalence, Derivative, Descriptive, Whole-part, Accompanying, Sequential
- Translation of, Sequel to, etc.

9. Between persons, families, and corporate bodies

10. Between concepts, objects, events, and places



Section 8 is about recording relationships between the Group 1 entities. The instructions will be organised using a taxonomy developed by Barbara Tillett.

They include:

Equivalence relationships – e.g. two items of a manifestation, two formats of the same sound recording.

Derivative relationships – e.g. a novel, and a play based on that novel.

Descriptive relationships – e.g. a film, and a review of that film

Whole-part relationships – a volume and the multi-volume set of which it is a part

Accompanying relationships – a serial and its index

Sequential relationships – an earlier or later title of a serial, or a sequel to a novel

More specific relationships will be able to be described using relationship designators such as 'Adaptation of', 'Translation of', and so on.

Section 9 deals with relationships between Group 2 entities and is what you may be used to seeing now as 'see also' references in authority records. These relationships are defined in FRAD.

Section 10 deals with relationships between Group 3 entities and is another placeholder. Today we would record these as related terms in our subject authority records.

Appendices

- Capitalization, Abbreviations, Initial articles
- Controlled vocabularies, e.g. Relationship designators
- Glossary
- Record syntaxes for descriptive data, and for access point control data
 - ISBD, MARC, Dublin Core, etc.



RDA will also contain a number of appendices. They will cover matters such as Capitalization, Abbreviations, and Initial articles.

Some of the controlled vocabularies being introduced to RDA, such as the relationship designators, will also be given in the appendices.

The Glossary is being thoroughly revised. In addition, in the description of the scope of each chapter you will find definitions of the key terms used in those instructions.

There will also be appendices on data presentation. Here you will find information on how to present RDA elements in an ISBD display or MARC record format, or encoded in Dublin Core.

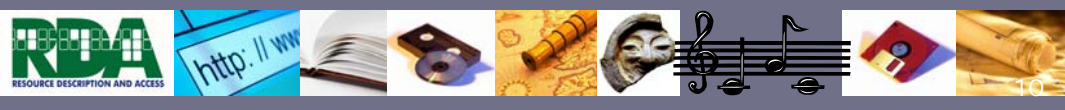
In the next few slides I would like to talk a little more about the relationship between RDA and some other standards - the ISBD, MARC, and Dublin Core.

RDA and the International Standard Bibliographic Description (ISBD)

Standards developed in harmony

RDA will:

- Be a content standard, not a display or encoding standard
- Be independent of the format, medium, or system used to store or communicate the data
- Include an Appendix for mapping to ISBD



Firstly, the International Standard Bibliographic Description (ISBD).

Like AACR, the ISBDs were first published in the late 1960s. The ISBDs provide basic descriptive elements arranged in a prescribed order (the eight areas of description), along with prescribed punctuation. AACR also used the ISBD areas of description and ISBD prescribed punctuation.

Harmony between the provisions of these two standards has been maintained over time.

In 2003, both AACR and the ISBD began to be revised. A common aim of both revisions was to cover all types of resources in a consistent way, and to make it easier to describe resources which have the characteristics of more than one format. In 2007 a consolidated edition of the ISBD was published.

Harmony between the ISBD and RDA remains a goal of the JSC. The data elements in RDA will cover all those covered in the ISBD. However, the JSC has made a conscious decision to make RDA a content standard rather than a display or encoding standard. RDA is intended to be independent of the format, medium, or system used to store or communicate the data. This is important because it allows flexibility for RDA data to be used and encoded in a variety of ways. It also paves the way for RDA to be used in different ways in the web environment.

The appendix I mentioned previously will help to maintain compatibility with the ISBD. It will show how to record RDA data using the ISBD order of elements and punctuation. This will assist libraries wishing to display RDA data in an ISBD presentation, and it will also act as a crosswalk between the standards.

RDA and MARC 21

RDA Appendix for mapping to MARC 21

MARC 21 Changes

- RDA/MARC Working Group formed
 - Proposals due June 2008
- Before RDA's release – e.g. new data elements for Content Type, Carrier type, Media type (to replace GMD)
- After RDA's release – better representation of works and expressions



There has always been a close relationship between AACR and MARC. Many English language libraries today use AACR2 and MARC 21 together, and in the future they will use RDA and MARC 21. For this reason there will also be an appendix which maps between RDA and MARC 21.

I mentioned earlier that to fully realise the benefits of FRBR requires changes not only to our content standards such as RDA, but also to our encoding standards. We can already see that a number of changes will be needed to MARC 21. An RDA/MARC Working Group has been formed to identify the changes that are required to MARC to support compatibility with RDA.

Most RDA data elements can be incorporated into the existing MARC 21 structure. However, there are some new data elements such as Content Type, Carrier Type and Media type – the terms which replace the General Material Designation or GMD – and a place will need to be found in the MARC record to encode these. By the time RDA is released we would like some of these simpler changes to MARC to be made. After RDA's release, and as part of MARC 21's continuing development, other changes may be made to the encoding standard, for example, to allow better representation of the FRBR Group 1 entities of work and expression.

Although we expect that the close relationship between RDA and MARC 21 will continue, RDA is also being designed so that it can be encoded in other schema, and also used more readily in the web environment.

RDA element set

Clearly defined elements for both attributes and relationships

- Elements can have : Sub-elements and Element sub-types

RDA vocabularies

- Content type, carrier type, media type, relationship designators, encoding formats, etc.

RDA Appendix for mapping to Dublin Core



To enable RDA to be encoded in a variety of schema, and to be used more readily in the web environment, we have defined an RDA element set or element vocabulary. The element set has clearly defined elements for both attributes and relationships. This will allow cleaner mapping to and from other standards, and also facilitate machine manipulation.

RDA elements can have sub-elements and element sub-types. Sub elements are components of the element. For example the element of “Edition statement” has sub-elements of “Statement designating edition”, “Statement of responsibility relating to the edition” and so on. Element sub-types all fall under the definition of the element, for example, the element of “Title” has sub-types for “Title proper”, “Parallel title”, “Other title information”, and so on.

We have also developed a range of vocabularies to be used in certain RDA elements. These include the terms for content, carrier and media type as well as the relationship designators.

As with the ISBD and MARC 21, RDA will contain an appendix which maps the RDA data elements to Dublin Core. Mappings to other encoding schema may be added in the future.

RDA and Dublin Core/semantic web

Hosted April 2007 meeting

DCMI/RDA Work Group

- RDA Element Vocabulary
- RDA DC Application Profile
- RDA Value Vocabularies



Work Plan

- <http://dublincore.org/dcmirdataskgroup/>



In developing RDA as a new standard for description and access designed for the digital world we have collaborated with a number of other communities. We have worked with ONIX the publishing standard on our vocabularies for content and carrier. We have also worked with the Dublin Core Metadata Initiative.

In April 2007 the JSC hosted a meeting with representatives from the Dublin Core and semantic web communities to discuss how we could make the RDA data model, data elements and values openly available. Subsequently an DCMI/RDA Work Group was set up. Work is now continuing on the development of an RDA element vocabulary, the development of a RDA Dublin Core Application Profile and the disclosure of RDA value vocabularies in a web-accessible way.

The benefits of this collaboration will be that:

the library community gets a metadata standard compatible with the Web Architecture and interoperable with other Semantic Web initiatives

the DCMI community gets a library application profile based on the Dublin Core Abstract Model and FRBR

the Semantic Web community get a significant pool of well thought-out metadata terms to re-use

And hopefully there will be a wider uptake of RDA. A workplan for this work is available at the address on the slide.

(Front row, left to right: Robina Clayphan, Mikael Nilsson, Alistair Miles ; Second row, left to right: Tom Delsey, Gordon Dunsire, Barbara Tillett, Diane Hillmann, Tom Baker, Andy Powell)

RDA and web resources

Better description of resources with multiple characteristics

Improved treatment of online resources

- *online resource* as a carrier type
- improved technical description
- introduction of persistent identifiers & URLs



Earlier I mentioned that RDA is intended to be a new standard for description and access designed for the digital world. The work with the DCMI and semantic web communities is part of this. In the next two slides I will tell you about some other ways in which we will achieve this goal.

We have improved the description of web resources in several ways:

Firstly, the instructions in RDA are more consistent across material types and allow all aspects of a resource, both those concerned with its content and with its carrier, to be expressed. This allows for a better description of resources with multiple characteristics such as many web resources.

Secondly, we are introducing specific changes that improve the description of online resources, including.

- The introduction of a specific carrier type for 'online resource'.
- An improved and more detailed technical description - for example, you will be able to record that a resource is a music score in PDF format with a certain file size, and
- The introduction of data elements for persistent identifiers and URLs.

RDA as a web tool

- Search and Browse functionality
- Different views
 - type of description; type of resource; mode of issuance
 - Core elements or full set
- Integration with policies
- Integration with cataloguing systems
- Integration with workflows



In addition, RDA itself will be an online tool - not just an electronic text, but a product that will allow customization.

- RDA will have the usual features of a web tool, such as search and browse functionality.
- It will allow you to limit your view of instructions to particular types of description, such as an analytic description, particular types of resources, such as music, or particular modes of issuance, such as serials. You will also be able to see just the core elements, or all the instructions.
- You will be able to customise the tool with your local or national policies, and make notes to yourself.
- Integration with cataloguing systems is planned, so that you will be able to click through from your cataloguing system to the RDA instruction for the data you are inputting.
- You will be able to create your own workflows as part of the online product to guide you through the process of creating a record.

An early view of the RDA functionality will be available in August.

JSC and development team



Tom Delsey, Editor; John Attig, ALA; Hugh Taylor, CILIP; Deirdre Kiorgaard, ACOC/JSC chair; Barbara Tillett, LC; Marg Stewart, CCC; Alan Danskin, BL; Nathalie Schulz, JSC secretary; Marjorie Bloss, RDA project manager

Before I finish I'd like to tell you a little about the group that are developing RDA. There are currently four countries represented on the various bodies that oversee the development of RDA: Australia, Britain, Canada and the US.

The Committee of Principals [or CoP], the Co-publishers, and the AACR Fund Trustees make the overall decisions, fund the process and publish the standard.

The Joint Steering Committee for the Development of Resource Description and Access is responsible for the content of the standard. The JSC has six representatives drawn from the national libraries and/or library associations of each country. The representatives are from the Australian Committee on Cataloguing, the American Library Association, the British Library, the Canadian Committee on Cataloguing, the Chartered Institute of Library and Information Professionals, and the Library of Congress.

This is a picture of us at our last meeting in Chicago in April.

In addition to the groups formally represented on the JSC, we also regularly receive input from cataloguing bodies in other countries, such as France, Germany, Italy, Norway, Spain and Sweden. We have received many valuable comments from these countries.

In the lead up to the publication of RDA, the CoP is considering different models for expanding the JSC to other countries or international groups. Any such expansion would become effective following the release of RDA Online in 2009.

RDA timeline



December 2007:	Sections 2-4, 9
August 2008:	Full draft of RDA
Feb. 2009:	RDA text finalised
April 2009:	Release of RDA
2009:	Preparation for implementation
Early 2010:	Implementation by JSC national libraries



This slide shows the timeline for developing RDA. A draft of some large sections of RDA was released in December 2007 and discussed at the April 2008 JSC meeting. In August this year we will release a full draft of RDA, using a early version of the online product. Following the review period, comments on that draft will be discussed by the JSC at our November meeting. The final text should be sent to the publishers in February 2009 and RDA online released soon after.

Four national libraries: the British Library, Library and Archives Canada, the Library of Congress, and the National Library of Australia have committed to the implementation of RDA, and will work together on implementation plans for our countries. During 2009 we will be preparing our systems and our staff for implementation, as well as assisting with implementation and training issues for our respective countries. Implementation is likely to occur early in 2010.

RDA will then continue to be developed as a standard, and regular releases of RDA will be made available.

Thank you



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